

Financial Accounting
Prof. Varadraj Bapat
School of Management
Indian Institute of Technology, Bombay

Lecture - 01
Introduction and Scope of Accounting

Namaste to all of you, today we are going to start a new course on Financial Accounting. I am very much excited to meet you all and I am sure at your end also you are excited to take the new course on financial accounting.

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The slide features a dark red header bar with the name "Dr. CA. Varadraj Bapat" in white text. To the right of the name is a small blue circular logo. Below the header, a list of bullet points describes the speaker's qualifications and interests. At the bottom left is the NPTEL logo, and at the bottom right is the page number "2".

Dr. CA. Varadraj Bapat

- Cost Accountant and Chartered Accountant (with AI Rank)
- Ph.D., IIT B, Powai, Mumbai
- Faculty in Finance at SJM School of Management, IITB
- Teaching Interests: Financial/Management Accounting, Indian Economy, Indian Financial and Business Models
- Research Interests: Financial Accounting, Financial Disclosure, Bankruptcy Prediction, Financial Inclusion, Portfolio Management, Mutual Funds, Corporate Governance, Family Business, Green Accounting,

NPTEL Building Blocks of Financial Accounting 2

This is a brief introduction about myself I am Varadraj Bapat, I am a chartered accountant and cost accountant currently I am a faculty in finance at IIT Mumbai and I have teaching interest mainly in the area of accounting as well as to an extent in economics. I also have various research interest including in accounting, bankruptcy prediction, financial disclosures, financial inclusion, portfolio management, green accounting and so on.

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Dr. CA. Varadraj Bapat

- Others: Yoga, Spirituality, Sanskrit, Bharatiya Sanskriti, ABVP

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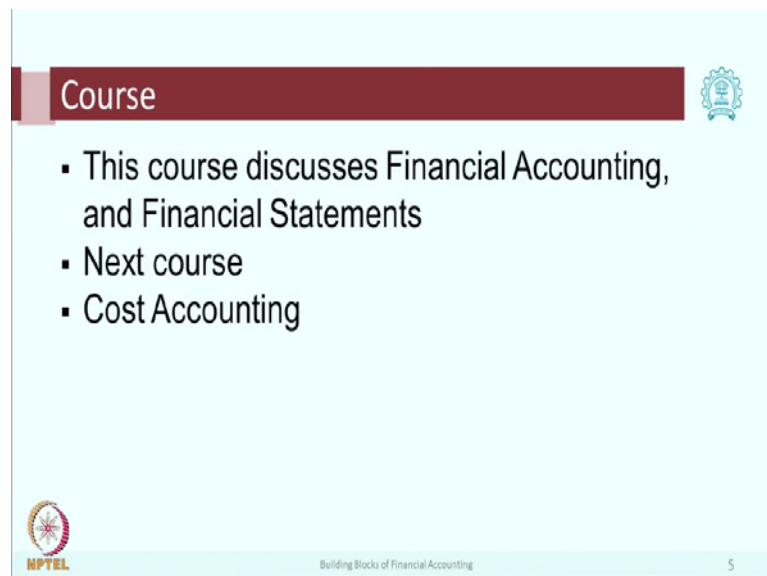
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Building Blocks of Financial Accounting 3


I am also interested in Yog Brahmavidya as well as Bhartiya Sanskriti these are about my Facebook pages. For a more detailed study I have written a book on Financial Accounting a Managerial Perspective this mainly caters to those who are interested in the study of accounting, but tries to consider those students who may not have a commerce or accounting background, but today are interested in accounting education. Now the course is mainly going to discuss about financial accounting and financial statements.

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Course

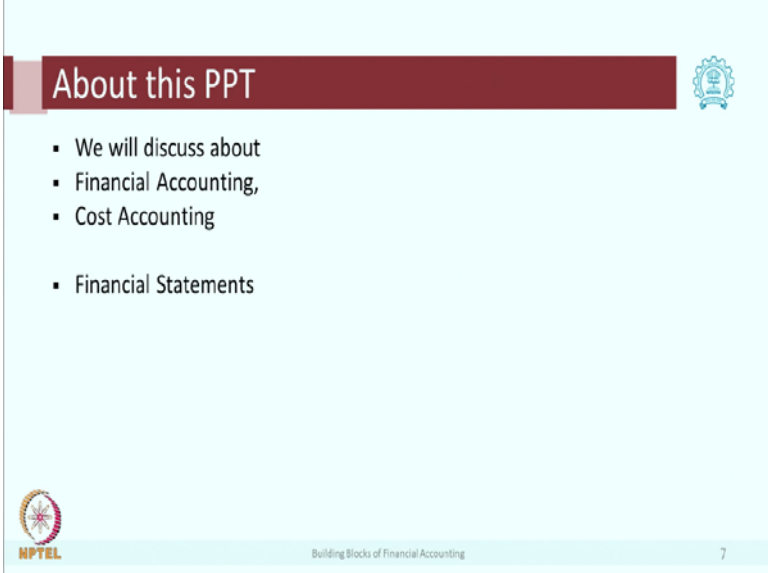
- This course discusses Financial Accounting, and Financial Statements
- Next course
- Cost Accounting

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Building Blocks of Financial Accounting 5

We also have one more course on cost accounting which will discuss about the accounting issues related to costs. You will need to submit various assignments in during the course we will be discussing about as and when the assignment becomes due.

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About this PPT

- We will discuss about
- Financial Accounting,
- Cost Accounting

- Financial Statements

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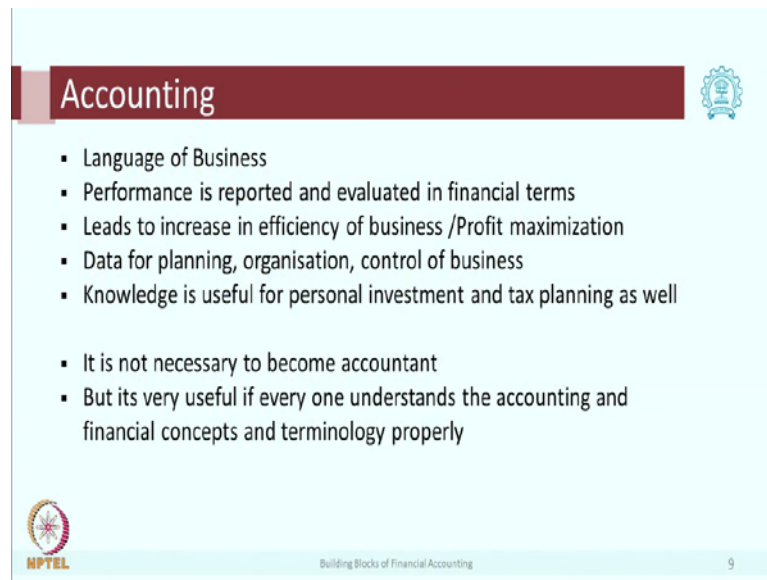
Building Blocks of Financial Accounting

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So, now we will start in this PPT discussion on comparison between financial cost accounting and then we will also learn about financial statements. Now for those who do not have accounting as their basic background as far as the commerce and accountancy students are concerned anyway this course is going to be very much relevant. But even for others assuming that you are engineers or you are pharmacists or for that matter you are arts students or science students this course is equally going to be important for you because, when you join your career whether it is a job or whether for doing some business you are mainly being hired for your functional expertise.

But, as you move up the ladder actually your management and financial expertise becomes more than more importance; so, accounting will be very much useful to you because it will help you to build your understanding of finances it will also help you to analyze the performance of yourself as well as others which is very much important when you are in a managerial position.

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The slide features a dark red header with the word "Accounting" in white. To the right of the header is a small blue circular logo. Below the header, there are two bulleted lists. The first list contains five items, and the second list contains two items. At the bottom left is the NPTEL logo, and at the bottom center is the text "Building Blocks of Financial Accounting". The number "9" is in the bottom right corner.

Accounting

- Language of Business
- Performance is reported and evaluated in financial terms
- Leads to increase in efficiency of business /Profit maximization
- Data for planning, organisation, control of business
- Knowledge is useful for personal investment and tax planning as well

- It is not necessary to become accountant
- But its very useful if every one understands the accounting and financial concepts and terminology properly

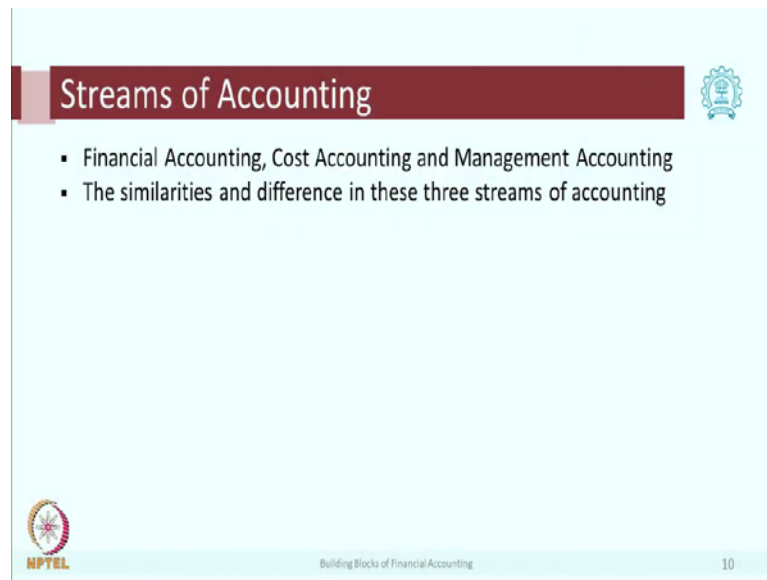
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Now, we will discuss bit a as to what is accounting? In simple terms we can define accounting as a language of business where the performance is reported and evaluated in financial terms and if you are doing accounting properly it leads to improvement in the efficiency which will ultimately maximize the profits. Accounting data is very much useful for planning, organizing and controlling of all business operations.

And even for non business entities like government or NGO's. Now the knowledge of accounting is also useful for personal investment and tax planning decisions. Keep in mind that this course is not to make you an accountant, those of you who have taken accounting as your basic area you can learn more detailed accounting and can become accountants, but this course is for everybody. So, you may or may not be intending to be an accountant you can be a doctor, you can be a engineer, you can be a manager, you can be a pharmacists, but what this course enables you to is to understand some basic accounting and financial concepts these terminologies are going to be helpful to you in any area.

Because your performance is going to be evaluated in financial terms whoever you are and this course is mainly to make you understand those terminologies. Now there are three important streams of accounting.

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Streams of Accounting

- Financial Accounting, Cost Accounting and Management Accounting
- The similarities and difference in these three streams of accounting

NPTTEL Building Blocks of Financial Accounting 10

So, we will discuss with trying to understand what are these streams? The first one is financial accounting, then there is cost accounting and there is management accounting.

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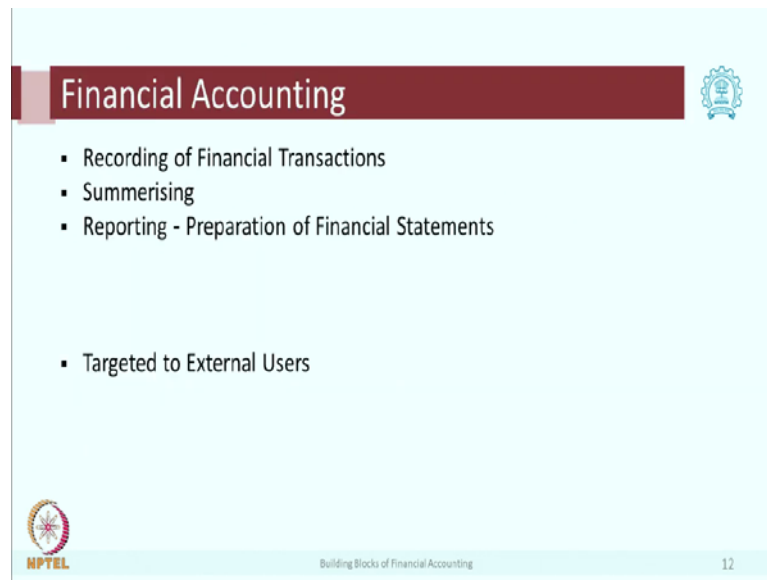
Streams of Accounting

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Financial Accounting Cost Accounting Management Accounting

NPTTEL Building Blocks of Financial Accounting 11

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The slide features a dark red header with the title "Financial Accounting" in white. To the right of the title is a small blue circular logo. Below the header, a list of topics is presented in a light blue box. The topics are: "Recording of Financial Transactions", "Summerising", "Reporting - Preparation of Financial Statements", and "Targeted to External Users". At the bottom left of the slide is the NPTEL logo, and at the bottom center is the text "Building Blocks of Financial Accounting". The page number "12" is located at the bottom right.

- Recording of Financial Transactions
- Summerising
- Reporting - Preparation of Financial Statements

- Targeted to External Users

Now, this particular course is on financial accounting. So, we will be going into what is financial accounting more in details, but right now we are just trying to differentiate the three main streams. So, what financial accounting deals with is about recording of financial transactions that is the first step, the next step is summarizing the transactions and the third step is reporting of the financial position that is usually by preparing financial statements. Now briefly, every business transaction needs to be recorded, if it has some financial implication.

Can you think of some business transactions for example, you might purchase raw material it is a business transaction, then you may do some processing, you may will go for selling of a finished product, you may incur expenses on travelling, you may be charged by bank charges by the bank as an expense, you may receive interest all of these are examples of business transactions and they need to be recorded. Even if you are a non business entity let us say you are an NGO or you are a government then also these transactions are there.

So, business or non business, but any transaction which has a financial implication needs to be recorded. So, the first step in financial accounting is recording of every transaction next step is about summarizing the transactions. Almost all of you would have your own bank account, so, you will be entering into various transactions with bank, I think you would have also seen passbook or a bank statement. Now what does the bank statement

give you? Bank statement or a passbook is a summary of your transactions with the bank.

Now, bank is having lakhs of customer and they are having variety of transactions, they are also having apart from customers various investment and loan related transaction, but what they are doing is there summarizing only the transactions related to a particular account holder and then they give you a passbook. So, the second step is summarizing the related transactions. In this case if as a customer of a bank you get a summary of your transactions it becomes useful to you, you are not interested in other transactions of the bank neither bank is authorized to pass you on the information of other customers.

So, they will just summarize the transactions about you that is the second step and in case of. So, in this example it was a personal transaction for a particular customer same way bank will summarize the transactions about loans at one place, transactions about their assets at one place, transactions about their salary expenditure at one place. So, they would be summarizing the related transactions in the second step. Those of you are aware of the terminologies used in accounting normally the first step is called as journalizing or recording the transactions in the journal, the second step is called as preparation of ledger accounts.

Now I am not using that jargon here, so to make it simple I have just tried to put two steps; as recording of transactions and the second step as summarizing of transactions. Now, in the third step reporting is done because, you already have summarized the transactions now, now at the end of accounting period it can be 1 year or it can be at the end of the month what we are interested in knowing the final balances. So, you may be wanting to know your profits, you may be wanting to know how much cash you have, you maybe wanting to know how much bank deposits you have.

So, you want to have a final summary of the balances which represent your financial position. So, in the third step reporting is done by preparing various financial statements. Keep in mind that the whole exercise of financial accounting is mainly for preparation of financial statements which are intended for external users.

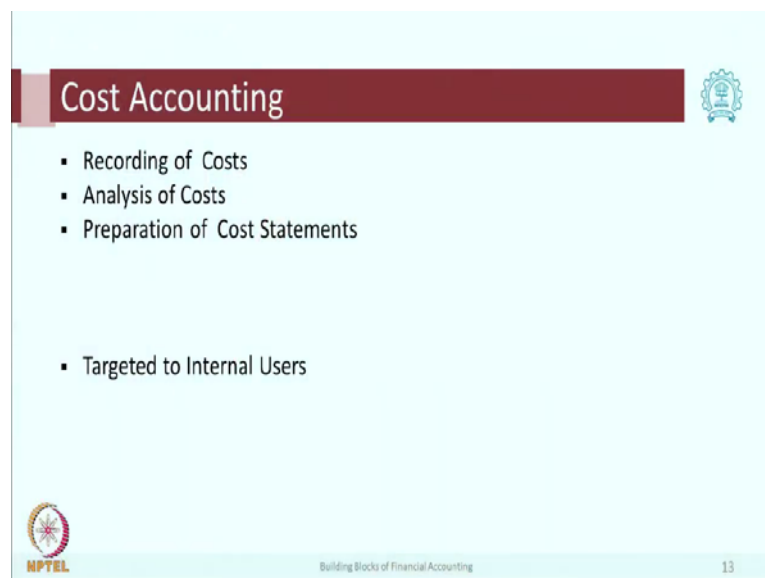
So, financial statements are passed on to outsiders of the business. Now who can be external users? As you are aware most of the people have to file income tax returns. So, along with income tax returns if you are a businessman you will need to give your

financial position. So, one of the users of financial statements are taxation authorities or government authorities there can be various other user for example, if you approach a bank for a loan bank will ask you to submit your financial statement or a balance sheet.

So, they are also your external users, in some cases customer ask for some statement, sometimes for vendor registration that is you want to be a supplier to a particular company that company ask for your financial statement. So, even your customers or your suppliers become the; become the parties who are interested in your financial statement, then employees might be interested. So, a variety of external users are provided financial statement; in case of many entities like listed companies those financial statements are put in public domain.

So, they are available for anybody who is interested in those financial statements. Internal users mind well are equally interested that can be management or that can be your board of directors or your owners, but in general financial statements are meant to be available for external user. That is why I have said that financial accounting is targeted to external users. I hope you are getting over all understanding as to the process or the steps of financial accounting. Now let us compare with second stream of accounting that is cost accounting.

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The slide features a dark red header with the title "Cost Accounting" and a small logo on the right. Below the header, a bulleted list contains the following items:

- Recording of Costs
- Analysis of Costs
- Preparation of Cost Statements

There is a significant gap between the first three items and the final item:

- Targeted to Internal Users

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Now, when it comes to cost accounting these are the three important steps; the first is recording of costs. Now, you can see it very well matches with the financial accounting,

because there are also the first step was recording of financial transactions now it says recording of costs, the next one is analysis of cost and the third one is preparation of cost statements. Now you may be wondering that the first step in financial accounting which is recording of financial transactions appears to be very similar now it is recording of cost. So, is it the same thing? Many times yes.

Because most of the financial transactions may give you some cost and almost all the costs are financial transactions. For example, if you go out let us say to a restaurant, then you will incur some expenditure, it will be a financial transaction, it will also be a cost to you, you might be paying rent, rent is a financial transaction it is also a cost to you, you might be paying salaries again it is a financial transaction it is also a cost.

So, many times almost all cost are covered in financial transactions then do you need the step again? You have already recorded there in financial accounting, then why do you need to record? Actually the answer is you do need to record more because in cost accounting you are recording with lot of more details. For example, in financial accounting you may be just recording the salary here you are also recording the time consumed on what work that particular employee is doing, you are also might be recording more details about the nature of work.

So, the recording of cost is actually more detailed recording, it further leads to analyzing the costs under different heads; for example, say manufacturing cost, production cost, marketing cost, admin cost and so on. Based on this analysis finally you come out with various financial statements like a cost sheet. Keep in mind that cost accounting is primary targeted to internal user. So, this is the confidential data, it is not given out to anybody, it's mainly for internal users.

So, I hope you would have I will just go back a bit. So, now, first we discuss financial accounting, then we discuss cost accounting. We will not going to too much details of cost accounting, because we are having a separate course on cost accounting where we will discuss further details about it. The third step in accounting or at third stream in accounting is known as management accounting. Now what is done in management accounting is it is a umbrella concept.

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Management Accounting

- Recording of Financial & other data
- Analysis of Financial and other information
- Preparation of Statements for Managerial Decisions

- Targeted to Internal Users - All levels of Management
- This is a broader concept encompasses Financial and Cost Accounting

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Now, you are recording both financial as well as other data, you analyze the financial data with other data that leads to preparation of various statements which are mainly used for managerial decisions. Now, this data again is a confidential, it is maintained for decision making of various levels of management it is not given to outsider, so, it is targeted to primarily internal users.

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Managerial v/s Financial Accounting

Accounting System (accumulates all accounting data)

- Managerial Accounting**
Information for decision making, and control of an organization's operations.
- Financial Accounting**
Published financial statements and other financial reports.

Internal users (Illustration of a person at a computer)

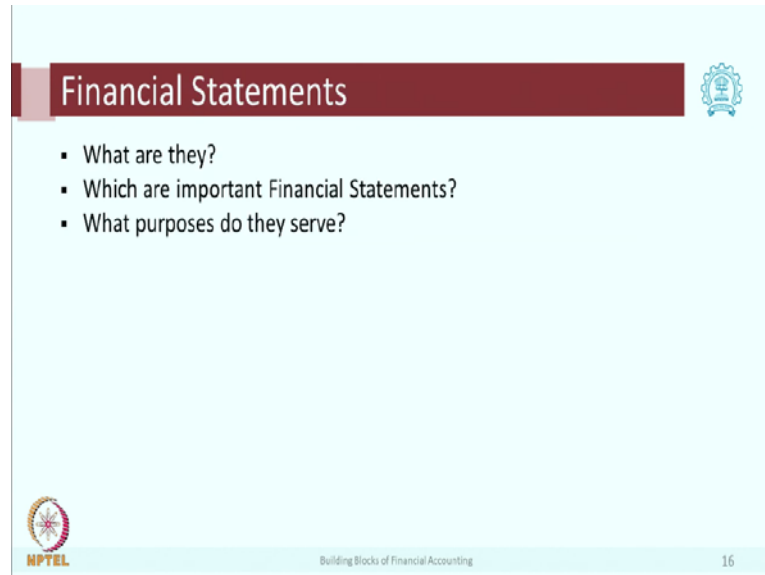
External users (Illustration of a group of business people)

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Now we have restated the streams so on one hand you have got financial accounting which is published normally in public domain for external user, on the other side your

have got cost and management accounting many times its together called as managerial accounting which gives you information on decision making and it is mainly for internal user.

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The slide features a dark red header with the title "Financial Statements" in white. To the right of the title is a small blue circular logo. Below the header, a bulleted list contains three questions: "What are they?", "Which are important Financial Statements?", and "What purposes do they serve?". In the bottom left corner, there is a circular logo with the text "NPTEL" below it. In the bottom right corner, the text "Building Blocks of Financial Accounting" and the number "16" are displayed.

Now, we will move to the next level I hope you have understood the main streams of accounting. Now in financial accounting as you we have seen the final target is preparation of financial statement. Now let us look at these things that what do you mean by financial statements, which are the important financial statements and what purposes these statements serve?

Now the first thing what are the important statements? I think many of you might have heard about them or might have been aware about them do you think of different financial statements? I think most of you are right there is a balance sheet, there is a profit and loss account, there is a cash flow statement and there are more statements which are considered as financial statements. Any statement which gives you financial information in a summarized form is considered as a financial statement, what purpose do they serve?

For example if you take balance sheet, what do you get from balance sheet? If you want to know the financial statement of that entity that how will be that entities is what assets they have, do they have any payables or liabilities all that information you will get from

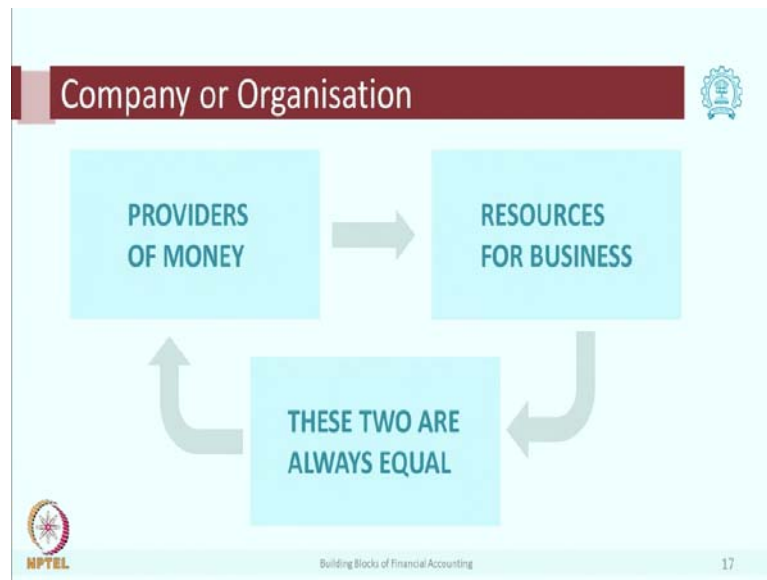
the balance sheet that is the purpose of balance sheet. We are going to discuss in detail in coming slide as to what does the balance sheet give you.

The next is profit and loss account, as the name suggest it gives you profit or loss at the end of some year or a month it also gives you what where the major streams of income or revenue, where have you spent all that money and finally, what you are left with in the form of profits at various levels? That is what is provided by P and L account we also have a statement known as cash flow statement.

Because many times you are interested in knowing how much cash the business has generated and where it has spend, what are the major sources of earning cash, what are the major sources of spending cash or major sources of making investments and so on. So, that all is summarized in cash flow statement, apart from that also there are some more statements like there can be fund flow statement, there are financial statements of subsidiary books, there are financial statements of a particular cash related transactions like say cash book.

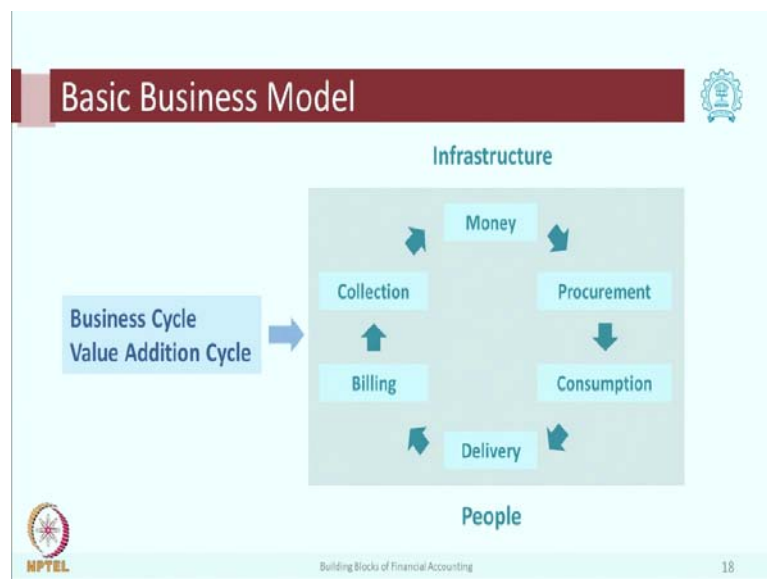
So, variety of financial statements are prepared and they can be in the category of financial statements. In this course we will mainly be talking about balance sheet p and l account and cash flow statement in coming weeks. Now to put it in a very much of a layman language, if you think of a company or for that matter any organization it need some resources for doing the business, so, you got resources, resources are provided by somebody.

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So, there are also providers for resources. So, for any organization these resources and providers for resources need to always match. Now while doing the operations normally you follow a basic business model.

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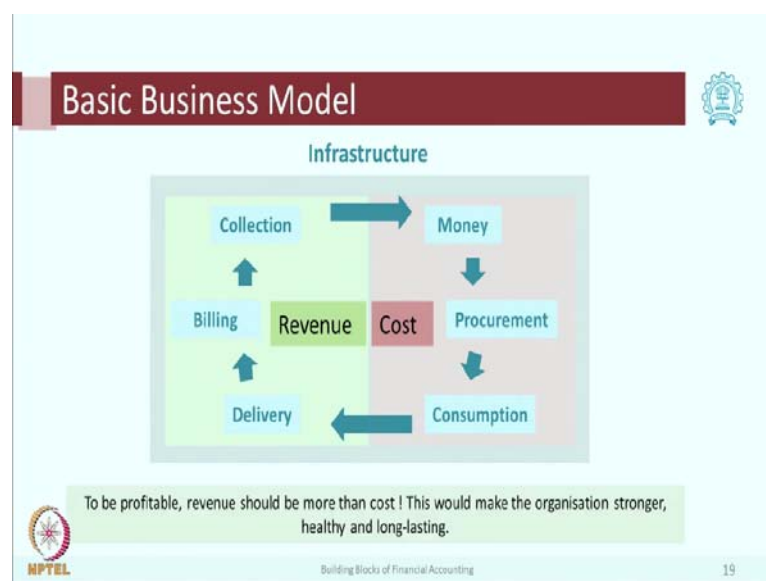


So, you start with some money, then you may have to do some procurement of raw material or procurement of essential items, then these are consumed in your operation, you get finished goods they are delivered, then you go for billing, collect the money back, so, you are back to money. So, what circle we have is normally known as a money

cycle it can also be called as a business cycle or as value addition cycle because what we are trying is if you are starting with x amount of money it goes through the whole process you would like to have x plus amount of money.

So, there should be some value addition in the form of generation of some extra cash, this is a basic business model. Now it is supported by infrastructure and it is operated by people because there are people who are essentially running the whole system they are also the part of business model or business cycle.

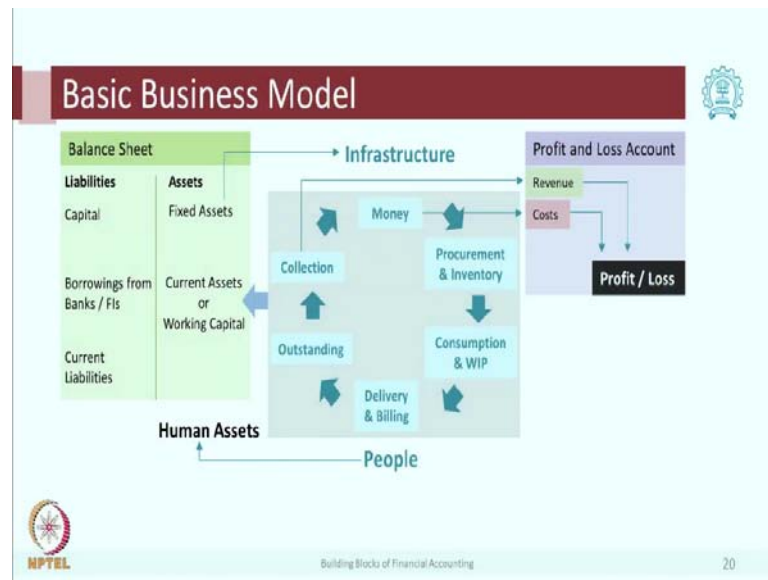
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Now, usually the costs are incurred in the beginning part, when you go for procurement on consumption of your resources and as you deliver it to the customer you start recovering money and that generates what is known as revenue. Now a statement is prepared to compare the cost and revenue.

Now, what that statement will be? I think most of you are guessing it right that is what is called as profit and loss account; it compares your cost and revenue. Now if you want to be profitable normally, you will need more revenues than the cost and if you are consistently profitable the business or the organization will become healthy and strong and it will also help you to last longer. Now this business model from this business model we will try to understand what is P and L and what is balance sheet? As we have just discussed a statement is prepared for comparing revenue and cost that is called as P and L account, it gives you net result in the form of profit or loss.

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On the other side you make a statement which lists out your resources, those resources are known as assets and there are providers for resources which are known as liabilities. Now, your assets are further categorized as fixed assets. So, whatever infrastructure you have is known as fixed assets because infrastructure is of permanent nature, it is not getting continuously consumed in your process, it acts as a catalyzed catalyzes catalyst it supports your process.

Now there are assets which are continuously moving in your business cycle these assets are known as current assets. So, we have got two major categories fixed assets and current assets that current those current assets are also sometimes known as working capital.

Now, can you think of any examples of fixed assets, I think one very easy example which would have come to your mind is a land or building. So, to run the business you will need some place in the form of building, you will also thinking you might also have thought of fixed assets like say vehicles there can be computers within the computer you will need software. So, hardware as well as software all these are examples of fixed assets. Now what could be the examples of current assets? Now current assets you can look at the money cycle and I think you will realize what could be the current assets.

So, when you do procurement you are purchasing raw material, then whatever raw material remains in your hand as a inventory or as a stock that is one current asset, then

you might consume the raw material and generate finished goods, some of the finished goods will be with you as a stock, again the stock of finished good is a example of current asset. Thus finished goods or whatever services you are providing are provided to the customers then customers may not pay you immediately, there might be some balances which are to be collected from the customers.

So, those receivable balances are also your current assets, whatever cash you have in hand or whatever cash you have got with banks with in the bank account all these are examples of your current assets. So, fixed assets current assets these are the major examples of assets. Can you consider people as in your assets? The answer is both yes and no because people are human assets are the most important assets for the business, this is the intellectual capital you have they are the people who are running the business. Unfortunately, human assets are not permitted to be shown on the balance sheet; can you think why they are not to be shown in balance sheet?

Because human assets are not owned by the entity or by that business, they are just working there may be as employees or as partners or owners, but they are not the assets which are owned. So, it is necessary that an item which is owned by that company or by that organization that can only be shown as an asset; seen people are not owned human assets are not shown as a part of balance sheet, that is why in the slide I have shown it, but I have shown it below the balance sheet ok.

So, these all these assets to together are the resources for the business, along with resource resources you will need the providers for resources because resources cannot come for free there would be somebody who have provided. Who have provided those? Then there are three four examples as you can see from the slide there is capital there are borrowings and there are current liabilities.

Now what is a capital? Capital refers to the money which owners have put in. What are borrowings? Borrowing refers to the money which the lenders have given you, for example, banks or financial institutions they have given you some amount of loan that is called as a borrowing. And what are current assets or current liabilities? The current liabilities are the moneys which are been generated from the money cycle. For example, if you have purchase something, but not paid them then those outstanding balances or payables are examples of current liabilities.

So, I think now at the first stage you would have seen: what are the important items on asset side and on liability side of the balance sheet. So, we will stop here and in the first session what we have discussed till now first we understood what is accounting, then we have tried to distinguish between financial accounting and management accounting. Financial accounting is mainly for external users and we are trying to record the cost and prepare statements.

In cost accounting it is mainly for internal users we record cost and provide various financial statements. In the next part we discussed about financial statements, so, we have discussed what is money cycle or business cycle and from business cycle how do you get P and L and balance sheet. In the next session we are going to continue this and go further into what is P and L and balance sheet.

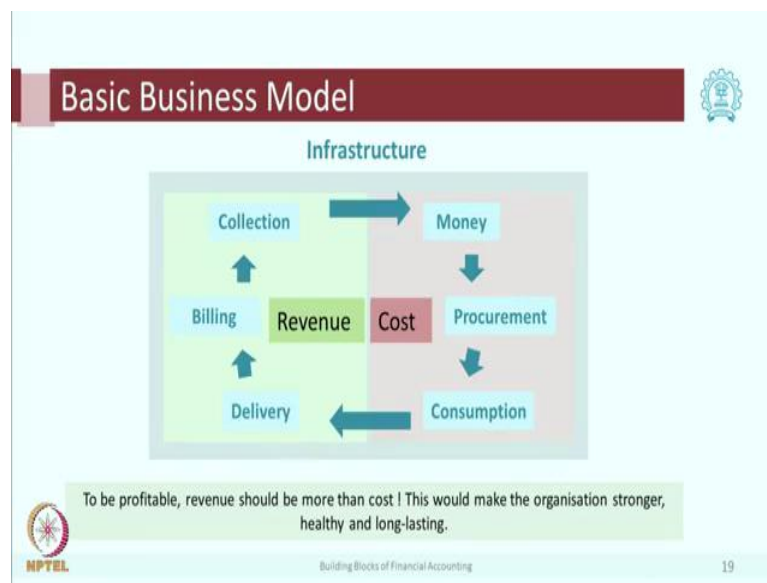
So, I hope you have liked the first session, so please watch the second session as well Namaste.

Financial Accounting
Prof. Varadraj Bapat
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Lecture - 02
Financial Statements

Namaste to all of you, this is our second session on Financial Accounting, I am sure you would have enjoyed the first session. In the first session it was just an introductory session so, we had just started with understanding what is accounting, then what is the distinction between various streams of accounting like financial cost, management accounting after that we have moved to Financial Statements. So, we have seen how are financial statements emerging? So, basically they emerge from money cycle.

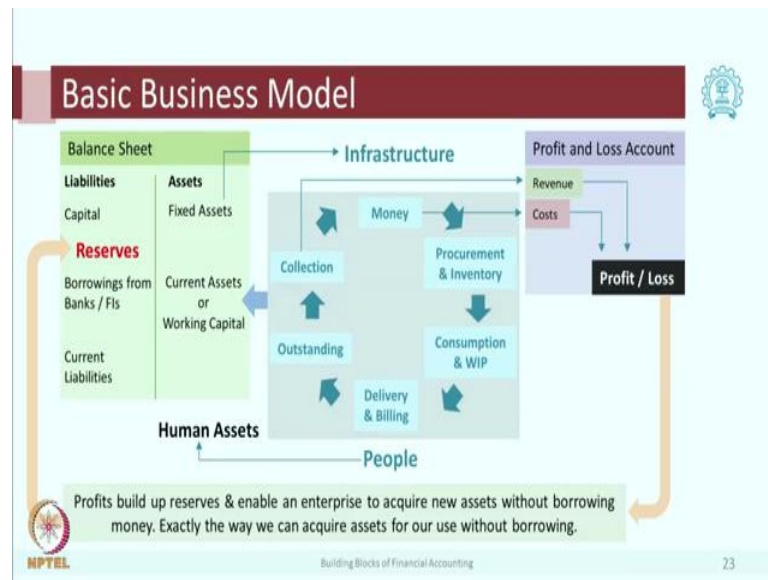
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So, you can have a view at the slide where we have just seen what is a money cycle; I am trying to go from a very much of a layman who does not know accounting some of you might be well versed with accounting terms. So, please bear with me, we will go in details in the coming sessions.

But to begin with this is what is a money cycle, it starts with money procurement and so on goes back to money. So, at the stage of procurement and consumption the costs are incurred then delivery collection is a time you get the revenue.

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Now, from this money cycle the basic financial statements emerged so on one hand we have got a P and L account, it records your revenues it records your costs and it compares the revenues and the cost the net result is given to you in the form of profit or loss. On the other side we have got balance sheet, now what does the balance sheet do? It lists out the resources for the business those resources for the business are known as the assets, it also list out the providers for resources which are known as the liabilities, in the last session we had also seen what are the important assets.

So, you can again look at those slides I think you know it all now the first one is fixed assets which is nothing, but infrastructure needed for the business can you think of any example. So, it can be land, building, it can be vehicle, it can be software, it can be patents these are all your fixed assets. What are the current assets? All those assets which are getting converted or which are moving in money cycle; so, it includes your stocks, it includes your receivables, it includes your cash balances, it includes any moneys which you have to receive from let us say from electricity authority as a deposit all these are included in current assets, human assets are important, but not part of balance sheet.

Then on liability side we have got three important items, we have got capital this is the money which owners have put in, then we have got borrowings this is the money which lenders have put in as various types of loans and then we have got current liabilities. Current liabilities again are coming from money cycle for example, the payables to

suppliers. So, if we purchase some goods do not pay that money immediately, then that much balance will be your payable or if you use let us say electricity, but have not paid the electricity bill then the outstanding electricity bill will become your current liability ok

So, this was a brief of what we did last time. If you look at the bottom part of the slide it is sort of trying to tell the purpose of these two statements. So, balance sheet is one which shows you the financial position of the organisation and P and L account it tells you about the profitability of the organisation. Now moving ahead again it tells you what does the balance sheet gives?

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The slide features a dark red header with the title "Basic Business Model" in white. Below the header, a light green box contains the following text: "Balance Sheet shows the cumulative position of resources (assets) and sources of funds (liabilities) at the end of the year. Profit & Loss Account shows 'Revenue & Cost' performance during a quarter/ year." The slide also includes a small gear icon in the top right corner, the NPTEL logo in the bottom left corner, and the text "Building Blocks of Financial Accounting" and the number "21" in the bottom right corner.

So, it shows the cumulative position of resources that is your assets and the sources of the funds that is your liabilities at the end of the year of course, it can be at the end of the month or a quarter also, but keep in mind it is a cumulative position.

So, if you purchase your some land 10 years before it will come continue to appear in balance sheet today unless you have sold it. So, all your assets continue your liabilities will also continue. So, if you have obtained a loan 4 years back it will appear in the balance sheet at that time it will even appear in the balance sheet today as long as you have not yet repaid it. So, you cannot say that this loan was taken four years ago, let us forget it now that is not possible loan was there then, loan is there now, the outstanding

balance will be shown in the balance sheet of today also, that is why it has been called as a cumulative position as on a particular date.

The profit and loss statement essentially gives you revenues and cost performance, but for a particular quarter or a year. So, if you have made any sales in this month and if you make profit and loss for this month it will come as a profit and loss of this month, but it cannot be shown in the next year it can only be shown in the current year ok. So, it is not accumulative performance it is a performance for that period that is shown in the P and L account.

Now very important statement is as we have seen in the beginning your resources and sources match. So, your balance sheet exactly matches, but after doing business for sometime your business cycle is continuously going on will the balance sheet still match is it possible? Suppose you are doing well in the business your assets will slowly go on increasing your liabilities will not increase infact liabilities can go on decreasing then will the balance sheet still tally or match.

Now I am just going back to the slide so, that you can have a view of the balance sheet. So, you can just look at the asset side normally what will happen is if your business is doing well your stocks will go up, then your receivables will go up, your cash will go up while on liability side you might be repaying your loan so, loan balances will go down. If you pay your suppliers or employees on time your current liabilities will also go down. So, your liabilities are falling assets are rising, then will the balance sheet still tally is it possible that the total of assets and liabilities will match, what do you think? Just have a thought on this.

Is any item missed out in the given assets or liabilities which should be there. Actually very important item is known as reserves which was not shown earlier, but I am just showing it now to highlight it or bring your attention to it. So, what will happen is after say 1 year you have made some profit in profit and loss account that profit either is taken away by the owners it is their profit they can take it away, but mostly owners do not take away the whole of profit they may take some money remaining money is accumulated in the business in the form of reserves.

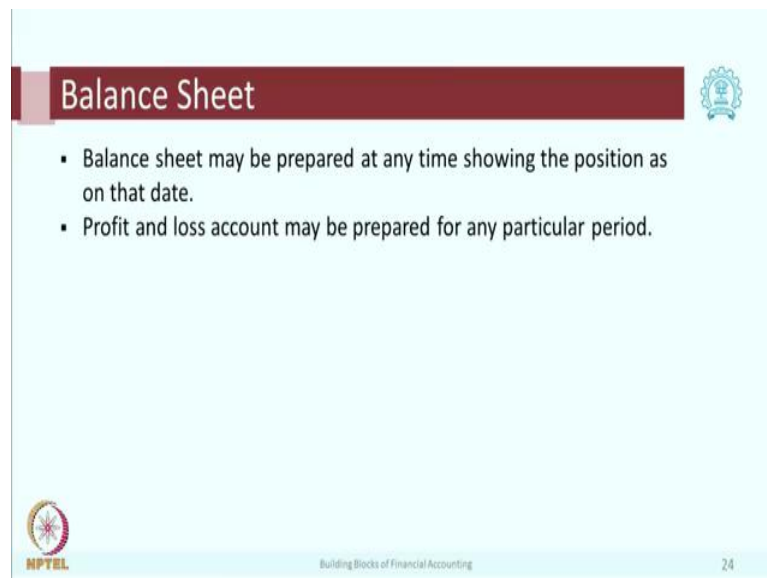
So, that reserve goes on increasing, see we have already seen that assets are raising your external liabilities are not rising in fact, they are falling. So, there is a difference that

difference will be given in the form of reserves. So, what happens is for a healthy business profit goes on building up and that accumulates in the balance sheet in the form of reserve. Now suppose you have no time to study the balance sheet the old balance sheet of a company just have a look at balance sheet and look at the reserves position, if the reserves money is high it immediately tells you that companies able to generate profit on a consistent basis because 1 year's profit you can get through P and L.

But it is only for that year, but that whole profit is getting added up in reserves, if the total profit for so many years minus what profit they have taken away is what is shown in the reserves and if that amount is very high it will mean that company is having a good financial position for a pretty long time. You would have heard of Blue Chip Companies most of the top rated companies have a high level of reserves.

Now, what happens is if you have good amount of reserves then company can easily expand, they do not have to go to bank to borrow new money, they can spend that money on anything which they want and the company will grow in a very healthy manner. Now once again I have summarized the financial positions.

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The slide features a dark red header with the title "Balance Sheet" in white. To the right of the title is a small blue circular logo. Below the header, there are two bullet points: "Balance sheet may be prepared at any time showing the position as on that date." and "Profit and loss account may be prepared for any particular period." At the bottom left is the NPTEL logo, and at the bottom center is the text "Building Blocks of Financial Accounting". At the bottom right is the page number "24".

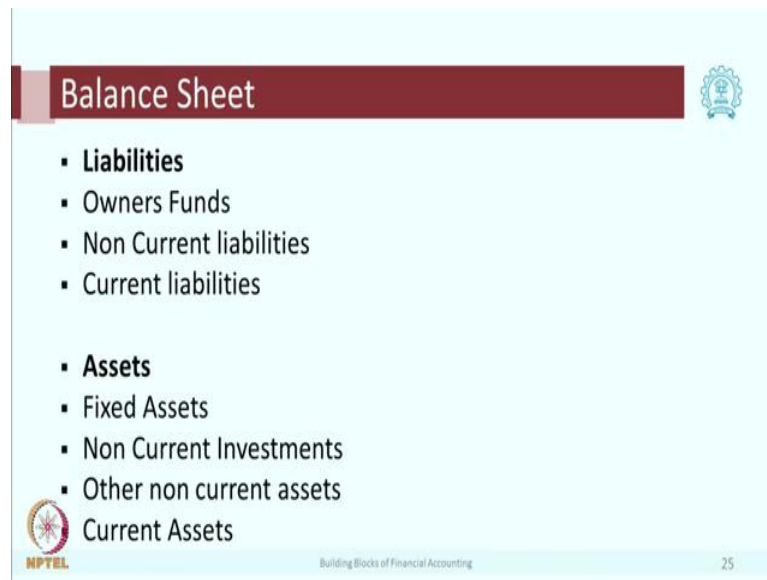
Balance Sheet

- Balance sheet may be prepared at any time showing the position as on that date.
- Profit and loss account may be prepared for any particular period.

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So, balance sheet it may be prepared at any time not necessarily at the end of the year, but it gives you position as on that day and profit and loss account is normally prepared and presented at the end of a particular period.

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The slide is titled "Balance Sheet" and features a dark red header bar. Below the header, there is a list of items categorized under "Liabilities" and "Assets". The "Liabilities" section includes "Owners Funds", "Non Current liabilities", and "Current liabilities". The "Assets" section includes "Fixed Assets", "Non Current Investments", "Other non current assets", and "Current Assets". The slide also contains logos for NPTEL and a university crest, along with the text "Building Blocks of Financial Accounting" and the number "25".

- **Liabilities**
 - Owners Funds
 - Non Current liabilities
 - Current liabilities
- **Assets**
 - Fixed Assets
 - Non Current Investments
 - Other non current assets
 - Current Assets

This is once again summarizing the items in the balance sheet for you, so, we have got liabilities, now the first item I have put it as owners fund. Now what do you understand by owners fund? If we just go back we had earlier put capital and we had the second item was reserve. So, these two items taken together capital plus reserves are known as owners fund. Now how do you define capital? If we remember we have seen that money which owners put in is a capital here business is generating profits and giving it to owners in the form of reserves.

So, capital plus reserves together is the first item in the liability side of the balance sheet that is known as owners fund. The second item is noncurrent liabilities in the earlier balance sheet we have called it borrowings as an example, but any liability which is of long term in nature is called as a noncurrent liability mainly it will include borrowings or loans it can also include any other item which you have not paid in 1 years time. The third item is current liability so, current liability we had seen that from the money cycle certain liabilities arise as far as the definition is concerned if that liability is intended to be paid in 1 years time then it is called as a current liability.

So, we have seen two three examples can you think of any other example. For example, if you have employees with you should pay salary at the end of the month, but if you do not pay that salary then the amount of salary which is still unpaid it will be called as a

current liability. If suppose there are some other expenses let us say office expenses, you have not yet paid them then that is also current liability.

So, all those liabilities which are due or which are payable within 1 years time they are in current liabilities all those liabilities which are not intended to be paid in 1 year are noncurrent liabilities. So, both these noncurrent plus current these are external liabilities and the top item or the first item was owners funds this is also called as an internal liability.

Now, go to asset side we have already discussed what is a fixed asset. So, this is a infrastructure or these are the assets which are long term with the business to be used for the business, then we have added one more item here that is known as noncurrent investments and the last item the bottom most item is a current asset which I think we have already discussed.

So, what we mean by current assets is these are those items which are to be liquidated or which are to be received within 1 years time or and they are not normally coming from the money cycle. So, all those items which are likely to last for more than 1 year are called as noncurrent ok. So, assets broadly are noncurrent current; current is the last item within noncurrent we have got fixed assets then next is noncurrent investments.

Now what is this non current investment? First of all what is meant by investment? If you see I will just take you back in the earlier balance sheet we had not mentioned of any investment we had just seen fixed assets and current asset because that was a balance sheet which emerges from money cycle, but in case you have invested some money outside your business then that money is called as an investment.

So, here any money which we have put outside your business and which is to last for more than 1 year then it is called as a non current investment. So, can you think of any examples of noncurrent investment may be something like fixed deposit kept in bank for more than 1 year not in your bank account because, bank account is a current asset, but if you keep the money in fixed deposit with a bank for 2 years, then that will be an example of non current investment. Similarly, if you invest in shares of some other company then that is non-current investment are you getting me.

So, you can have some examples of those money put outside your business that is the non current investment apart from these if you have any noncurrent assets then they are categorized as other noncurrent assets. So, are you getting these are the important items in balance sheet under liabilities and assets. Now we will come to the next item we are going to discuss balance sheet and P and L in the next sessions, but right now it is very important for you to know where from you get all these information.

The best source of information for you is a annual report because every company comes out with the annual report and that annual report has financial statements.

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The slide features a title bar with a dark red background and white text. Below the title, a bulleted list details the contents of an annual report. The slide includes logos for NPTEL and a university emblem, along with footer text.

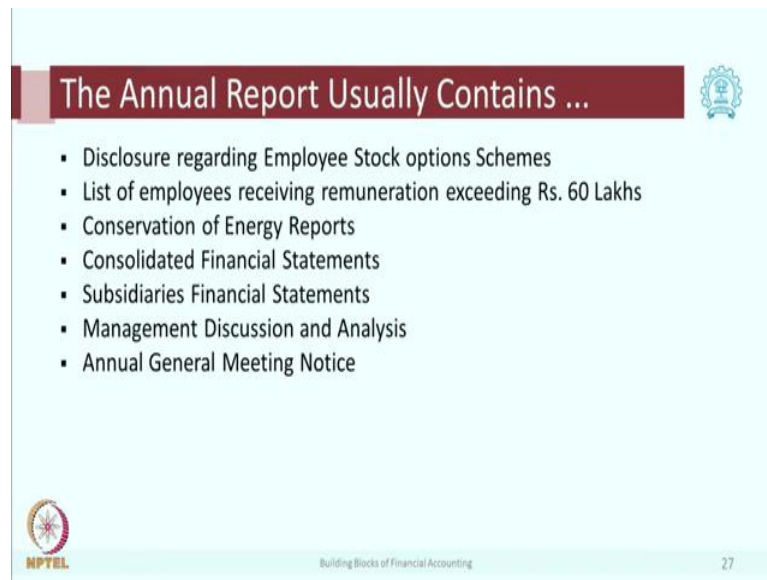
The Annual Report Usually Contains ...

- Financial statements which consist of
 - Balance sheet, Profit & Loss A/c
 - Cash Flow Statements
 - notes to the financial statements
 - disclosure of accounting policies
- Chairman's Statement
- Board of Directors & Committees
- Directors Report
- Directors Responsibility Statement
- Auditors Report
- Report on Corporate Governance

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Whatever financial statement that we have discussed like balance sheet, P and L, cash flow, they will all be available in the annual reports along with notes to accounts and some more disclosures. Then there are some other things in annual report also, there will be chairman's statements, there will be board of directors analysis, there will be auditor's report, there will be report on corporate governance, there will be consolidated financial statements, then there is a management discussion and analysis.

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The slide features a dark red header with the title "The Annual Report Usually Contains ..." in white. To the right of the title is a small blue gear icon. Below the header is a bulleted list of items. At the bottom left is the NPTEL logo, and at the bottom center is the text "Building Blocks of Financial Accounting". The slide number "27" is located at the bottom right.

- Disclosure regarding Employee Stock options Schemes
- List of employees receiving remuneration exceeding Rs. 60 Lakhs
- Conservation of Energy Reports
- Consolidated Financial Statements
- Subsidiaries Financial Statements
- Management Discussion and Analysis
- Annual General Meeting Notice

There is also a list of employees receiving remuneration more than 60 lakhs maybe some of you are aspiring for that may be someday even my name should appear among the employees who are earning more than 60 lakhs per year. So, there is a list given out there that who are these people what is their qualifications and experience and so on. So, this annual report is a authenticated document and a very useful document for any learner, you will get financial statements here I am telling you this right away because I am expecting each one of you to download the annual report of the company this is freely available.

So, please choose your company download your annual report read it go through it because in our course in coming lectures we are going to discuss about balance sheet, P and L, cash flow some more requirements of preparation of financial statements all these should not be theoretical. Go through your annual report look at the balance sheet and L and L of your own company, your own means you do not may not be owning it, but consider it as your company and start studying it from now, that is why in this situation I have told you what is annual report in detail we are going to look at various financial statements in the coming sessions.

I hope you have like the second session also this was bit shorter one, but the third session onward now we will go into technical details about each of the financial statements.

Thank you so much and Namaste.

Financial Accounting
Prof. Varadraj Bapat
School of Management
Indian Institute of Technology, Bombay

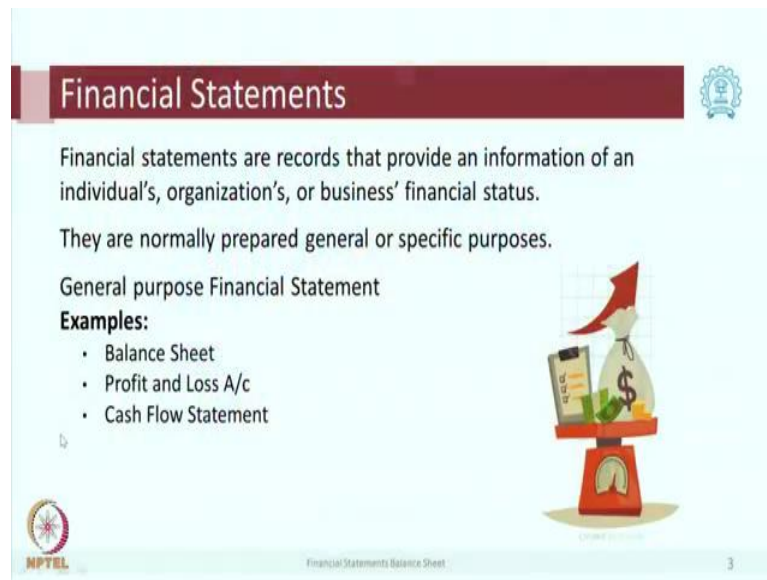
Lecture – 03
Balance Sheet 1

Namaste to all of you. Welcome to the third session of Financial Accounting. In our first session, we had discussed the distinction between financial cost and management accounting, and we had also seen the importance of accounting. In the second session, we started with our discussion on financial statements. If you remember we have discussed the basic format of Balance Sheet and then we went on to understand what is annual report. If you remember, balance sheet is a statement which gives the financial position as on a particular date, it is a cumulative statement.

Today, we are going to discuss further in detail about what is balance sheet and how it is prepared. We also discussed about annual report. Now, this is a authenticated document which is published by the company and it is a treasure of lot of data about companies. It is freely available. So, I had told you to download annual report of one particular company and go through it in detail. It will give you financial statements, it will give you consolidated balance sheet, it will also give you various other statements which are very much relevant to understand the company, the nature of company and so on. I had told you that there will be a list of employees who are earning more than 60 lakhs per year. So, if you aspire to go there first of all you should know the list. So, lot of information will be available.

I hope by now you have decided your company and also downloaded your annual report. We will be giving you some assignments at the end of the week which you have to do on your company. But, right now let us move to our session 3, which we will discuss further about the balance sheet.

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Financial Statements

Financial statements are records that provide an information of an individual's, organization's, or business' financial status.

They are normally prepared general or specific purposes.

General purpose Financial Statement

Examples:

- Balance Sheet
- Profit and Loss A/c
- Cash Flow Statement

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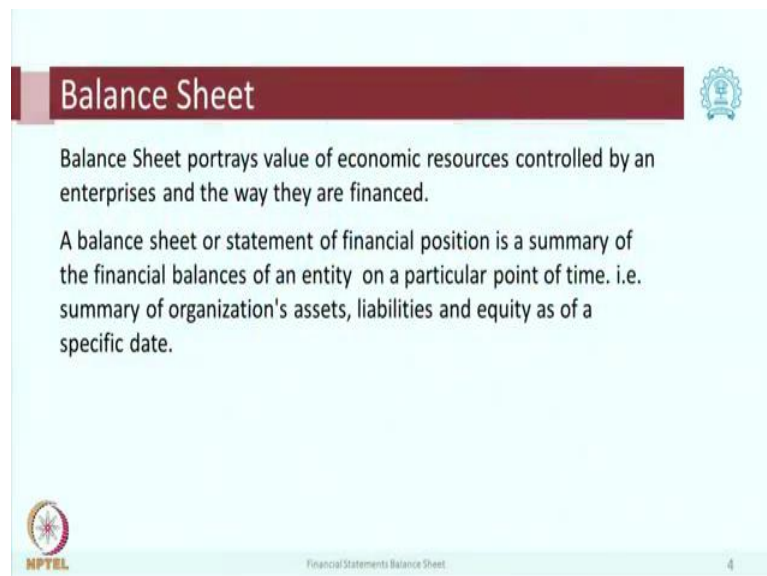
Financial Statements Balance Sheet

3

So, introduction to the balance sheet and the elements of balance sheet. Now, you already know that financial statements records are the provides information for about financial status; it can be for individual, it can be for organisation, it can be for a particular business and so on.

There are three important financial statements: balance sheet, profit and loss and cash flow statement. So, in our course we are going to discuss about how these are prepared and how they can be read and interpreted.

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Balance Sheet

Balance Sheet portrays value of economic resources controlled by an enterprises and the way they are financed.

A balance sheet or statement of financial position is a summary of the financial balances of an entity on a particular point of time. i.e. summary of organization's assets, liabilities and equity as of a specific date.

NPTEL

Financial Statements Balance Sheet

4


Now, coming to specifically what the balance sheet is, it portrays the value of economic resources which are controlled by the enterprises. So, what they are known as economic resources controlled by enterprise? The accounting terminology for it is assets and also how they are financed. They are financed through variety of liabilities. So, either it is money put in by outsiders which is known as liability or it is money put in by the owners themselves which is known as owners fund or it is also called as equity. So, balance sheet is a statement which summarises asset on one side and external and internal liabilities on the other side.

(Refer Slide Time: 04:01)

Balance Sheet (Short Format)

| Liabilities | Rs. | Assets | Rs. |
|-------------------------|-----|-------------------------|-----|
| Owners Fund | XX | Fixed Assets | XX |
| Non Current Liabilities | XX | Non current Investments | XX |
| Current Liabilities | XX | Current Assets | XX |

Every balance sheet shall give a true and fair view of state of affairs of the company as at the end of financial year.


Financial Statements Balance Sheet
5

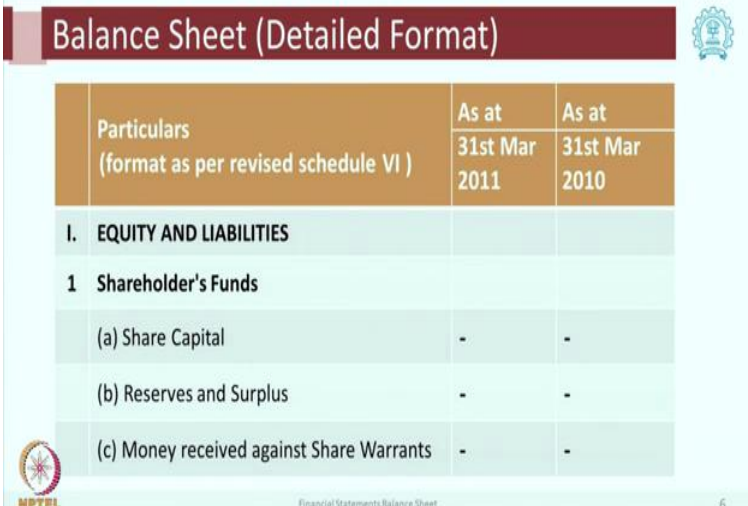
Now, just to get a feel of the balance sheet this is the format in short. So, you can start from the asset side, in the last session we are already discussed what are those terms. So, the first one is fixed assets; this is various infrastructure of the company. The second one is non-current investments. These are long term investments which are going to last for more than 1 year outside our business. The third one are current assets. These are assets which are intended to be held for less than 1 year. So, these three are the major assets or the resources of the undertaking.

On the other side, we have got liabilities. Liabilities are the providers of funds. The first item there is owners' fund. In our last session we have discussed what does it consist of. Do you remember what is included in an owner fund? There are two items. The first one is capital and the second one is reserves or accumulated profits. The second item is

noncurrent liabilities. As the name suggest noncurrent refers to one which is likely to last for more than 1 year. So, long term liabilities the third one is current liabilities or short term liabilities or those liabilities which are likely to last for less than 1 year. So, to just to have a glance, this one is not official format. We are going to it in the next slide. But, just to understand in short what the balance sheet is I think this format is very much useful.

So, any balance sheet can be very much longer because of long large number of items. It can be summarised in this particular short form just to give at a at a first eye view of the balance sheet. Now, every balance sheet shall give a true and fair view of state of affairs. This is the terminology which accountants use. They do not show correct they do not say correct view because there are a lot of assumptions which go into valuation of certain items in the balance sheet. We will be discussing it later, but any balance sheet is supposed to give a true and fair view as at the end of financial year or it can also be prepared in between; it will give you a balance sheet as at the end of that particular day.

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| Particulars (format as per revised schedule VI) | As at | As at |
|---|------------------|------------------|
| | 31st Mar 2011 | 31st Mar 2010 |
| I. EQUITY AND LIABILITIES | | |
| 1 Shareholder's Funds | | |
| (a) Share Capital | - | - |
| (b) Reserves and Surplus | - | - |
| (c) Money received against Share Warrants | - | - |

NPTEL Financial Statements Balance Sheet 6

Now, let us go for a detailed balance sheet. Now, this is the official format as per the schedule VI of Companies Act. This particular format was introduced in year 2011, that is why I have kept there 10 and 11, for a corporate balance sheet two year data is to be given. So, you can see the columns there one for 2010, the other one is for 2011. Now, the first item there it is going to start with the equity and liabilities that is I; in that one is

shareholders funds. If you remember in our earlier balance sheet; I will just go back. See, here I have shown the first item as owners fund. Now, in this format it uses the term shareholders fund.

Now, why is this difference why there it was owners fund and why here it is shareholders fund? Can you think of what is the difference? There is no difference as such. Shareholders are nothing, but the owners of the company. But, since this is the format meant for the company they have specifically used the term shareholders. While for using the short form I had used the term owners fund because every balance sheet is not a balance sheet of a company. It can be a company if it is a partnership firm what whose capital it will be? It will be called as a partners capital. If it is a proprietary concern with a single owner it will be called as a proprietors capital. In case of NGO or a non profit organization what it will be called? It is called as a capital fund ok. So, overall whoever are the owners, it is their capital.

Now, let us go back to company balance sheet. In company balance sheet it is called as shareholders funds. Inside the shareholders fund item a is share capital. Now, how do you define share capital? What is the share capital? Yesterday we have discussed in the last session we had discussed about capital. Do you remember what is the capital? Capital refers to the money which is put in by the owners. In case of company the shareholders are the owners. So, money which is put in by the shareholders is known as share capital. There are three-four specific items under share capital, but we will not go right now into it. But, whatever the money which they have paid it is known as paid up capital that will come here in the balance sheet. So, item a is share capital.

Second item is reserves and surplus. Now, what do you understand by reserve and surplus? Reserves I think in the last session we had discussed. If you remember from the profit and loss account the profit is generated by the entity or by the company. There are two choices with the company: either it can distribute profit in to the owners, then it will not come in the balance. But, most of the good companies do not distribute whole of the profit. They may give part of the profit to the owner and remaining profit is ploughed back into the balance sheet; ploughed back means instead of distributing it is kept with the company and in the balance sheet it appear as a reserve. So, but the full name for it is reserves and surplus.

Now, in the last session we are seen that this profit which is ploughed back is a reserve. Actually for a company there are some other type of reserves also. There can be statutory reserve, there can be capital reserve or there can be dividend equalisation reserve. These are of few examples of reserve. The total of reserves and surplus is given as item b in the balance sheet.

Now, take a look at item c. The item c is money received against share warrants. Now, the question which will arise in your mind is what is share warrant? I think everybody knows the share. What is the share? So, in the partnership firm, let us say there are three partners. Instead of writing total capital we will say as a's capital, b's capital, c's capital. But, in company what happens there are 1000, 10000, 1 lakh, 10 lakh there are large number of owners. So, we do not write everybody's name in the balance sheet. We write the amount which is contributed by that persons together it form share capital.

So, share refers to the share in the ownership of a particular company. So, for so many shareholders suppose there are 10000 shareholders in the company everybody would have put in some capital, that total is item number a share capital. In item number c, it talks about share warrant. So, you will be wondering what is a warrant? Does anybody know what is a share warrant? Now, sometime what happens is a few people are entitled to receive share in future.

So, as of today they have not yet received share, so, we cannot show it in the share capital. Whoever has received share from a company and has paid the money will be share capital, item a. But, if that person has paid the money, but still has not been received has not been issued a share, but has been issued a right to receive share in future it is called as share warrant. That means, suppose I am a company, there are hundred people who have paid me some money and I have issued them the warrant which gives them are right to get share in future. The money which is received by me; I am a company, so, money which is received by me against those share warrants is that item number c. The money received against share warrant.

Now, you may be wondering why should company go into this business of issuing warrants. There are variety of reasons. As I told you one simple way is take money give them share, then it will go in item a that is known as share capital. But, in certain instances as a company I do not want to give them share now, but I want to receive

money and give them share in future, then in such scenario I issue them share warrant. Can you think of any such scenario where a share warrant is received?

I think some of your guessed it correct. In many cases there are some shares known as a ESOPs. ESOP that is Employee Stock Option Plan sometimes is also sweat equity. So, there are managers or executives who are working for the company we want to incentivise them. We want to give them some benefits because they are working very well, but we also want them to stay in the company, we do not want them to go out. So, what we do is we will issue them warrant and attach a condition that if they continue in the company for next 3 years then that warrant can be converted into share. So, this is one example of when the share warrant is received.

Can you think of any other example? Sometimes what happens is company wants to raise loan. Let us say I go to bank and request the bank to give me loan, but what banks says is that bank wants the share in our profit. Now, we cannot directly give them share. So, what we do is when we take loan we give them some share warrants and these share warrants can later on the converted into shares by the bank. They pay some token money to receive the share warrant and that money is shown in item number c.

Now, you may be wondering that the share warrants is a small amount, why so much discussion on it? Why so much discussion because later on it is going to be added to a and keep in mind that a that is share capital is a very important item. These are the owners of the company. So, today's investor should know that there are some owners which are in future going to be included in the list of shares. Now, they can be employees, they can be bankers, in some cases company get some technology from some technical experts or some professionals, maybe to compensate them we give them warrants. So, all these are shown under item number c that is money received against share warrants.

Obviously, this item c is not there for a proprietary concern or for a partnership concern. So, in that earlier short balance sheet it was not there, but in a company balance sheet in a detailed format this item is bound to be disclosed. I hope you are getting what is item number c. Now, we will go to the next slide.

(Refer Slide Time: 16:57)

| Balance Sheet (Detailed Format) | | |
|---------------------------------|--|-----|
| 2 | Share Application Money pending allotment | - - |
| 3 | Non-Current Liabilities | |
| | (a) Long-Term Borrowings | - - |
| | (b) Deferred Tax Liabilities (Net) | - - |
| | (c) Other Long Term Liabilities | - - |
| | (d) Long-Term Provisions | - - |

NPTEL Financial Statements Balance Sheet 7

Now, item number 2; this is share application money pending allotment. Now, what is meant by application money? Many of you would be aware that whenever the shares are issued first of all the shareholder or a prospective share holder has to pay to the company. So, suppose I am company, I want to issue shares; of course, I am not giving them for free they are going to pay me. So, I declare that I am willing to issue share to prospective investors; people who want the shares in my company, they would come forward and pay me some money. Now, I receive money if I give them shares then no problem it will go in one a, that is share capital.

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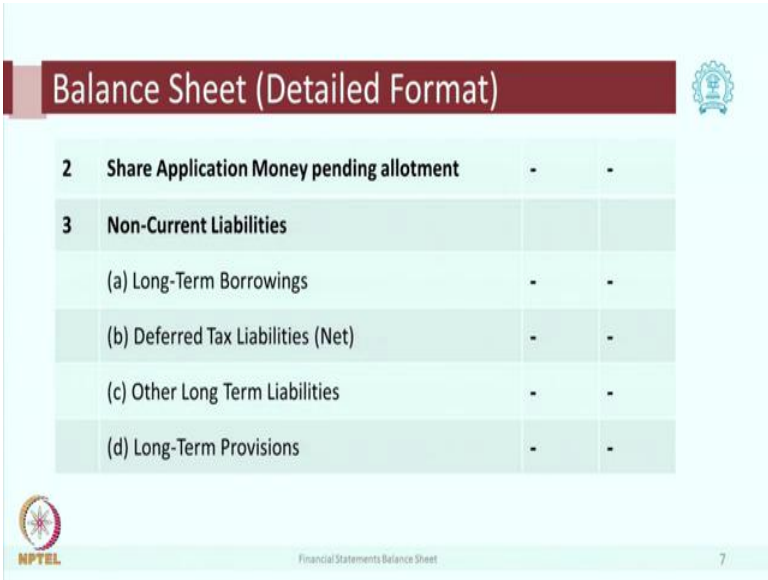
| Balance Sheet (Detailed Format) | | |
|---------------------------------|-----------------------------------|-----|
| 2 | Current Assets | |
| | (a) Current Investments | - - |
| | (b) Inventories | - - |
| | (c) Trade Receivables | - - |
| | (d) Cash and Cash Equivalents | - - |
| | (e) Short-Term Loans and Advances | - - |
| | (f) Other Current Assets | - - |
| | TOTAL | - - |

NPTEL Financial Statements Balance Sheet 10

However, what happens is if a company wants to issue shares it declares that is willing to issue share whoever wants to invest, that is the prospective investors, they would pay money and they want to issue shares receive shares. Now, if they are issued shares then it will go in one a no problem.

But, in some cases what happens is the allotment of shares is delayed means I receive the money now, but till the end of the year the shares are not allotted that is and then where will you keep that money that that particular amount is kept under this item number 2. So, I hope you have got it now.

(Refer Slide Time: 18:39)



| Balance Sheet (Detailed Format) | | | |
|---------------------------------|--|---|---|
| 2 | Share Application Money pending allotment | - | - |
| 3 | Non-Current Liabilities | | |
| | (a) Long-Term Borrowings | - | - |
| | (b) Deferred Tax Liabilities (Net) | - | - |
| | (c) Other Long Term Liabilities | - | - |
| | (d) Long-Term Provisions | - | - |

NPTEL Financial Statements Balance Sheet 7

So, share application money pending allotment; that means, suppose I have received 10 lakhs from the shareholders as till not given them shares. So, it is an application money, but the allotment of shares has not happened; allotment means giving process of giving the shares that has not yet happened. That is why it is shown as share application money pending allotment. It is shown as a separate item because later on it is going to be added to one a that is share capital or the other possibility is I can reject their applications and I will refund the money.

So, it is not yet clear whether it is a share holders funds or whether it is liability. If I give them shares it become shareholder fund if I give them back to the prospective investors it becomes a external liability. That is why there is a second item is a specific item known as share application money pending allotment ok.

Now, the third item. The third item is noncurrent liabilities. Now, we have discussed it earlier in the last session also and also in the beginning of the session. So, what do you understand by noncurrent? I think by now everybody knows that whatever is intended to be settled within one year is we call current. If it is likely to last for more than 1 year we call it noncurrent. So, all these items under are the examples of long term liabilities, they are going to be for more than 1 year. So, they come under item number 3 noncurrent liabilities.

In that if you see a, it is long term borrowings. Now, as the name suggests it is for a long term more than 1 year borrowing. What do you mean borrowing? Borrowing refers to the loans which are taken by the company. So, company most probably will take loans from banks, it can also take loan from financial institutions it can take loans from non banking financial companies or NBFCs are as they are known as. From anybody if they have taken loan then it will be shown under the head 3 a as long term borrowings.

Now, 3 b, deferred tax liability. Now, what do you mean by deferred? Deferred means instead of paying now I am going to pay it in future after one year and tax liability. See normally the tax liabilities are to be paid in the same year then it is known as current tax liability, but a part of the tax liability instead of paying now is paid after 2 years, 3 years, 4 years then it is called as a deferred tax liability. Of course, this is not as per the wish of taxpayer otherwise he/she will say I do not want to pay now and I will defer it.

Government decides as to what tax liability you have to pay now and a part of the tax liability as a incentive they say you do not pay it now you pay after 2-3 years. We will discuss it later on as to which items are deferred, but in general whichever items which are not to be paid in next year, but can be paid beyond that then it is called as a deferred tax liability. Then the item c, 3 c is other noncurrent other long term liabilities non noncurrent and long term is almost same.

So, we have already seen that a refers to long term loans, b refer to deferred tax liability, other than these are shown under c as other noncurrent liability. Now, the question in your mind will be which are such items. Can you think of any such item? I will just give you one example. Suppose, we have received deposit from somebody it is not the loan, but the deposit is likely to be paid after 2 years, 3 years, 4 years etcetera then it will fall in 3 c because it is neither borrowing nor it is a tax liability, but it is a long term in

nature. It is not a short term deposit. It is to be paid after 2-3 years, then it will be shown as a other noncurrent liability.

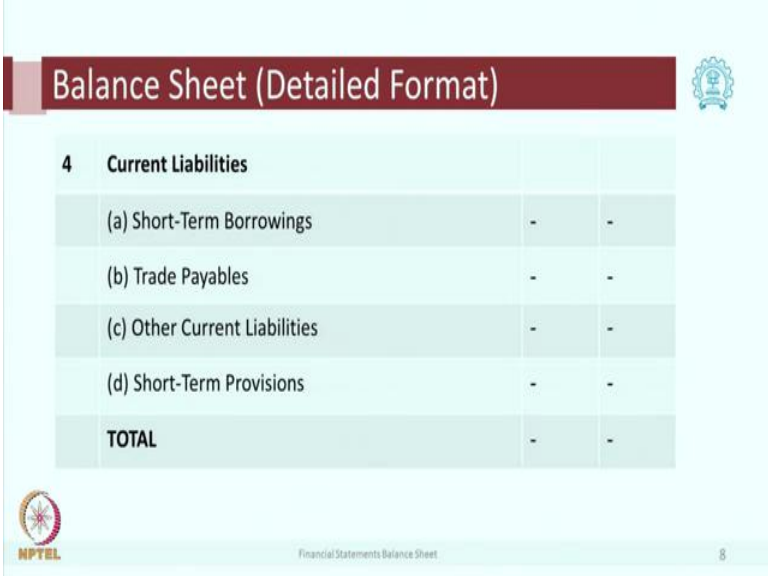
Then the fourth item 3 d, that is long term provisions. Long term means more than 1 year that you are aware, but what do you understand by provision. Is anybody aware what is a provision? See, this is the amount which is payable, but how much is payable is not known to me to the full accuracy with the exact details a few of the details are not yet known, information is not available. So, what I do is I make the best estimate of a particular liability and show it as a provision. So, such long term items are shown as long term provisions.

Can you think of any example of any provision which is long term in nature? Suppose, a customer has filed a complaint against me and wants to take some compensation because, of deficiency in service. We are having argument with the customers some case is on or some discussion is on. We are not going to paid it immediately. After some court decision or after some authority's decisions we will pay it. It will take to 2, 3, 4 years in such case whatever is likely to be payable as a compensation will be shown as a long term provision.

Or another example I give. We have got lot of employees working in our company. When they retire they have to be paid with gratuity. At the time of retirement employees get gratuity amount however we do not know the gratuity amount because it depends on the salary of that person at the time of retirement. Age of retirement we do not know or in case of unfortunate death of the person we have to pay it at the time of death. So, nobody knows the date of death.

So, naturally we do not know the exact amount of gratuity, but we make our best estimate and that estimated liability of gratuity will be shown as a long term provision. Later on we are going to discuss a bit more on provision, but right now I think you would have generally understood that this is the one of the long term liabilities that is why it shown under item 3, that is noncurrent liabilities.

(Refer Slide Time: 26:13)



The slide displays a balance sheet titled "Balance Sheet (Detailed Format)". It features a table with the following structure:

| Balance Sheet (Detailed Format) | | |
|---------------------------------|-------------------------------|----------|
| 4 | Current Liabilities | |
| | (a) Short-Term Borrowings | - |
| | (b) Trade Payables | - |
| | (c) Other Current Liabilities | - |
| | (d) Short-Term Provisions | - |
| | TOTAL | - |

The slide also includes the NPTEL logo in the bottom left corner, the text "Financial Statements Balance Sheet" in the bottom center, and the number "8" in the bottom right corner.

Now, the next one is current liabilities. Now, in the last session we have already discussed what is a current liability; it is less than 1 year period and it comes from the business cycle. So, mostly it relates to day today transactions of the business. So, 3 a refers to short term borrowings.

Now, we already know long term borrowings means more than 1 year, the short term borrowings are loans which are taken for less than 1 year. So, for example, we have approach bank for a bridge loan; bridge loan is typically sanction for just 2 months, 3 months, 4 months period. That means, we are going to start a new project, but it will start after 3 months. So, for that 3 months we have obtained some loan that bridge loan which is 3 month loan so, it is shown as a short term provision. For that matter any loan which is less than one year accepted from bank or NBFCs will be a short term borrowing.

Next one is trade payables. I think most of you are aware about it that whenever we buy any item in a B2B transaction it is not across the counter. If you are in business transaction what happens company places a order, the goods are delivered and payment is done after 15 days, 1 month, 2 month etcetera. So, from the date of purchase till the date of payment the amount is a payable it is related to our regular trading activity, that is why it is shown as a trade payable. Usually trade payables will be for 15 days, 1 month, 2 months and so on. So, that is why they are clubbed under current liabilities.

The third one are other current liabilities. So, as you know what is not covered in borrowing or trade payables there can be any other items. Can you think of any examples? Most of you would have got this in your mind that suppose salaries are there, so, we are supposed to pay salary on thirty first of the month or thirtieth of the month. But, if you do not pay then till the time you pay it becomes a outstanding salary. So, it is an example of other current liabilities. Same way electricity bill, rent, and any other office expenses which is not paid, but is payable in the short term that will be other current liability.

And, the last item in this head that is 4 d is short term provision. We have already discussed the provision. So, a particular liability where amount is not known with substantial accuracy is a provision, but it is payable in the short term period then it is called as a short term provision.

So, with this that is right now we have gone through 1, 2, 3 and 4. So, we have finished the asset side of a detailed format. In the next session, we will discuss about we have completed the liability side of the format. Now, we will next session we will discuss about the asset side Namaste.

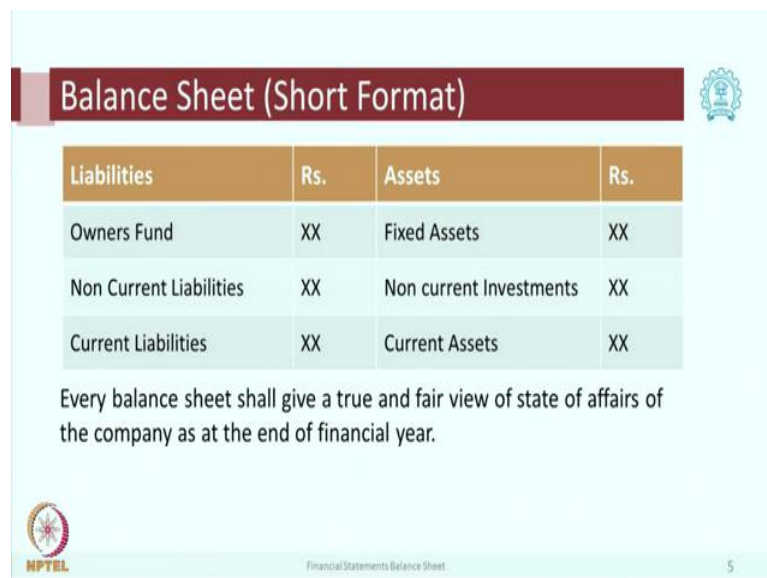
Financial Accounting
Prof. Varadraj Bapat
School of Management
Indian Institute of Technology, Bombay

Lecture – 04
Balance Sheet 2

Namaste, welcome to the 4th session of our Financial Accounting course; I hope you have enjoyed first three sessions and first session 1 and 2 where very much introductory. We had just started what is financial accounting, then we went to understand financial statements particularly the starting point of balance sheet which we saw how it gets emerged from business cycle, we also discussed about what is there.

In the annual report in the last session we had started a little detailed discussion of balance sheet. So, I will just go back to the formats which we have seen, those of who have first time seen the balance sheet this was the short format at one glance to understand what is a balance sheet.

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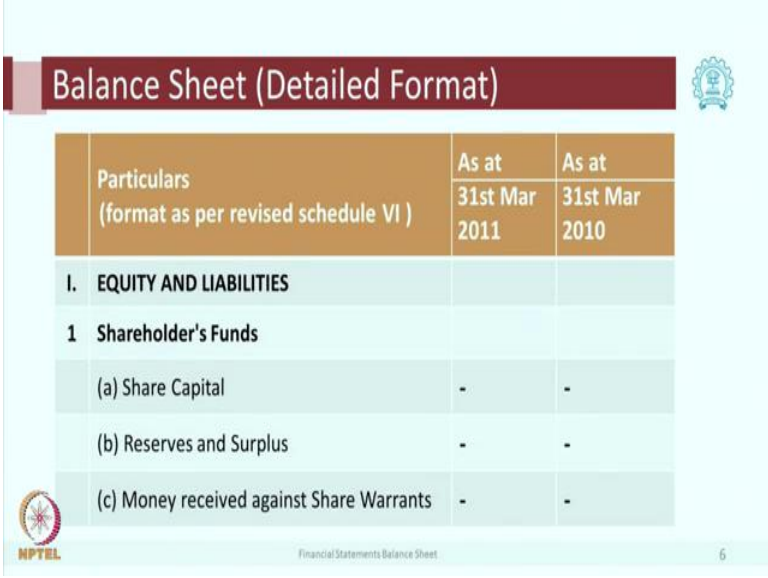
Balance Sheet (Short Format)

| Liabilities | Rs. | Assets | Rs. |
|-------------------------|-----|-------------------------|-----|
| Owners Fund | XX | Fixed Assets | XX |
| Non Current Liabilities | XX | Non current Investments | XX |
| Current Liabilities | XX | Current Assets | XX |

Every balance sheet shall give a true and fair view of state of affairs of the company as at the end of financial year.

On one side we have got assets which provide a list of all the resources with the enterprise, on the other side we have got liabilities. So, liabilities are giving you the providers for the resources or there are internal people like owners who have given us owners funds, there are external people like banks who have given us external liabilities both are listed under the head liabilities.

(Refer Slide Time: 01:51)



| Particulars (format as per revised schedule VI) | As at | As at |
|---|------------------|------------------|
| | 31st Mar 2011 | 31st Mar 2010 |
| I. EQUITY AND LIABILITIES | | |
| 1 Shareholder's Funds | | |
| (a) Share Capital | - | - |
| (b) Reserves and Surplus | - | - |
| (c) Money received against Share Warrants | - | - |

NPTEL Financial Statements Balance Sheet 6

After this we had started discussion on format as per schedule VI, now few of you may be wondering what is the schedule VI mean. Now, schedule six is a schedule under companies act. So, for all the companies the balance sheet is to be prepared as per this format. Now, under schedule VI the first item not the first part is I refers to equity and liabilities that is what we are discuss in the last session, under that you have got 1 that is shareholders funds I hope you have understood it. If you have a doubt in anything not only here, but even of the earlier items please feel free to discuss it on discussion forums. So, the team from IIT we would like to respond to all your queries please be responsive discuss a lot on your discussion forum.

As I have told you earlier I hope you have decided about your company, download the annual report of that company look at the balance sheet; as we are studying a particular financial statement please look at the balance sheet of your company. And, any doubts you have you can discuss with your classmates you can also discuss and ask it on to IIT team we will be responding to each and every question from your side ok. So, under item number 1 there are three sub items share capital, reserves and surplus and money received against share warrant.

So, capital share capital is a money which is put in by the owners, reserves and surplus refers to the profits which are ploughed in; c refers to the money which is collected from certain people and in future they will receive shares, so far they have not received any

shares such money is shown as money received against share warrant. In item number 2 share application money pending allotment this is also similar; the prospective investors have paid me some money, shares are to be issued to them but are not yet issued, till that time the money is shown under item number 2 that is share application money pending allotment. Once they are allotted it will go in 1 if they are not allotted it will be refunded that is the item number 2.

Item number 3 is non-current liabilities again you have got four items a are long term borrowings. So, these are the loans taken for more than 1 year, b is deferred tax liability. Now, this is a tax liability the amount which is to be paid as tax, but not in the current year it will be paid after 2, 3, 4 years due to certain provisions under tax laws. They are differed tax liabilities later on we are going to discuss how they are calculated, but once we complete our balance sheet.

c is other long term liabilities, so other than a and b if there are deposits received for more than 1 year or if there are some salaries which are unpaid for a longer period they are all shown under other long current long term liabilities, then 3D is long term provisions. So, provisions are those items in liabilities of which the amount is not known with substantial accuracy. So, a provision is created and it is shown under 3D especially if it is for more than 1 year.

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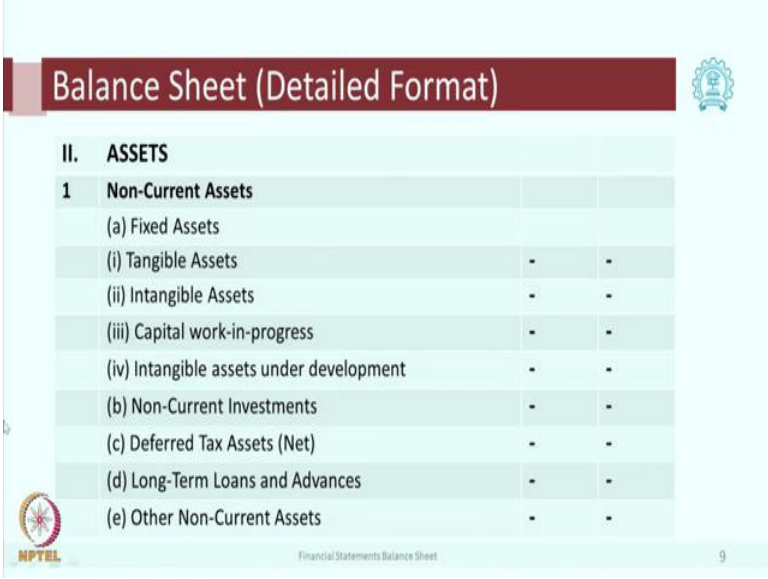
| Balance Sheet (Detailed Format) | | |
|---------------------------------|-------------------------------|---|
| 4 | Current Liabilities | |
| | (a) Short-Term Borrowings | - |
| | (b) Trade Payables | - |
| | (c) Other Current Liabilities | - |
| | (d) Short-Term Provisions | - |
| | TOTAL | - |



The next one which discussed was item number 4 in item number 4 a, then item number 4 where current liabilities as the name suggest these are for less than 1 year. So, 4 a is short term borrowings, so loans taken for less than 1 year 4 b we are trade payables. So, these are various purchases made, but we have not yet paid related to our regular business, so they are called as trade payables. 4 c are any other current liabilities like do you remember any examples we are discussed outstanding salaries or outstanding electricity bills or outstanding office expenses outstanding stationary charges.

So, on any expense which is not yet paid, but is payable in 1 year that is other current liabilities. 4 d are short term provisions, so again estimated liabilities which are payable in short term. So, in our last session we had come up to item 4 this was a quick revision I am taking revision every time especially in the earlier sessions but, I hope you are attentive and you have understood whatever we have discuss till now.

(Refer Slide Time: 07:09)



| Balance Sheet (Detailed Format) | | |
|---------------------------------|--|-----|
| II. ASSETS | | |
| 1 | Non-Current Assets | |
| | (a) Fixed Assets | |
| | (i) Tangible Assets | - - |
| | (ii) Intangible Assets | - - |
| | (iii) Capital work-in-progress | - - |
| | (iv) Intangible assets under development | - - |
| | (b) Non-Current Investments | - - |
| | (c) Deferred Tax Assets (Net) | - - |
| | (d) Long-Term Loans and Advances | - - |
| | (e) Other Non-Current Assets | - - |

Now, let us go to the II part of balance sheet that is known as assets. So, these are the properties or these are the resources which are available with the enterprise in two again the item number 1 is noncurrent asset as the name suggests noncurrent means it is for more than 1 year or you can also call it as a long term in that you have got a; a refers to fixed assets. In a again we have got a small i and ii, so a 1 is tangible assets a 2 is intangible assets.

In our second session we are discussed what is a fixed asset I hope you remember. So, fixed assets refer to the infrastructure of the undertaking, it refers to those assets which are used for running the business cycle they themselves do not take part in business cycle, they do not get converted, but they support the money cycle. So, which are such items?

For example, we have got land, we may have a building, we may have a machinery, we may have vehicles they are with us for a longer period, they help us in doing business or they help us in doing our regular activities, but they are themselves or not getting converted, so it is not a stock ok. So, these are fixed assets they are of two types one is tangible the other is intangible.

Tangible means that can be touched, that has physically existence. So, all the examples which we discussed like land building vehicles these are all tangible second one are intangibles, they have no physical existence and cannot be touched, but they have a value. So, what are such assets can you think of any example? I think all of you use computers we can see the computer screen and the other parts that is all your hardware, but computer also has some software built into it that software you cannot touch or you cannot feel it but you can see its impact that is an example of intangible asset.

Can you think of any other example? There are patents, there are copyrights, there are trademarks these all are rights of the company or rights of the owner, but not of physical in nature it is a intellectual property all these are examples of intangible fixed assets. This is an era aware intangible assets are becoming more important than tangible assets say 100 years before tangible assets were very important. So, large companies like ford or general motors or general electric wire big companies.

Today which are the big company's? I think all of you know now it is Google, it is Facebook it is, Microsoft do they have physical assets of course, they have little bit, but most of their assets are intangible in nature anyway this was just for discussion in general for any company there will be some tangible assets some intangible assets through be shown under a 1 and 2, a 3 is capital work in progress.

Now, what is meant by work in progress? That means, some work is going on something which is under construction, capital because it's a long term. So, suppose building is under construction once it is ready then we will call it as a tangible fixed

asset, right now the building is not ready, but some work is on we have spent some money and suppose it will take three years to complete. So, as of now I cannot show it is a building or as a tangible asset neither I can show the money paid just as an advanced because some work is already happened that is why it is shown as a capital work in progress.

The fourth one is intangible assets under development. Now, what is this? Just like capital work in progress lot of intangible assets are being created or being developed, but still they are not ready like you have applied for patent, but patent is not yet sanctioned, but you have already spend lot of amount on research, then that will be a intangible asset under development or for example, you are developing some software development testing has not happened.

So, it is not in the ready stage for use, but cost has been incurred in the development process that will be shown as intangible asset under development. Now, when you studied your company's balance sheet for last two three years please try to look at item 3 and 4 carefully because, this year suppose it is under construction or under development next year it will be ready. And, it would have gone into tangible or intangible asset right because we expect in 1 or 2 years the work will be completed and it will be classified either as tangible or intangible.

Suppose a particular item is shown as under construction for a long period 2, 3, 4 years, then we will have a doubt as to why that item is not getting ready, is it a fraud to show that item or there are genuine problems; if non-completing it of course, we cannot conclude anything right away. But, I am just saying that you can just look at the details of item 3 and 4 and say that these items are stagnant or they are getting ready and new items are by being newly constructed ok.

Now, this a that is fixed assets as 1, 2, 3, 4 the total of that is considered as a total of fixed assets. Now, the second item that is 1 b is non current investment, in our last to last session we are discussed a bit about what is an investment, do you remember? So, if you put in some money outside your business it is called as a investment within your own business if you construct a building construct or purchase stock purchase that is not an investment; investment means you have to give it money to some other company or somewhere else. So, can you give any examples of investments?

So, for example, shares for example, bank deposits for examples units of mutual fund if you invest money with some other company or with the bank then it is a investment if that investment is done for more than 1 year it will be shown under 1 b non-current investment. Some of you may be interested in finance in future you might be wanting to do career in finance you would have heard of terms like portfolio management or stock market whatever the money you are putting in there that is all under 1 b.

And there is a science of how that is managed, how do you invest, when do you buy, when do you sell all those things are studied under portfolio management of course, right now will not going to it, but what portfolio they have your company has you can see from 1 b. So, when you go to balance sheet of your company have a look at 1 b to understand what type of investments they are making.

Now, go to 1 c that is deferred tax asset if you remember in the last session and even in the beginning of today's session we discussed about deferred tax liability. Now, deferred means something which is not due today or in the current year which is due in later years, if it is a liability it will be shown as a deferred tax liability this is a deferred tax asset.

So, today you will not get the benefit of it you will get it after two three years, then it is called as a deferred tax asset. Does it mean after three years government will pay you tax? Of course, no government pays us tax, but government gives you some benefits which you can use after 2 years, after 3 years benefit of remission of tax or reduction of tax that is called as a deferred tax asset. Exactly what is this item we will discuss later on, but if there is any such asset in existence it will be shown under 1 c ok.

Now, the next item is d long term loans and advances. Now, what do you mean by loans and advances? Loan is of two types; one, the company has taken loan, then it will be shown as a borrowing under the liabilities we have seen it in the last session, but suppose company gives loan, then to distinguish it from normal loans we will call it as loan and advance. So, if company gives loan to somebody or advance to somebody it is considered as a loans and advances.

So, in future if you see the word loan and advance always keep in mind that it is an asset item if there is only loan then it is a liability, if it is a loan and advance there is a hint to you that it is an asset ok. Now, since this is for a longer period we are showing it as a

long term loans and advance. What can be an example? For example, suppose company gives advance to employee to purchase new house, now the housing advance will obviously not be for one year only, it may be for 5 years, ten years, 15 years, then it will be shown as a long term loan and advance.

It can also be a loan or advance given to some supplier for two three years let us say supplier wants to buy a new machinery. So, we will give some loan to be repaid after 3 years, then it will be shown as a long term loan and advance. Then 1 e other noncurrent assets, so apart from abcd if there is any other long term asset then it will be shown as a other noncurrent asset ok. So, under item 1 we have discussed whole of long term assets.

Now, let us go to second, so in assets we have got one as noncurrent, two as current I think you all know the definition these are all going to mature or which are going to be liquidated or converted within a period of 1 year. If you remember in our session 1 we have seen the business cycle. So, in a business cycle mostly it is a exchange of fixed assets noncurrent assets we will discuss or we will deal in them only after two three years, four years, five years, but current assets' transactions take place every moment, they are continuously being exchanged.

So, under 2 1 we have got current investments I think you remember what is an investment. So, we put money outside our business it is called investment, for example, if we have a three-month bank FD, then it will be shown as a current investment or if we invest in shares and sell them after two months, then it will be a current investment ok, then 2 b is inventories.

(Refer Slide Time: 20:11)



| Balance Sheet (Detailed Format) | | |
|---------------------------------|-----------------------------------|-----|
| 2 | Current Assets | |
| | (a) Current Investments | - - |
| | (b) Inventories | - - |
| | (c) Trade Receivables | - - |
| | (d) Cash and Cash Equivalents | - - |
| | (e) Short-Term Loans and Advances | - - |
| | (f) Other Current Assets | - - |
| | TOTAL | - - |

Now, what do you understand by inventory? The other name for it is stocks we might have some raw material that are converted to finished goods or we can purchase finished goods all this taken together are known as inventories. So, these are items which are meant to be converted or sold in our normal course of business which will be shown under 2 b c is trade payables sorry trade receivables we have already seen trade payables under liability. What is a trade receivable?.

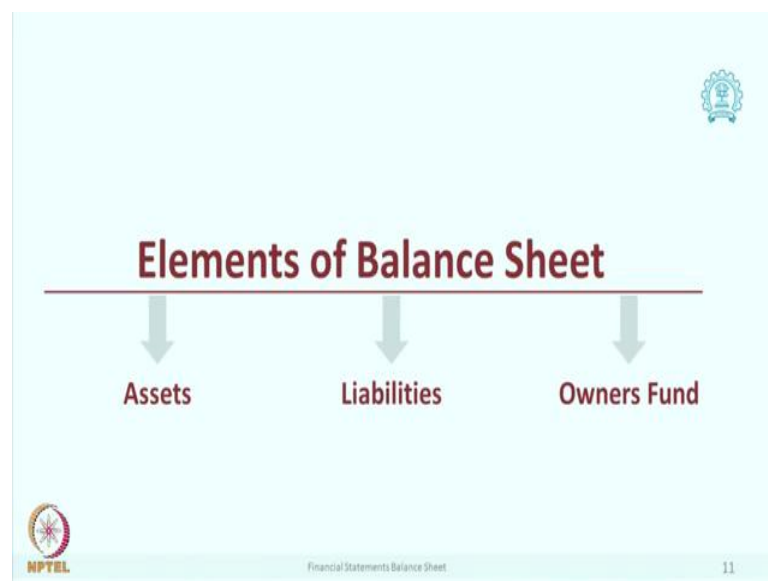
In B2B business normally when we sell the goods across the counter we do not get the payment immediately, we will sell the goods, we will send the bill after 15 days, 1 month, 2 month customer will make the payment. So, till the time the money is received it is called as a trade receivable. In other words whenever we make a credit sale till the time we do not get the payment the sale amount will be shown as a trade receivable, the world trade shows that it's a day to day activities, it is a regular business activity relating to or creating a receivable for me it will be called as a trade receivable 2 c. Now 2 d cash and cash equivalent I think everybody understand cash, everybody likes cash because it is very easy to spend. What is the cash equivalent?

There are items which are almost like cash; they can be very easily converted into cash, so they are called as cash equivalents. Later on we are going to study cash flow statement if you remember that is a third statement, when we study cash flow we will go into details about what is cash and cash equivalent, but right now you can just assume it that

its more or less like a cash. Now e that is short term loans and advances we have just discussed loans and advance I hope you remember. So, these are the loans given by the entity, so when we give loan to employee or to other company or advance to somebody, all that is under the head loans and advances.

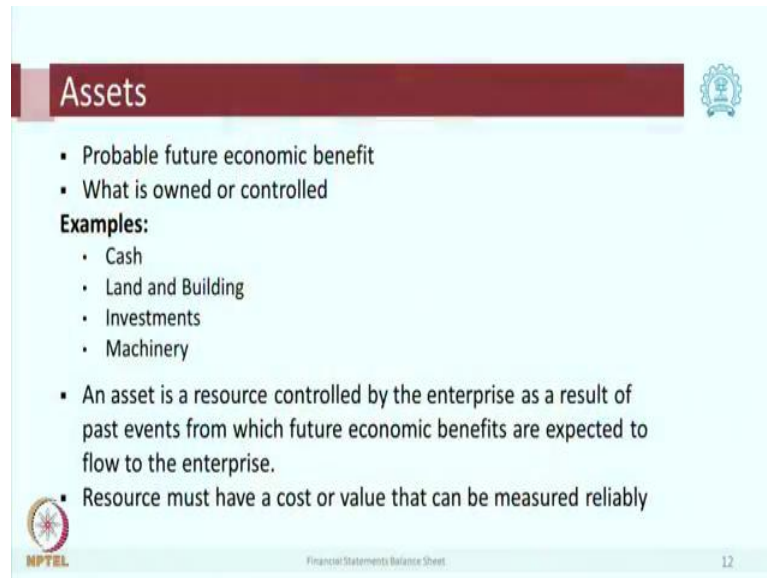
So, under that if there for less than 1 year we will call it as a short term loans and advance, 2 f other current assets. So, a to e if there is a particular item which is of short term in nature, but we does not fit in a to e it will be shown under f as other current assets I hope you have got what is an asset. So, it is a total of 1 plus 2 simple if it is more than 1 year the it is non-current if less than 1 year then it is current. So, we get here the total of assets some of you might have many queries do not worry we are going to again discuss the assets taking each asset we will discuss it in detail right now let us go ahead.

(Refer Slide Time: 23:33)



So, if you look at the elements of balance sheet there are three parts one is a asset then it is funded by a liability here I mean a external liability or by the owners which is called as owners fund. Now, let us go into detail of each item. So, how do you define an asset?

(Refer Slide Time: 23:57)



The slide is titled "Assets" in a dark red header. Below the header, there is a list of characteristics of assets:

- Probable future economic benefit
- What is owned or controlled

Below the list, the word "Examples:" is written in bold. Underneath, there is another list of examples:

- Cash
- Land and Building
- Investments
- Machinery

Below the examples, there is a definition of an asset:

- An asset is a resource controlled by the enterprise as a result of past events from which future economic benefits are expected to flow to the enterprise.

At the bottom of the slide, there is a small logo on the left and the text "Financial Statements Balance Sheet" and "12" on the right.

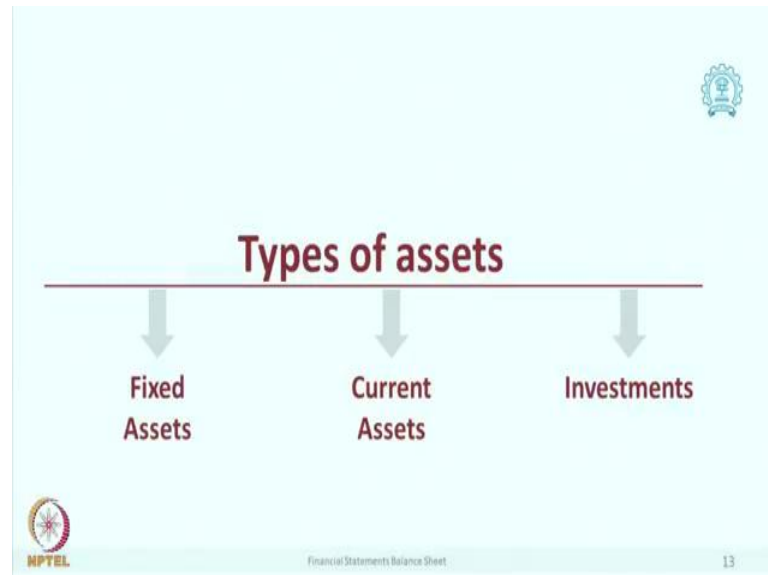
This is a probable future economic benefit what is owned or controlled. So, there are two conditions to be satisfied to be called an asset; one, the item should have an economic value and two, the item should be owned. If you remember on day 1, the first session I had told you that a particular asset does not come in balance sheet because it does not satisfy condition number 2 do you remember that item that item is a human asset, the employee, scientist, managers, executives working with the company actually they are very important asset to the entity, but that cannot be shown in the balance sheet because look at the definition it should have a probable economic value which they have, but it should also be owned or control.

So, employees are not our slaves they are not owned by the company, so they cannot be shown as owned assets that is why human assets you would not see in the balance sheet. Now, any other assets first of all you have to see whether it's a it meets this two conditions I think examples you are all aware cash, land, building, investment, machinery think of another 10 examples and I think you can include it in your assignment.

Now, again the definition is given that it is a resource controlled by the enterprise as a result of some past event, but it should have a future value. The second point is resources must have a cost or value that can be measured reliably, if we have an asset that has

some value but there is no reliable estimation available, then also we cannot value it and show it in the balance sheet.

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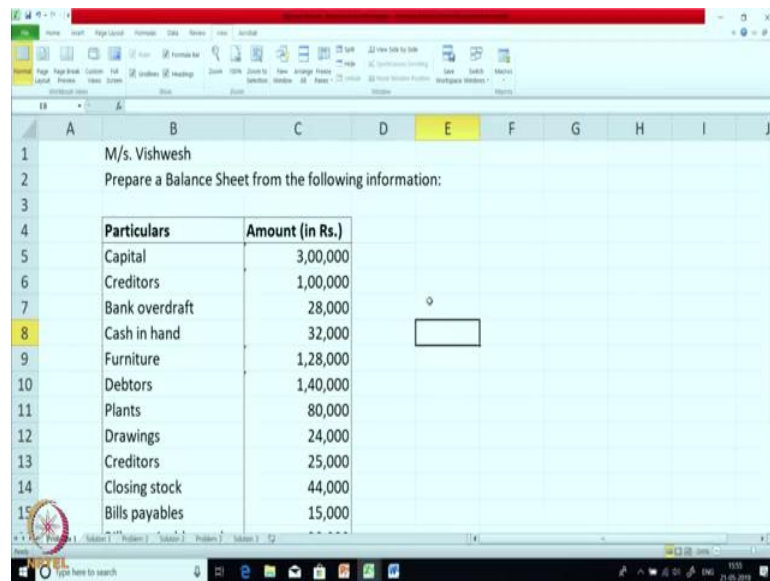
Now, the types of assets we have got fixed assets, current assets and investments. I think with this we will stop here we have already discussed it when we discuss the balance sheet, but we will take up each item now individually and will explain it in detail. But, till that time as I have told you please go to the balance sheet of your company and look at what assets they have, then only you will really have a real type of learning Namaste.

Financial Accounting
Prof. Varadraj Bapat
School of Management
Indian Institute of Technology, Bombay

Lecture – 05
Balance Sheet 3

Namaste we have already discussed format of Balance Sheet. So, you know that amongst the financial statements balance sheet has a very important role and it shows the financial position as at a particular date. Now let us do a small case or a problem where we will try to prepare the balance sheet from given balances, later on we will do it for a company in a company format, but this is a small exercise which wherein we will not emphasize too much on format. We will just try to prepare the basic structure of balance sheet you have a printout of this so, have a look at it and try to solve the case along with me.

(Refer Slide Time: 01:09)



M/s. Vishwesh
Prepare a Balance Sheet from the following information:

| Particulars | Amount (in Rs.) |
|----------------|-----------------|
| Capital | 3,00,000 |
| Creditors | 1,00,000 |
| Bank overdraft | 28,000 |
| Cash in hand | 32,000 |
| Furniture | 1,28,000 |
| Debtors | 1,40,000 |
| Plants | 80,000 |
| Drawings | 24,000 |
| Creditors | 25,000 |
| Closing stock | 44,000 |
| Bills payables | 15,000 |

(Refer Slide Time: 01:16)

| Particulars | Amount (in Rs.) | |
|-----------------------|-----------------|----|
| Capital | 3,00,000 | L |
| Creditors | 1,00,000 | L |
| Bank overdraft | 28,000 | L |
| Cash in hand | 32,000 | A |
| Furniture | 1,28,000 | A |
| Debtors | 1,40,000 | A |
| Plants | 80,000 | A |
| Drawings | 24,000 | -L |
| Creditors | 25,000 | L |
| Closing stock | 44,000 | A |
| Bills payables | 15,000 | L |
| Bills receivables and | 20,000 | A |
| Net profit | 25,000 | L |

Now, this is a balance sheet they have given list of balances and from this you are required to prepare a balance sheet. So, how shall we go about? We know there are two sides of balance sheet one represents liabilities and the other represents assets, liabilities are the way the money has been sourced and assets are the resources which are required for the business. So, for each and every item go on marking it as a asset item or a liability item.

For example capital, where will you capital be recorded, where will you take it? This is a liability item so, mark it as L like that try to mark each and every item. So, creditors is what type of item? Creditors represent the payables for our supply somebody has supplied us good and we have to pay them right now it is a liability so, we will mark it as L. Bank overdraft here the bank has allowed us to draw excess beyond our balance again it is one more liability so, L cash in hand this is A, furniture A, debtors these are receivables from customers so, this is A.

Plant and machinery or plant it is A, drawings so, money is put in by the owners that is capital if they take out the money from the business it is called as a drawing. So, this is not exactly asset, but we will mark it as minus L. So, it is a L item, but it should be reduced from L system is not allowing me to mark it that way. Now I think its fine creditors; creditors also represent, closing stock this is S, bills payable is a liability.

Bills receivables and maybe other assets, but it is an asset and net profit is it an asset or liability should it be written in the balance sheet, net profit or reserves represents the

accumulated profit of the undertaking. So, it is one of the liabilities, it belongs to the owners we will add it to the owners funds, but right now mark it as liability. So, we have marked all the items now based on this prepare the balance sheet you can do the exercise on your own you can halt the pause the video here and prepare the balance sheet and then we will check the solution. So, ready with the solution.

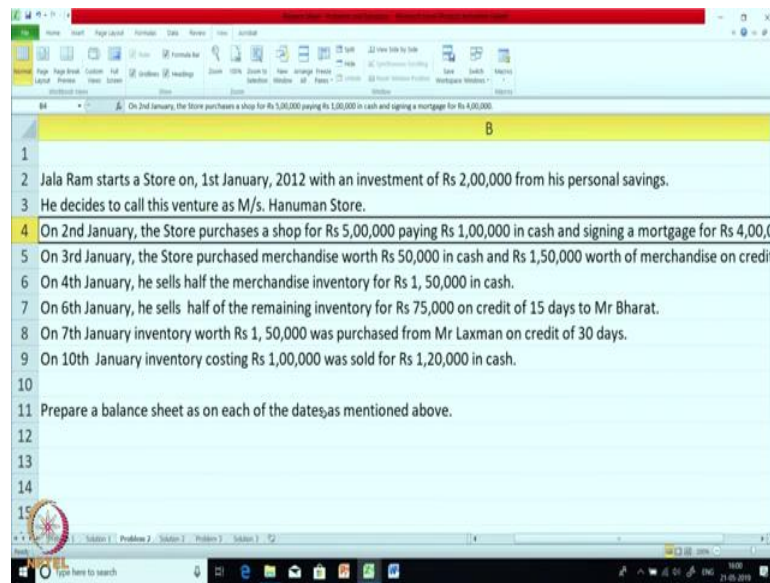
(Refer Slide Time: 05:00)

| Balance Sheet | | | | |
|--------------------|---------------|-------------------|---------------|-----------|
| | Rs | | Rs. | |
| Liabilities | | Assets | | |
| Capital | 3,00,000 | Plant | 80000.00 | |
| Less: Drawings | -24,000 | Furniture | 128000.00 | |
| | | 276000 | Debtors | 140000.00 |
| Creditors | 100000 | Closing stock | 44000.00 | |
| Bank overdraft | 28,000 | Bills receivables | 20000.00 | |
| Bills payables | 15,000 | Cash in hand | 32000.00 | |
| Creditors | 25,000 | | | |
| | 444000 | | 444000 | |

I am just showing you the solution directly I hope you have made it and you are rechecking it. So, we have listed out all the assets plant, furniture these are part of fix assets debtors, closing stock, bills receivable and cash in hand these are all current assets. You can see it is as per the order of permanence, the most permanent asset is put up and the most liquid asset is put at the last. Capital minus drawings that is why we have put it as minus L then we have got two creditors here; creditors 100000 again creditors 25000.

Because these are probably long term creditors and these are short term creditors, bank overdraft and bills payables and this last creditor these are all current assets current liabilities sorry getting it. So, this is a balance sheet as on that particular date using the balances which we were we had been given.

(Refer Slide Time: 06:06)



Now, let us go to the next problem this is even more interesting because here based on the information as it is made available we are trying to prepare the balance sheet. Now we have been given a few raw transactions and directly from raw transaction we should make balance sheet on respective date on each date ok. Now, Jala Ram start store on 1st January 2012 with investment of 200000 from his personal savings he decides to call the venture as Messrs Hanuman Stores. On 2nd January the stores purchases a shop for 500000.

Paying 100000 rupees in cash and signing a mortgage for 400000. So, a shop is purchased down payment of 100000 is made in cash and a mortgage is signed; that means, a loan is obtained for 400000 so, that shop of 500000s can be paid. Now the store purchases merchandise worth 50000 in cash and one fifth 150000 on credit. So, the payment for this 150000 will be made latter on, but we will have to record it right now on the date the transaction is entered it is recorded the payment is made as and when it becomes due. Now he sells half the merchandise for 150000 in cash.

He sales the remaining inventory for 75000 on credit for 15 days to Mr. Bharat on 7 January inventory of 150 that is the next purchase is made from Laxman on credit of rupees 30 of 30 days and on 10th Jan another inventory of that inventory of 100000 was sold for 120 in cash. Now here not only we have to make balance sheet we have to make balance sheet on the respective dates. You I will request you to take printout of this and

solve it yourself you can take a pause here solve it and then we are going to check answer for every transaction. So, you have to make series of balance sheets on 1st Jan, 2nd Jan 3rd Jan 4th Jan and so on.

So you are ready ok. In the interest of time I am immediately showing you the solution I hope you are ready with the solution by now, so, that you can cross check it.

(Refer Slide Time: 09:19)

The screenshot shows an Excel spreadsheet with two balance sheets. The first balance sheet is for 1 January 2010, and the second is for 2 January 2010. The first balance sheet shows Capital of 200,000 and Cash of 200,000. The second balance sheet shows Capital of 200,000, Payables (Mortgages) of 400,000, Cash of 100,000, and Shop of 500,000.

| Balance Sheet as on 1 January 2010 | | | |
|------------------------------------|--------|--------|--------|
| Liabilities | Amount | Assets | Amount |
| Capital | 200000 | Cash | 200000 |
| | 200000 | | 200000 |

| Balance Sheet as on 2 January 2010 | | | |
|------------------------------------|--------|--------|--------|
| Liabilities | Amount | Assets | Amount |
| Capital | 200000 | Cash | 100000 |
| Payables(Mortgages) | 400000 | Shop | 500000 |

So, the first transaction was opening of a new business with investment of 200000s from personal savings that is a capital which Jala Ram has brought in. So, the day 1 that is on 1st January the balance sheet shows capital of 200000s Mr. Jala Ram would have brought in cash of 200000. So, we are showing cash of 200000 the balance sheet tallies at 200000. So, total of liabilities matches the total of assets. Now this precondition should be there on all the days now.

The next transaction; the next transaction is there is a purchase of shop for 500000 down payment is made for 100000 and remaining is in the form of mortgage loan of 400000.

(Refer Slide Time: 12:25)

| Balance Sheet as on 3 January 2010 | | | |
|------------------------------------|--------|---------------------------|--------|
| Liabilities | Amount | Assets | Amount |
| Capital | 200000 | Cash | 50000 |
| Payables for Mortgages | 400000 | Shop | 500000 |
| Payables | 150000 | Merchandise (Inventories) | 200000 |
| | 750000 | | 750000 |

So, on 3rd January this is how the balance sheet looks like. Now the cash balance has come down to 50000, see earlier it was 100000 since we have made a payment of 50000 for goods. The cash will come down to 50 shop remains unchanged at 500000 merchandise that is inventory is 200000 now it is also called as goods 150 is purchased on credit 50000 is purchased on cash so, total goods are 200000.

Capital 200000 payable for mortgage this is continued in the last time on from last time that is 400000 and payables now these are trade payables that is creditors also sometimes is called its 150000, total is 750000 sorry you getting it. This is how slowly the balance sheet will get build and more and more items will get added. Now next transaction on 4h January half of the merchandise inventory is sold for 150000 in cash.

(Refer Slide Time: 13:51)

| Balance Sheet as on 4 January 2010 | | | | |
|------------------------------------|--------|--------------------------|--------|--------|
| Liabilities | Amount | Assets | Amount | |
| Capital | 200000 | Cash | 200000 | 150000 |
| Payables for Mortgages | 400000 | Shop | 500000 | |
| Payables | 150000 | Mercandise (Inventories) | 100000 | 100000 |
| Profit and Loss A/c | 50000 | | 0 | |
| | 800000 | | 800000 | |

| Balance Sheet as on 6 January 2010 | | | | |
|------------------------------------|--|--|--|--|
| | | | | |

Now, on 4th of Jan the cash balance increases from 50000 plus 150 it becomes 200000. Shop 500000, unchanged merchandise earlier it was 200000, now half of it remains so, it has become 100000. Capital unchanged 200000, mortgages unchanged at 400000s, payables unchanged. Now there is a addition here because the transaction was unique compared to our earlier transactions inventory of 100000 was sold for 150000.

So, we get cash of 200000 I mean 50000 was the earlier cash, new 150 was added I will just mark write it here for more clarity. So, we got fresh cash of 150 and merchandise or inventory or goods of 100000 were given to customers. So, inventory of 100000 sold for 150; that means, we got 50000 extra that 50000 represents profit. So, in balance sheet we will write it as profit and loss account 50000 getting it. Now let us go to next transaction on 6th January remaining half of the inventory is sold for 75000.

(Refer Slide Time: 16:45)

| 37 | Capital | 200000 | Cash | 200000 | |
|----|------------------------|--------|--------------------------|--------|-------|
| | Payables for Mortgages | 400000 | Shop | 500000 | |
| 38 | | | | | |
| 39 | Payables | 150000 | Mercandise (Inventories) | 50000 | 50000 |
| 40 | | | Receivables | 75000 | 75000 |
| 41 | Profit and Loss A/c | 75000 | | | |
| 42 | | | | | |
| 43 | | | | | |
| 44 | | 825000 | | 825000 | |

Balance Sheet as on 7 January 2010

And now the balance sheet total has become 825000. Now 7 January inventory worth 150 was purchased from Laxman on credit of 30 days.

(Refer Slide Time: 17:12)

| | Liabilities | Amount | Assets | Amount |
|----|------------------------|--------|--------------------------|--------|
| 48 | Capital | 200000 | Cash | 200000 |
| 49 | Payables for Mortgages | 400000 | Shop | 500000 |
| 50 | | | | |
| 51 | Payables | 300000 | Mercandise (Inventories) | 200000 |
| 52 | | | Receivables | 75000 |
| 53 | Profit and Loss A/c | 75000 | | |
| 54 | | | | |
| 55 | | | | |

Balance Sheet as on 7 January 2010

So, this is as on 7 January since the new inventory is purchased, inventory has become 200000 this is a transaction on credit. So, payables will now become 300000 earlier it was 150, 150 plus 150 it become 300000 all other balances are unchanged.

(Refer Slide Time: 17:33)

| | Liabilities | Assets | |
|------------------------|-------------|--------------------------|--------|
| Capital | 200000 | Cash | 200000 |
| Payables for Mortgages | 400000 | Shop | 500000 |
| Payables | 300000 | Mercandise (Inventories) | 200000 |
| Profit and Loss A/c | 75000 | Receivables | 75000 |
| | | | |
| | | | |
| | | | |
| | | | |
| | 975000 | | 975000 |

Balance Sheet as on 10 January 2010

So, now the total becomes 975. Now the last transaction on 10th January inventory costing 100000 was sold for 120 in cash.

(Refer Slide Time: 17:58)

| | Liabilities | Assets | |
|------------------------|-------------|--------------------------|---------|
| Capital | 200000 | Cash | 320000 |
| Payables for Mortgages | 400000 | Shop | 500000 |
| Payables | 300000 | Mercandise (Inventories) | 100000 |
| Profit and Loss A/c | 95000 | Receivables | 75000 |
| | | | |
| | | | |
| | | | |
| | | | |
| | 1075000 | | 1075000 |

So, 10th Jan; now, the cash balance increases by 120, it was 200000 earlier becomes 320, merchandise or inventory which was 200000 of that 100000 is reduced. So, it becomes 100000, shop and receivables are unchanged because this was a cash transaction. The profit which was 75 we are going to further add 20000 to profit. Capital payables for

mortgage and payables that is trade payables remain unchanged the total becomes 107500 are you getting.

This was a very simple exercise we have seen a series of transactions and made a series of balance sheets for it. In real life it is not necessary to make balance sheet everyday you can make it at the end of the period at the end of 3 months or at the end month of 1 month. But within the system this is how the balance sheet gets updated or revised. So, this is only one problem where we are looking at series of balance sheet are you getting it ok. Let us go to the third case.

(Refer Slide Time: 19:29)

Prepare a vertical Balance Sheet from the following information:

| Particulars | Amount (in Rs.) | Particulars | Amount (in Rs.) |
|------------------|-----------------|----------------------|-----------------|
| Opening Stock | 32,250 | Sales | 2,55,000 |
| Purchases | 1,80,000 | Returns Outward | 12,000 |
| Closing Stock | 26,250 | Capital | 1,87,500 |
| Returned Inward | 7,500 | Discount (Cr) | 7,500 |
| Freight | 4,500 | Creditors | 42,000 |
| Rent | 18,000 | Cash at Bank (Cr) | 13,500 |
| Carriage | 3,000 | Loan (Cr) | 27,000 |
| Debtors | 52,500 | Bad Debts Recovered | 750 |
| Cash | 6,000 | Outstanding Expenses | 16,950 |
| Interest on Loan | 2,700 | Net Loss | 22,200 |
| Goodwill | 12,000 | Salaries | 25,500 |

Now, in the third case we have been given several balances and from these balances you are required to make a vertical balance sheet. Latter on for a company we are going to make a detailed balance sheet this is a very simple exercise where we use only a skeleton type of pattern or a structure and we will try to make a vertical balance sheet. So, have a look at these items go through each and every item. As we did in the first case we will mark every item as asset and liability and then prepare a balance sheet.

(Refer Slide Time: 20:12)

| | A | B | C | D | E | F | G | H |
|----|---|--|--------|----------------------|----------|---------|---|---|
| 7 | | Closing Stock | 26,250 | Capital | 1,87,500 | L | | |
| 8 | | Returned Inward | 7,500 | Discount (Cr) | 7,500 | PL | | |
| 9 | | Freight | 4,500 | Creditors | 42,000 | L | | |
| 10 | | Rent | 18,000 | Cash at Bank (Cr) | 13,500 | L | | |
| 11 | | Carriage | 3,000 | Loan (Cr) | 27,000 | L | | |
| 12 | | Debtors | 52,500 | Bad Debts Recovered | 750 | +CASH A | | |
| 13 | | Cash | 6,000 | Outstanding Expenses | 16,950 | L | | |
| 14 | | Interest on Loan | 2,700 | Net Loss | 22,200 | -L | | |
| 15 | | Goodwill | 12,000 | Salaries | 25,500 | PL | | |
| 16 | | Furniture | 18,000 | Samples | 7,500 | PL | | |
| 17 | | Bad debts | 6,000 | Land and Building | 1,50,000 | A | | |
| 18 | | Wages | 10,500 | | | | | |
| 19 | | | | | | | | |
| 20 | | Bad debts recovered is not included in the Cash Balance. | | | | | | |
| 21 | | | | | | | | |

One note is also given that bad debts recovered is not included in cash balance perhaps they do not know where to write it. So, if you start from sales where will you record it in the balance sheet? Actually sales is a profit and loss item. So, it should not be recorded anywhere in the balance sheet it is just given to you as an extra balance. So, we will just mark it as PL, those of who are interested in preparing profit and loss account you can make it as extra work, but right now we are going not going to use this.

Because we are only going to focus on the balance sheet return outward this is also a profit and loss item capital, capital is a balance sheet item we will write it on liability side discount, discount cr this is the discount which we have received it is a PL item, creditors a liability item cash at bank credit they have given; that means, this is a bank overdraft. Normally, cash at bank is if we keep cash in bank it becomes a debit balance it becomes a asset, but here cash at bank credit; that means, we have drawn excess from the bank or it is also known as bank overdraft it is a type of loan which bank has given us.

So, we will mark it as, loan credit so, we have got loan. So, again we will mark it as L bad debts recovered this is a unique item first of all everybody has understood what is bad debt recovered? When we sell goods it gets converted into receivables or debtors, you can see here there is a debtors balance, now from those debtors we are supposed to receive cash. In case a particular debtors becomes non paying or becomes bankrupt, for

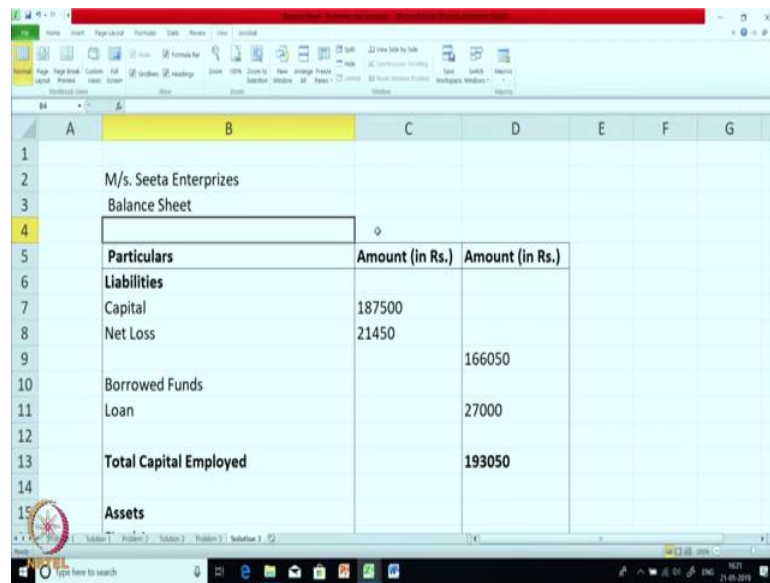
example Vijay Mallya. So, for banks the loan which was given to Mallya became bad debts.

Now, of course, government very smartly has caught it and is recovering the money from Mallya, but otherwise the money given to Mallya was more or less like a bad debt. So, in case of this party Messrs Seetha enterprises they would have given some loan and the loan is not receivable that is why they consider it as a bad debt earlier. But now that bad debt they are able to recover they have received that money as a bad debt, but they do not know where to record it. So, they have not included it in cash balance. So, now, we are going to do two things we are going to include it in the cash balance outs. So, this is a special case this is not as such for bad debt recovered this is definitely bad debt recovered.

But since the money is not shown in the cash we are going to add it in the cash. So, I have written it plus 2 cash A, A means on asset side outstanding expenses; that means, we have taken we have incurred some expense like say electricity bill, but we have not yet paid it so, it becomes a liability. Net loss companies or the enterprise is suffering loss. So, where should we write this loss will it go to balance sheet yes because if there is a profit it is added to liability side if there is a loss we will reduce it from liability.

So, we will mark it as minus, salary this is a PL item, samples these are free samples which are distributed it is a marketing expense. So, we will mark it as PL land and building this is an asset item, I think most of the items are getting clear to you. Now on this side also we have got few balances we will not go for marking every item I hope you will be able to mark it yourself and based on this let us go for preparation of balance sheet. So, you can pause your video here and I will show you the solution please first solve it and then check with my solution.

(Refer Slide Time: 25:58)



| Particulars | Amount (in Rs.) | Amount (in Rs.) |
|-------------------------------|-----------------|-----------------|
| Liabilities | | |
| Capital | 187500 | |
| Net Loss | 21450 | |
| | | 166050 |
| Borrowed Funds | | |
| Loan | | 27000 |
| Total Capital Employed | | 193050 |
| Assets | | |

So let us have a look at the solution this is the balance sheet for Messrs Seetha enterprises. So, always have a habit of writing it on top either we can write it as a liability on one side and asset on one side or we are I can write in the vertical form right now we are making it in vertical form. So, we will start with liabilities.

Have a look at the items as we have marked in the earlier sheet. So, the capital is marked as L. So, we will start with capital there is a loss which is reduced from capital. So, capital minus loss the value of capital or the amount of capital is reduced then one heading called borrowed fund is made we have written loan in that.

(Refer Slide Time: 27:29)

| | A | B | C | D | E | F | G |
|----|---|--------------------------------------|--------|---------------|---|---|---|
| 10 | | Borrowed Funds | | | | | |
| 11 | | Loan | | 27000 | | | |
| 12 | | | | | | | |
| 13 | | Total Capital Employed | | 193050 | | | |
| 14 | | | | | | | |
| 15 | | Assets | | | | | |
| 16 | | Fixed Assets | | | | | |
| 17 | | Building | 150000 | | | | |
| 18 | | Furniture | 18000 | | | | |
| 19 | | Goodwill | 12000 | 180000 | | | |
| 20 | | | | | | | |
| 21 | | Current Assets | | | | | |
| 22 | | Cash (Including Bad debts Recovered) | 6,750 | | | | |
| 23 | | Debtors | 52,500 | | | | |
| 24 | | Closing Stock | 26,250 | | | | |

Total capital employed then we have listed all the assets under the heading fixed assets first of all building, furniture and goodwill please check with the solution which you have made.

(Refer Slide Time: 27:41)

| | A | B | C | D | E | F | G |
|----|---|--------------------------------------|---------------|-----------------|---|---|---|
| 19 | | Goodwill | 12000 | 180000 | | | |
| 20 | | | | | | | |
| 21 | | Current Assets | | | | | |
| 22 | | Cash (Including Bad debts Recovered) | 6,750 | | | | |
| 23 | | Debtors | 52,500 | | | | |
| 24 | | Closing Stock | 26,250 | | | | |
| 25 | | Total Current Assets | 85,500 | | | | |
| 26 | | Current Liabilities | | | | | |
| 27 | | Creditors | 42,000 | | | | |
| 28 | | O/s Expenses | 16,950 | | | | |
| 29 | | Bank Overdraft | 13,500 | | | | |
| 30 | | Total Current Liabilities | 72,450 | | | | |
| 31 | | Net Current Assets | | 13,050 | | | |
| 32 | | Total Assets | | 1,93,050 | | | |

Then in current assets we have got cash, but keep in mind we have the balance of cash was given as 6000 this bad debt recovered was added to cash balance because it was not added by them earlier. So, now we will write 6750 then debtors than closing stock. So, we get total of current assets, from current assets we are reducing the current liabilities

creditors, outstanding expense, bank overdraft, total current liabilities and we get the net balance as net current assets 13050.

You can also write these liabilities on liability side, but we are making in a vertical format. So, we have written it under the assets and reduced it from current assets. So, total assets is 193 it matches with total liabilities 193050, getting it. This was a simple balance sheet; latter on we are also going to make balance sheet for companies, but just to make you understand the fundamentals we are making this simple balance sheet.

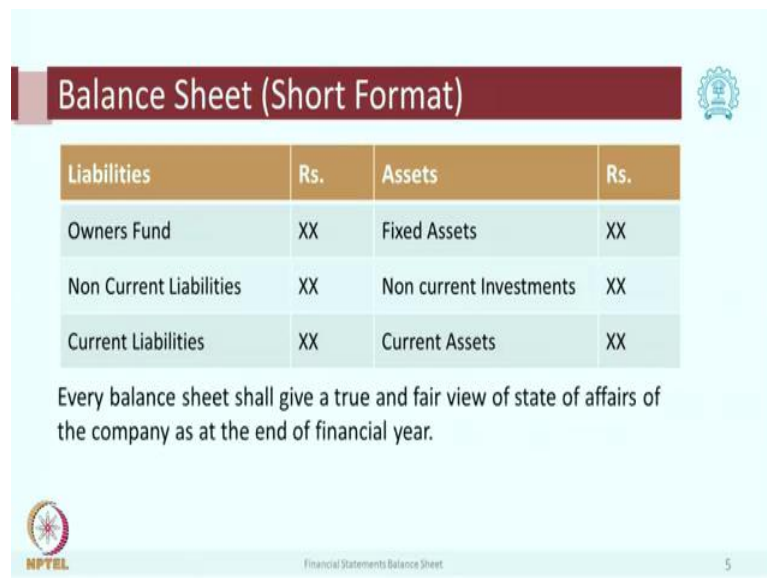
So, we will stop here Namaste.

Financial Accounting
Prof. Varadraj Bapat
School of Management
Indian Institute of Technology, Bombay
Lecture - 06
Balance Sheet 4

Namaste In financial accounting, if you remember in our first session, we had tried to understand what is accounting and then started discussion on financial statements. In the second session, we discussed what a business cycle is and from that how the main financial statements that are balance sheet and P and L account emerges. Then in session 3 and 4 we went into what is balance sheet and what are the items in balance sheet.

Today we will continue with our discussion on Balance Sheet, and then we will proceed to understand the profit and loss account. We will take a quick review of balance sheet.

(Refer Slide Time: 01:12)



Balance Sheet (Short Format)


| Liabilities | Rs. | Assets | Rs. |
|-------------------------|-----|-------------------------|-----|
| Owners Fund | XX | Fixed Assets | XX |
| Non Current Liabilities | XX | Non current Investments | XX |
| Current Liabilities | XX | Current Assets | XX |


Every balance sheet shall give a true and fair view of state of affairs of the company as at the end of financial year.

NPTEL Financial Statements Balance Sheet 5

So, you already know short form format of balance sheet. There are 6 items. Then I will go ahead, we are going to discuss each of them in detail. We had also seen a detailed format of balance sheet under schedule III of Companies Act.


(Refer Slide Time: 01:17)


| Balance Sheet (Detailed Format) | |  | |
|--|------------------|---|--|
| Particulars (format as per revised schedule III) | As at | As at | |
| | 31st Mar 2011 | 31st Mar 2010 | |
| I. EQUITY AND LIABILITIES | | | |
| 1 Shareholder's Funds | | | |
| (a) Share Capital | - | - | |
| (b) Reserves and Surplus | - | - | |
| (c) Money received against Share Warrants | - | - | |

 Financial Statements Balance Sheet 6

So, we have equities and liabilities, then shareholder's funds, share capital, reserves and surplus. I hope you know their meanings. If you really do not know please do not keep quiet ask them on the discussion forum. Then you have got money received against share warrant.

(Refer Slide Time: 01:52)

| Balance Sheet (Detailed Format) | |  | |
|--|---|---|--|
| | | | |
| 2 Share Application Money pending allotment | - | - | |
| 3 Non-Current Liabilities | | | |
| (a) Long-Term Borrowings | - | - | |
| (b) Deferred Tax Liabilities (Net) | - | - | |
| (c) Other Long Term Liabilities | - | - | |
| (d) Long-Term Provisions | - | - | |

 Financial Statements Balance Sheet 7

(Refer Slide Time: 01:54)




| Balance Sheet (Detailed Format) | | |
|---------------------------------|-------------------------------|---|
| 4 | Current Liabilities | |
| | (a) Short-Term Borrowings | - |
| | (b) Trade Payables | - |
| | (c) Other Current Liabilities | - |
| | (d) Short-Term Provisions | - |
| | TOTAL | - |

Financial Statements Balance Sheet 8

Then we went on to discuss share application money pending allotment and non-current liabilities, then current liabilities.

(Refer Slide Time: 01:56)



| Balance Sheet (Detailed Format) | | |
|---------------------------------|--|---|
| II. | ASSETS | |
| 1 | Non-Current Assets | |
| | (a) Fixed Assets | |
| | (i) Tangible Assets | - |
| | (ii) Intangible Assets | - |
| | (iii) Capital work-in-progress | - |
| | (iv) Intangible assets under development | - |
| | (b) Non-Current Investments | - |
| | (c) Deferred Tax Assets (Net) | - |
| | (d) Long-Term Loans and Advances | - |
| | (e) Other Non-Current Assets | - |

Financial Statements Balance Sheet 9

Then we discussed on assets, again divided as non-current assets followed by current asset.

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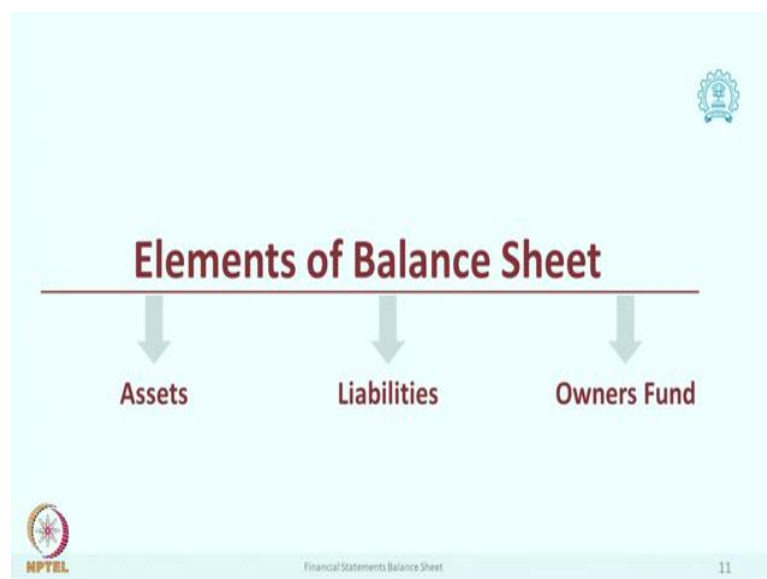


The slide displays a detailed balance sheet table with a dark red header. The table lists various current assets and their values, which are all zero. The footer includes the NPTEL logo, the text 'Financial Statements Balance Sheet', and the page number '10'.

| Balance Sheet (Detailed Format) | | |
|---------------------------------|-----------------------------------|-----|
| 2 | Current Assets | |
| | (a) Current Investments | - - |
| | (b) Inventories | - - |
| | (c) Trade Receivables | - - |
| | (d) Cash and Cash Equivalents | - - |
| | (e) Short-Term Loans and Advances | - - |
| | (f) Other Current Assets | - - |
| | TOTAL | - - |

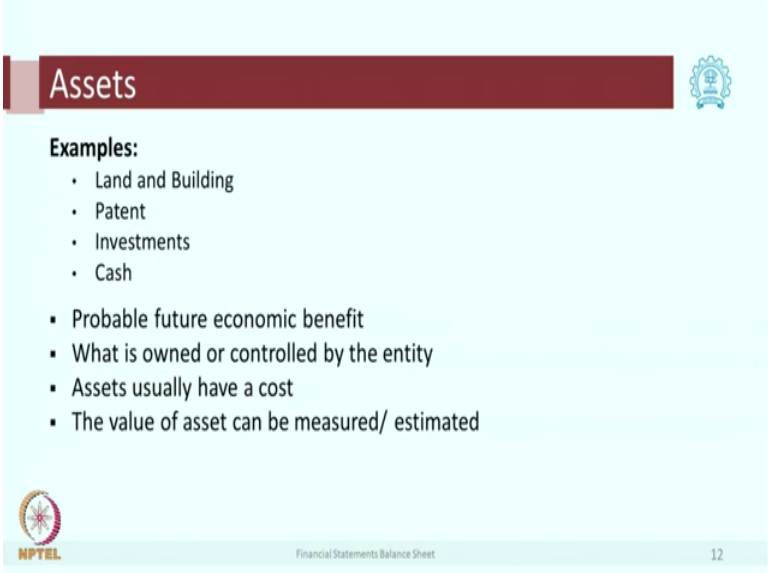
If you look at the format it is as per the permanence. So, what is permanent comes first. For example, in balance sheet share capital has the longest renewal that comes first, then non-current liabilities, then current liabilities. In assets first we have got non-current liabilities because they are going to be with us for more than 1 year, within that also fixed assets are likely to be more with the company for a longer tenure, so first we have got fixed asset then we have got other non-current assets then we have got current assets.

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So, in the format of balance sheet if you look at the elements which we are going to discuss in detail now, there are 3 elements one is assets, next liabilities; here I mean external liabilities followed by owner's funds.

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The slide is titled "Assets" in a dark red header. Below the header, there is a list of examples and characteristics of assets. The examples are: Land and Building, Patent, Investments, and Cash. The characteristics are: Probable future economic benefit, What is owned or controlled by the entity, Assets usually have a cost, and The value of asset can be measured/ estimated. The slide also features a logo in the top right corner and a footer with the text "Financial Statements Balance Sheet" and the number "12".

Assets

Examples:

- Land and Building
- Patent
- Investments
- Cash

- Probable future economic benefit
- What is owned or controlled by the entity
- Assets usually have a cost
- The value of asset can be measured/ estimated

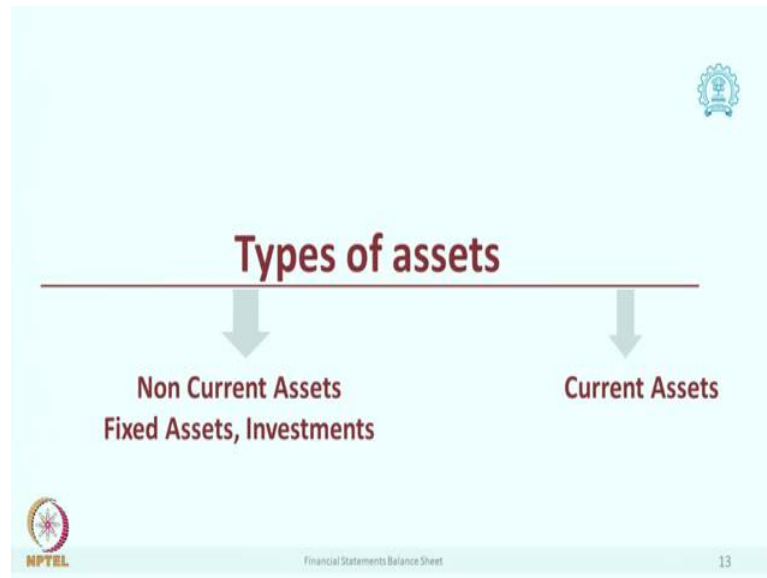
Financial Statements Balance Sheet 12

In the last session we are just started our discussion on assets. So, we will just start again from that. In the assets we are already seen the major examples of assets. So, we have got land building, patents, investments, cash and so on. As a definition something which is a property of the company which has a probable economic value that is called as a asset.

And the second condition is it must be owned or controlled by the entity. We also saw in our earlier sessions we had seen that business cycle you need human power, you need people to manage the business, they are invaluable assets of the enterprise, their skills are important, how they behave is important. However, they cannot be shown in the balance sheet because human beings are not owned by the company.

In assets essentially there are the items which are owned by the company and which are going to have economic value in future. Usually, assets will not be made available to company for free, so there will be some cost for the asset and we are assuming that there is a economic value which can be measured and if exact value is not known at least it can be estimated.

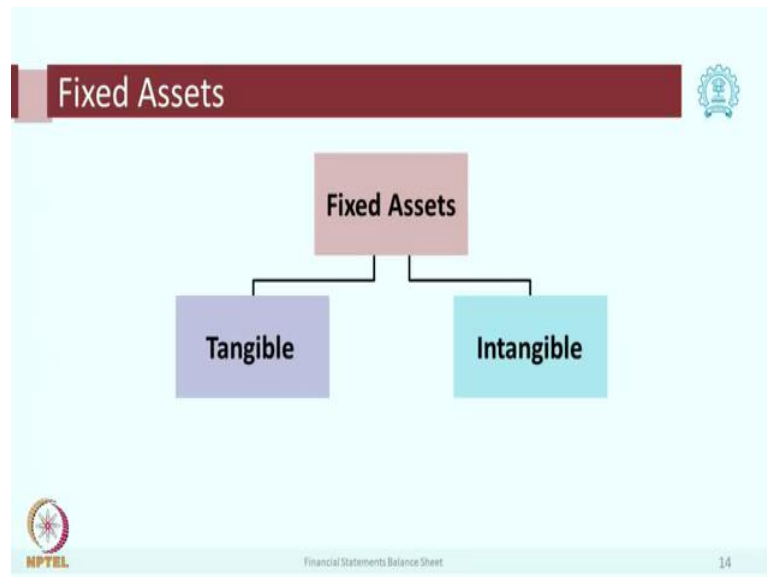
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Now, coming to the types of assets; as we know there are major two types of assets one are non-current then other ones are current. Non-current means those which are likely to last for more than 1 year, which again the major examples of fixed assets and current assets.

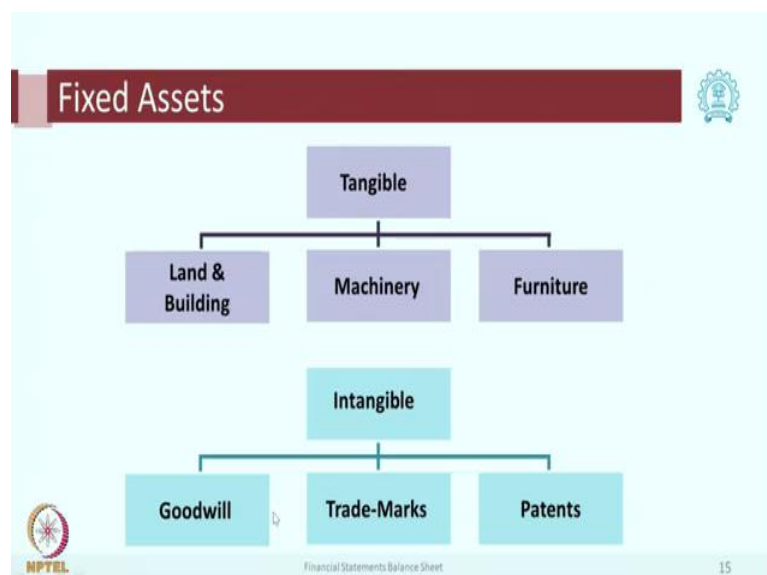
Do you remember what is meant by fixed assets? Because when we discussed money cycle, we had started with the first asset which is fixed asset. Do you remember what it is? Yes, many of you are correct I think. It is a kind of infrastructure using which company does its business. Whatever operations are happening fixed assets themselves do not get converted, but they act as catalysts, they support the whole process.

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Now, what are the types of fixed assets? There are two types, one is tangible the other is intangible. Tangible means something which you can touch, which you can feel, which has physical existence. They are called as tangible assets. I think the examples are very very easy everybody knows what are the examples of tangible assets. We have got land, machinery, furniture, vehicles, large number of say computers, cameras, mobile, phones, large number of assets which you can touch, feel are all called as tangible fixed assets.

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The other type is intangible. Now, this is something which you cannot touch or feel, but still they have a value. They are going to be with the company for a long time. So, what are the examples of intangible assets? Can you think of any examples?

Earlier I had taken one example if you remember. We had seen that we have a computer is it a fixed asset the answer is yes, there are two things in computer there is a hardware, there will be a mouse, there will be a keyboard, there will be all other parts, now whatever you can touch whatever you can see these are all tangible parts, but there is also intangible part which is software, which is loaded in the computer.

And many of you use mobile phone, so in mobile phone more frequently whole day I think most of you would be on mobile phone. So, you can see your instrument, but in that instrument, there are apps there are various other things which are loaded on instrument which do not have physical existence which are but which are of very much used to you. Those things are an example of intangible assets.

Ok, any other examples of intangible asset do you think of? Let us see you are doing some scientific research and you get a new formula or you develop a new product then you will apply for a patent. If you get a patent it has a very important economic value and patent will be an example of intangible asset. Those of who are good in art or those who have got creative attitude, you might have a new drawing or you may might come out with the new size or a design that also can be registered. It is registered as a copyright then a copyright or a trade mark is also an example of intangible asset, ok. Are you seeing the example?

So, you have got patents, we have got trademarks, we have got goodwill. Now, what is goodwill? As the name suggests it is a good name of the concern. If you are say running a shop for many years 2 years, 3 years, 5 years, 10 years several people in the locality or even from faraway places we will know your shop they would prefer your shop over other shops, because of the trust factor, because of reliability and so on, that will be what is known as goodwill.

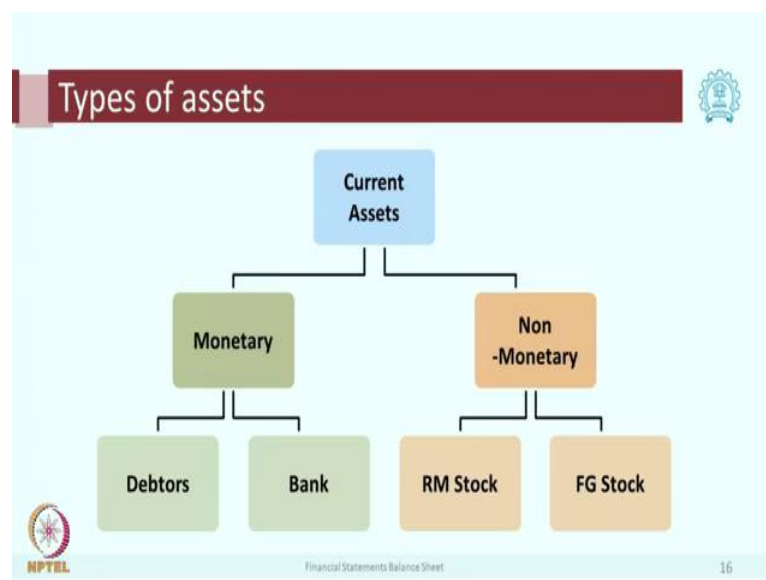
There are several brands of international and national importance, they can be considered to be valuable, that brand name itself is valuable. Can you name of or think of a few brands? I think everybody would have heard of Tata which is highly reputed brand all over India, there are several companies under Tatas like TCS or Tata motors or Tata steel, but the brand name is Tata. So, that Tata name is attached with lot of goodwill.

Similarly, nowadays most of you know Jio. So, Jio is a brand name which is owned by reliance industries that is also brand name. I do not want to advertise too many

companies but I am just giving you examples. For example, relatively new, but which has taken a big name is Patanjali. So, Patanjali is a big brand name today not only in yoga, but also in ayurved. Like that there are also several international brands. So, all of these are backed by some goodwill of that company. It is sometimes copyrighted, then the copyright is a intangible assets, sometimes it is not copyrighted then it can be called as a goodwill.

Now, valuation of intangible assets is bit difficult. Relatively valuation of tangible assets is easy, anyway we will go into it later on, but right now on your screen you have got variety of both tangible and intangible fixed assets.

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Now, the next one is current assets. Now, what is the definition of current asset? I think we have seen it earlier, we have got a money cycle or a cycle of operations and in the operation cycle or in the money cycle or in the value addition cycle many assets are getting continuously exchanged, those assets are typically what are known as current assets. Normally, the life of these assets is not very long, they are likely to be with you for a relatively shorter time maybe 15 days, 1 month, 2 months, 3 months and so on; these assets are known as current assets.

Now, current assets can be classified into two types, one is a monetary one, the other one is non-monetary. Now, can you give examples of monetary current assets or non-monetary current asset? Is anyone of you able to think? Something which can be

expressed in money terms is monetary, I think most of you would be thinking of it, but in fact every value in the financial statement can be expressed in monetary terms. Then can you call everything as a monetary, then what will come as non-monetary, ok. I will try to respond to your question.

So, see monetary assets are debtors and bank. So, they represent something which you are going to receive from bank or something which you are going to receive from your customers or debtors. Their value does not change. So, they are called as monetary fixed assets, monetary current assets. Then, what are non-monetary current assets? Can you think of any examples? Non-monetary current assets are variety of stocks or inventory with you.

So, if you have purchased raw material, it is a fixed, it is a inventory of raw material you will converted into finished goods it becomes inventory of finished goods. Some of the companies only deal trading business, they purchase finished goods, they sell finished goods, in that case the stock of finished goods in their hand is a non-monetary current asset.

As I was just saying even non-monetary assets have a monetary value, then why do you call them non-monetary? The reason is because their value goes on changing with the changes in the market value in the market. So, for example, the value of inventory of finished goods may go up and down, value of investment sometimes go up and down. So, such assets are known as non-monetary current assets, ok. Now, I think you would have understood what are the important assets. Now, let us go to the next part that is liability.

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Liabilities

- A liability is a present obligation of the enterprise arising from past events, the settlement of which is expected to result in an outflow of a resource embodying economic benefits.
- A liability is an existing obligation based on the evidence available on balance sheet date.
- A liability is recognised when outflow of economic resources in settlement of present obligation can be anticipated and the value of outflow can be measured.

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Now, what is meant by a liability? I think you are able to see it on the screen, that it is a present obligation of the enterprise that arise from the past events. So, in the past suppose we have got purchase we have purchased raw material from somebody, if you pay in cash you get raw material you pay cash then there is no liability. But, if you purchase raw material but you are yet to pay, let us say you are going to pay at the end of one month, but as of today you are not paid then it will be shown as a liability in your books. It will be what type of liability in the example which I am saying.


I have purchased raw material I have not yet paid I am going to pay within a month, what type of raw liability it is? I think most of you are guessing it correctly it will be a current liability, because it is going to be settled in just 1 month. Anyways, types we will see later on. Now, it is an existing obligation there should be some evidence available on the balance sheet date and it is expected that there will be some outflow which can be anticipated and value also can be measured. So, suppose we have purchased raw material of 1 lakh, we will pay after 1 month rupees 1 lakh.

So, you know that expected outflow is 1 lakh that is why it is called as a liability. Sometimes you do not know exact value, but you can estimate the value, still it will be called as a liability. Can you think of any examples of liability other than what example I gave you? I think most of you are guessing it rightly. Suppose I take a loan from bank I will have to repay it, so bank loan also is an example of a liability. Now, what are the

types of liabilities? Nowadays, your life is very simple. If you remember current, one type is current the other type is non-current.

So, non-current is something which will be settled after 1 year, which has a life of more than 1 year. So, can you think of any examples of non-current liability. I think bank loan which we discussed was one, because it is mostly for more than 1 year. But other than bank loan, are there any other liabilities any other non-current liabilities, ok.

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The slide is titled "Long-Term Liabilities" in a dark red banner at the top. Below the title, there are two main bullet points: "Long-term liabilities are debts or obligations that are to be repaid or performed beyond one year." and "Usually it is a Source of fund". Underneath these, the word "Examples:" is followed by a list of four items: "Bank Loan >1 yr", "Loan from NBFCs", "Debentures", and "Deferred Tax Liability". The slide also features a small logo in the top right corner, an NPTEL logo in the bottom left, and the text "Financial Statements Balance Sheet" and the number "18" in the bottom right.

- Long-term liabilities are debts or obligations that are to be repaid or performed beyond one year.
- Usually it is a Source of fund

Examples:

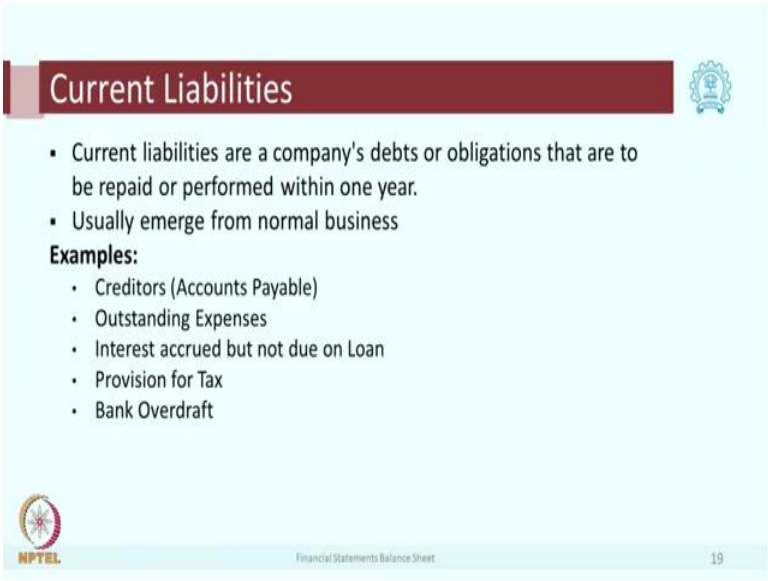
- Bank Loan >1 yr
- Loan from NBFCs
- Debentures
- Deferred Tax Liability

These are long term or non-current liabilities. They are likely to be repaid or perform beyond 1 year. Usually, they represent sources of funds because that is how the enterprise or company is raising it funds. Now, example one is bank loan you already know if it is more than 1 year it can be loan from NBFCs. Do you know what is NBFC? Full form is Non-Banking Financial Companies. So, other than banks there are companies which give you variety of loans that is also a non-current liability for us.

One more possible liability is debenture. Now, what do you understand by debentures? Debenture also is a type of loan. So, many companies come out with a debenture issue, they inform the investors that we will issue a debentures, investors pay them money and they issue a certificate for debenture. So, it is a loan, but which can be traded in the debt market. In any case as for as the balance sheet is concerned it is an example: of a long-term loan.

One more possible liability is deferred tax liability. Earlier we had discussed a bit on it when we discuss the format. So, normally the tax liability should be paid within 1 year, but under special circumstances or because of some specific provision in the law if it can be paid after more than 1 year it will be called as a before tax liability. Now, the other exam the other type is current liability I think you all know the examples, but just have a look.

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The slide is titled "Current Liabilities" in a dark red header. It contains a bulleted list of two main points: "Current liabilities are a company's debts or obligations that are to be repaid or performed within one year." and "Usually emerge from normal business". Below this is a section titled "Examples:" followed by a bulleted list: "Creditors (Accounts Payable)", "Outstanding Expenses", "Interest accrued but not due on Loan", "Provision for Tax", and "Bank Overdraft". The slide also features a small gear icon in the top right, an NPTEL logo in the bottom left, and the text "Financial Statements Balance Sheet" and "19" in the bottom right.

- Current liabilities are a company's debts or obligations that are to be repaid or performed within one year.
- Usually emerge from normal business

Examples:

- Creditors (Accounts Payable)
- Outstanding Expenses
- Interest accrued but not due on Loan
- Provision for Tax
- Bank Overdraft

So, these are the obligations which are likely to be repaid or performed within 1 year and normally they come from day to day business transactions or from the money cycle or from the business cycle as we were see. I think you know most of the examples, one is creditors also known as accounts payable, then outstanding expenses. Now, what do you mean by outstanding expenses?

So, for example, if you have got 100 employees normally the salary should be paid on the last day of the month, say on 30th or 31st. If we do not pay salary on that day and we pay salary on let us say salary of April should be paid by 30th of April, but if you do not pay, if we pay it in May, on 10th of May then on 30th of April up to 9th of May if you make a daily balance sheet in each balance sheet it will be shown as a outstanding expense or it can be also called as an outstanding liability. Like that any expense which is unpaid will be considered as an outstanding expense.

Then one more example is interest accrued, but not a due. Now, what is the meaning? So, suppose you have taken loan from bank let us say you have taken loan of 1 lakh at 10 percent per annum that means, every year you have to pay 10 percent. So, on 1 lakh you have to pay 10,000, but at the end of the year; now at the end of the year if you do not pay 10,000 it will be an example of an outstanding expense which we have already discussed.

But even during the year let us say 3 months are over and you are preparing a balance sheet, so you have to pay 10,000 at the end of the year, that means at the end of 3 months you have to pay one-fourth of 10,000 or say 2500, but you do not have to pay it now you will pay it at the end of the year. But at the end of 3 months you have already created an obligation it is called as an accrued interest; it is accrued but not due. When will it become due? After 1 year, but after 3 months since you have used the funds you will need to show 2500 as an accrued interest. It is one more example of current liability.

The next example is provision for tax. Now, what is the meaning? As we were discussing whatever profit we earn we have to pay income tax on it. The calculation is done by us. Finally, it is to be approved by income tax department until it is approved by department we will show as per our calculation we will calculate the profit, as per our calculation we will also calculate the taxes payable. Till the time we pay it, it will be shown as provision for tax under the head current liabilities.

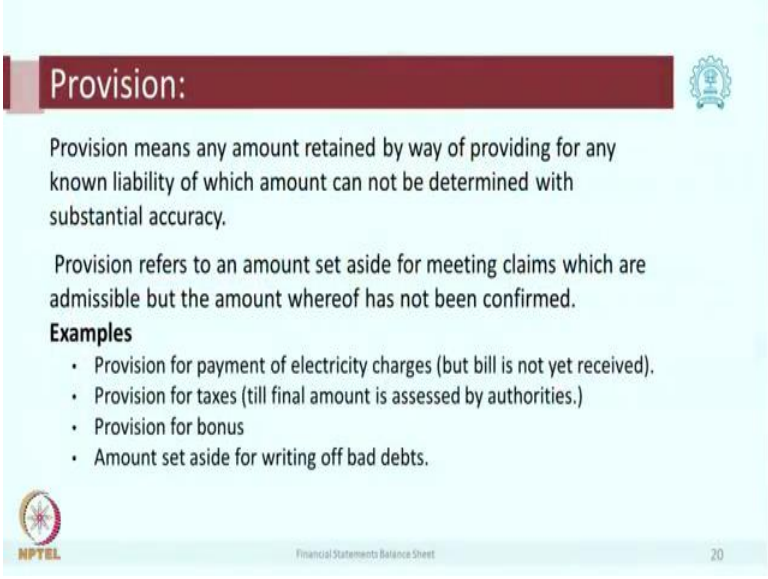
The next is bank overdraft. Now, what is the meaning of bank overdraft? Now, bank gives a facility to the account holder that account holder can withdraw some money that is called as a bank overdraft. So, suppose we have deposited 10,000 in bank normally we can withdraw only 10,000 balance will be 0, but in case of current accounts you can deposit 10,000 but you can withdraw 15,000, that 5000 which we have taken more the balance in the bank account will be appearing as minus 5000, that minus 5000 is called as a bank overdraft.

Of course, there will be a limit that a particular company can draw how much from the bank, but it is payable in the short term. So, it is considered as a current liability. Are you getting? Just think of some more examples of current liabilities. Now, we have understood both non-current assets, current assets, then current non-current liabilities,

current liabilities. Think of the examples and they will be discussed on the discussion forum, ok.

Now, let us go to one special type of liability that is called as a provision. If you have marked when we discuss the current liability, we had shown one item known as provision for tax. Now, did you think why it is called as a provision? Why I did not call it as outstanding tax? If I pay tax on time, no problem, no liability is created. If I do not pay tax on time it should have been shown as a outstanding tax, but instead of calling it out standing we are calling it provision for tax. Now, what is the reason? Ok.

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Provision:

Provision means any amount retained by way of providing for any known liability of which amount can not be determined with substantial accuracy.

Provision refers to an amount set aside for meeting claims which are admissible but the amount whereof has not been confirmed.

Examples

- Provision for payment of electricity charges (but bill is not yet received).
- Provision for taxes (till final amount is assessed by authorities.)
- Provision for bonus
- Amount set aside for writing off bad debts.

Financial Statements Balance Sheet 20

Now, have a look at it. So, provision are those amounts which are retained by way of providing for a known liability for which amount cannot be determined with substantial accuracy. That means, I know there is a obligation, I know there is a liability, but I do not know exactly how much should be payable, in such scenarios you create a special item it is also a type of liability, but it has a special name as provision. So, provision refers to amount which is set aside for meeting claims which are admissible, but amount is not yet confirmed.

Examples are also in front of you. One example is provision for electricity charges. Now, let us say we prepare accounts or balance sheet at the end of 31st of March and every month we get the bill for electricity on the 10th of next month; that means, February bill will occur on 10th of March, March bill will occur on 10th of April. That means, on 31st

March I do not know the amount of bill, but I know that I have consumed electricity, that means some amount is payable on account of electricity charges. I did not pay the bill till date if fact I did not received the bill which will me on 10th of April. So, as on 31st March when I am making a balance sheet I am unaware of the amount which I have to pay, but I am very much aware that electricity has been consumed, that means some amount needs to be provided for. So, we will create a provision.

Now, the question which will come in your mind is, so far we have not received any bill, so how will we know the charges for electricity bill for the month of March. Now, there are various ways of estimating. For example, I can do one thing I know the charges for last 11 months, right from April to February I have all the bills, only March bill is pending. So, I can take average of 11 months or I can even take a last March electricity bill and add a 5 or 10 percent and treat it as a provision for this March. So, there are various ways of estimating but there will be some estimation done and a provision is created. I hope you are getting what is a provision.

Another example which we are already discussed was provision for taxes. Now, as far as the provision is concerned, we do not know how much taxes will be finally payable, because those decisions are taken by tax authorities. But what I do is based on my understanding I calculate profit; I also calculate the taxes payable and make a provision in the balance sheet. For estimated amount of taxes likely to be paid that is called as a provision for tax.

Same way to the employees, normally bonus is paid at the end of the year based on their performance, exact amount is not known because that will be known after performance evaluation. So, as on 31st March some estimated provision is made for bonus that is called as provision for bonus. There is a possibility that there will be some bad debts. We are having debtors or accounts receivable in the balance sheet, there could be some bad debts may be half percent, may be 1 percent, may be 2 percent, may be 5 percent, according to the type of business I will make an estimate and create a provision that is known as provision for bad debts.

So, today we have discussed both current, non-current assets, then current, non-current liabilities and we have come up to some specific liability which is called as provision. In

our next session we will go ahead and going to further some more types of liabilities and then into profit and loss account Namaste.

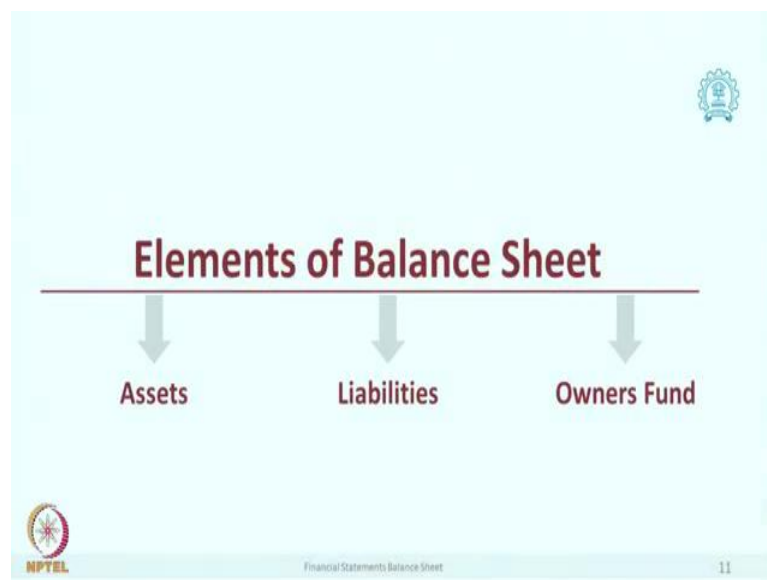
Thank you so much.

Financial Accounting
Prof. Varadraj Bapat
School of Management
Indian Institute of Technology, Bombay

Lecture – 07
Balance Sheet 5

Namaste. I hope you have enjoyed the last week sessions, and you are also able to comfortably complete the assignment. So, we were discussing financial statements; particularly we were discussing balance sheet, we also seen the format of balance sheet, and now we are discussing each element of balance sheet. So, already on the screen you are seeing three major elements assets, liabilities and owners funds.

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Within that we have already discussed asset and almost completed the liability. Today will going to owners fund, then we will see the process how the balance sheet emerges, and then we will go to discuss what is a profit and loss account.

Right now, let us briefly revise asset and liabilities.

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Assets

Examples:

- Land and Building
- Patent
- Investments
- Cash

- Probable future economic benefit
- What is owned or controlled by the entity
- Assets usually have a cost
- The value of asset can be measured/ estimated

NPTEL Financial Statements Balance Sheet 12

So, these are assets. I think you all know this is something which is a property or a resource of a company which has a value, and it is likely to give some probable future cash flow. There are variety of examples which are in front of you, so I am not repeating them.

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Types of assets

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Non Current Assets
Fixed Assets, Investments

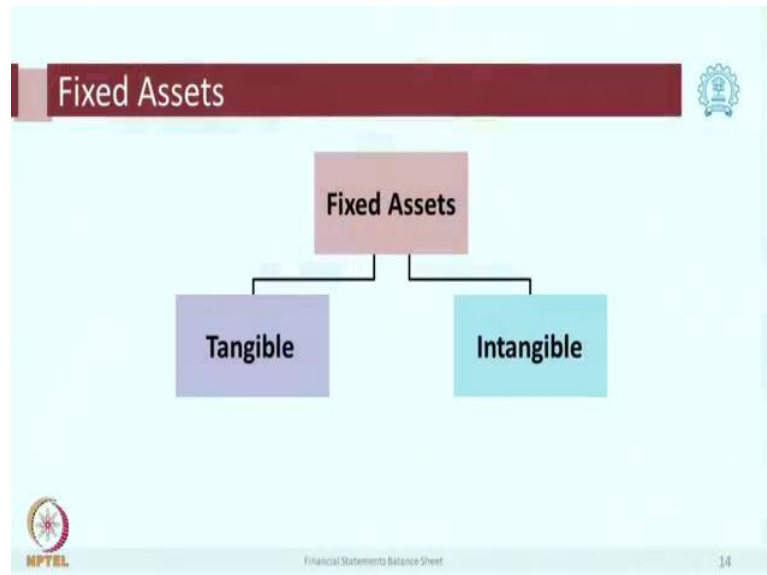
Current Assets

NPTEL Financial Statements Balance Sheet 13

Then two major types of assets noncurrent current, within noncurrent you have got fixed and fix assets and investment. Now, what do you mean by fixed assets? This is a

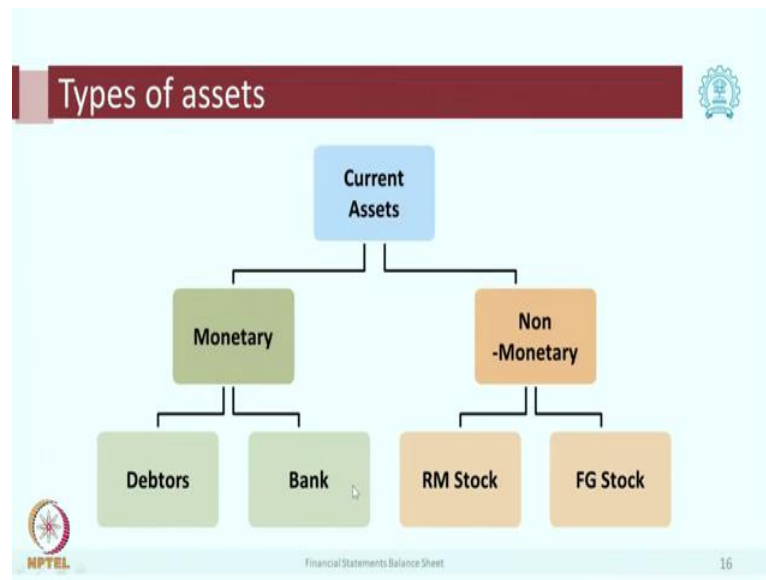
infrastructure or a property which is going to last for more than 1 year it acts as a catalyst in our operations.

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There are two types: tangible fixed assets, intangible fixed assets. Tangible example are: land, building, plant, machinery, variety of things which we see in front of us, which are going to have a longer life; these are all tangible. Intangible: we cannot see or we cannot as such touch it, but they have a value, they are very important to us. They can include software, they can include apps on your mobiles, they can include patterns and so on. So, these are the examples.

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Then the next type is current assets. Current assets have a life of less than 1 year. There are two major types monetary and non-monetary so, within monetary what are the example; debtors and bank balances, as we saw last time. And in non-monetary category you have got variety of inventory or stock; like raw material or like finished goods, there is also one more type known as work-in-progress stock. That is also an example of non-monetary asset.

Then we went to discuss the liabilities, these are the present obligation. These are the dues which company or an enterprise has to pay and you can reasonably estimate the amounts and they would result in outflow in future.

Now, what are the types and what are the examples of the liabilities. So, again you got long-term liabilities short-term liabilities. So, what are the examples of long-term? Mostly bank loans or loans from NBFC or deferred tax obligations. These are all long-term liabilities.

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The slide is titled "Long-Term Liabilities" in a dark red header. Below the title, there are two main bullet points: "Long-term liabilities are debts or obligations that are to be repaid or performed beyond one year." and "Usually it is a Source of fund". Underneath, the word "Examples:" is followed by a list of four items: "Bank Loan >1 yr", "Loan from NBFCs", "Debentures", and "Deferred Tax Liability". The slide also features a small logo in the top right corner and a footer with the NPTEL logo, the text "Financial Statements Balance Sheet", and the number "18".

The other one is current or a short-term liability. What are the examples? They include bank overdraft, they include payables or creditors, they include variety of outstanding expenses. Can you give an example of outstanding expense? Last time we discussed about salary, but do you think of any other expense which is not paid on time. Suppose we have purchased stationery, but we do not pay the stationary bill immediately, we will pay after some time till the time is paid it becomes outstanding expense. Any expense you can think of if not paid on the date you got the service or the product, it becomes an outstanding expenses, ok.

Now provisions; now, this is a specific type of liability, wherein the amount is not known with substantial accuracy. We know the existence of liability, but not the amount. So example, can you think of any example? The four examples are in front of you, but apart from that is there any other example of a provision, just think over it.

Suppose some repair work is done in our factory or in office, we do not know exactly what was done in the repairs; the particular party who has done repair as not yet send the bill. So, we do not know the charges, but we know the repairs has been done and we are required to prepare balance sheet on say 31st of March, then we will make a provision for repair.

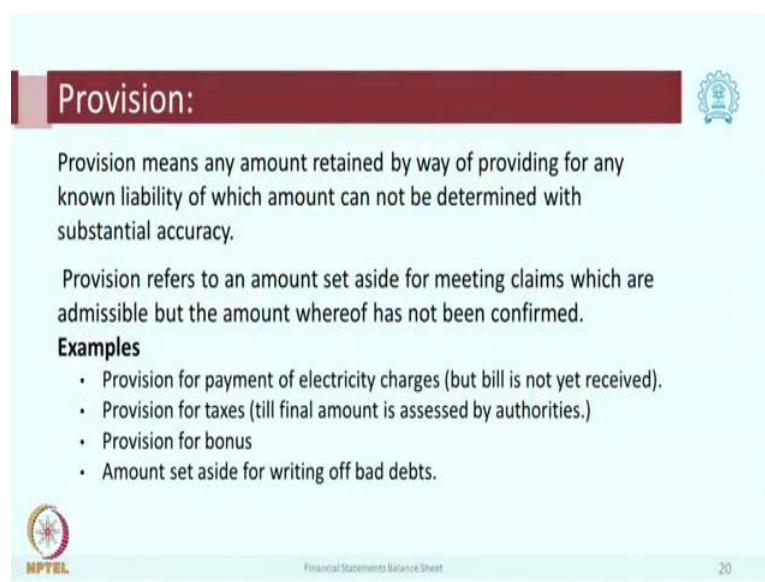
There is another possible case: we have sold products for which we have given a guarantee because of guarantee clause, now for 1 year we will have to provide a free

service. Suppose there is any damage in the product we will have to repair it for free or we may have to replace it. Then for 1 year there is an existence of an obligation, but we do not know the amount. We may have to pay more or less, but we will calculate some estimation; based on our past record or based on whatever is likelihood of the repair and replacement cost. Let us say 2 percent or 3 percent maybe set aside for provision for repairs.

Can you think of any other example? One more example is gratuity; I think most of you know that whenever an employee retires or in case of unfortunate death of employee, we have to pay gratuity to the employee. The gratuity is calculated on the basis of number of years of service, that service can be 5 years, 6 years, 10 years, 40 years whatever. According to the tenure of that employee and the retirement salary of that employee company has to pay gratuity. Now, as on the day of balance sheet we are not sure about the gratuity amount payable, but the liability exists.

So, in such case we will calculate provision for gratuity, ok. And plus, four more examples given here I hope the concept of provision is clear to you.

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Provision:

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Provision refers to an amount set aside for meeting claims which are admissible but the amount whereof has not been confirmed.

Examples

- Provision for payment of electricity charges (but bill is not yet received).
- Provision for taxes (till final amount is assessed by authorities.)
- Provision for bonus
- Amount set aside for writing off bad debts.

Financial Statements Balance Sheet 20

Now, there is one more special type of liability, where neither we know the amount nor we know the existence of asset.

Now, your question might come in your mind that neither the amount is known nor its existence is certain, whether the liability would be created or no is also not known. Is it necessary to show such a liability in the balance sheet? What do you think? The answer is yes. Even if there is a very small likelihood of getting an obligation; there is no certainty of obligation, but there is a very small chance that we make an obligation. In such a scenario also we will have to show that liability; that liability is called as Contingent Liability.

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The slide features a dark red header with the title 'Contingent Liability' in white. To the right of the title is a small circular logo. Below the header, the text 'Contingent liability can be defined as' is followed by a bulleted list. The first bullet point describes a possible obligation arising from past events, confirmed only by future events not wholly within the enterprise's control. The second bullet point describes a present obligation not recognized because it is not probable that resources will be required to settle it, or a reliable estimate cannot be made. At the bottom left is the NPTEL logo, and at the bottom right is the page number '21'.

Contingent Liability

Contingent liability can be defined as

- A possible obligation that arises from past events and the existence of which will be confirmed only by occurrence or non-occurrence of one or more uncertain future events not wholly within the control of the enterprise.
- A present obligation that arises from past events but is not recognised because:
 - it is not probable that an outflow of resources consisting economic benefits will be required to settle the obligation or
 - a reliable estimate of the amount of the obligation cannot be made.

NPTEL Financial Statements Balance Sheet 21

As the name suggests contingent liability is a possible obligation that this obligation may arise. Since it is not a present obligation if you remember when we discussed or defined the liability, we had said that it is a present obligation arising from the past event.

Now, contingent liability is a possible obligation, since it is just a possible obligation it is not actually shown as a part of balance sheet, but it is required to be shown as a footnote. So, below the balance sheet we have to give a note for all the contingent liabilities; are you getting me? Now, can you think of any examples? I think you are seeing what is a meaning that, it may or may not arise as for occurrence of some events. In which everything is uncertain, but liability or obligation can be there and enterprise or a company has no control over that event. Can you think of any example?

One of the best examples are court cases. Suppose one of our customer feels that whatever service we have given is not a satisfactory service, we have say given a wrong

product or sold wrong product to a customer which is of a poor quality. Customer files a complaint against us to a consumer court or even files a case against us in the court; saying that this product was faulty and we will have to give compensation to the customer.

Now there are two possibilities: in possibility one, we accept that there was a fault on our part and we agree to pay some compensation, but amount is not yet known. Some discussion is going with customer; customer is asking for 10 lakh compensation, we say no 10 lakh is too much we will pay you 1 lakh. Then there will be a negotiation between them and then the amount will be decided. In such case it will be called as the provision, because we have accepted our obligation.

Now, the liabilities there is certain, but the amount is still being decided, but in a case where we refuse our obligation. That means, we say that nothing is payable as a damages or as a compensation our product is of good quality. But still customer says no product is of bad quality, claims a compensation of 10 lakhs, we are saying nothing is payable. Customer files a case in the court. now court decision is unknown. If court gives decision against us we may have to pay, if court decision in our favour we may not have to pay. Now, this is a proper example of contingent liability. I hope you are getting it. Any other example can you think of, of a contingent liability.

Now, suppose fire occurs, and because of fire lot of damages have occurred and some of the curtains are closed, they are sealed curtains we do not know whether they are damaged or not, and they do not belong to us they belong to some customer or somebody else. Now, if inside the package there damage we have to pay compensation, if they are not damage me do not have to pay a compensation. That we will be only when it reaches the customer, customer opens and ask for or not ask for compensation, that can also be a case of contingent liability, ok. I hope you are getting me.

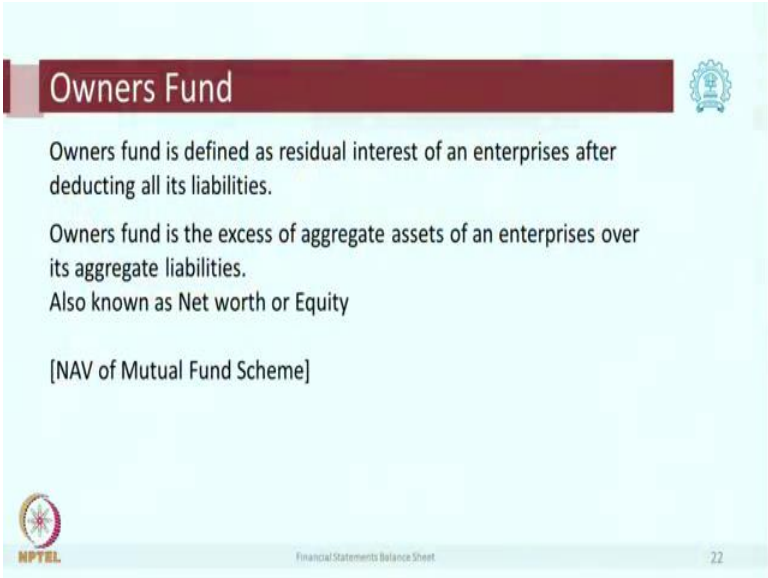
Now, this is a rare case. However, for big companies since they are into lakhs of transactions, there are bound to be some or other cases where there would be court cases for such things, they are required to be properly disclosed as per company law. So, they will come in notes to account.

I am hoping that you are properly reading the balance sheet of your company; I have already told you to select one company and read the annual report of that company. Go

to the balance sheet of your company not in the main balance sheet, but below the balance sheet there are notes. In the notes there will be one of the items known as contingent liability, where they will have to discuss full details as to the nature of case filed by the customer or filed by any other person, what is a legal advice to the company on the likely charges and so on.

Now, suppose company accepts the obligation it will get converted into what provision. If court gives decision against us it becomes a contingent, it becomes our regular current liability. But as long as nothing of that sort happens it remains in the balance sheet as a contingent liability; I hope you getting me. Now, this was our last item in balance sheet liability side. Now, we will go to the next item that is known as owners fund.

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Owners Fund

Owners fund is defined as residual interest of an enterprises after deducting all its liabilities.

Owners fund is the excess of aggregate assets of an enterprises over its aggregate liabilities.

Also known as Net worth or Equity

[NAV of Mutual Fund Scheme]

NPTEL Financial Statements Balance Sheet 22

Now, we have already seen this item when we are seen the format earlier. Now, this is a residual interest of the enterprise or this is the amount which enterprise or company has to pay to the owners. Now why it is called residual; because these are your assets from their assets first you have to pay external liabilities. So, you have to pay your both current as well as noncurrent liabilities, if any amount remain after paying that amount, then owners will get it. That is why owners fund is considered as a residual interest.

If you remember the format of balance sheet earlier it has two components: there is a capital, owners have put in some money that is the capital plus the profits which enterprise gives to the owner that is called as reserves. That capital plus reserves together

is known as Owners Fund. We can also put it in this way this is the total of assets minus total of all external liabilities, the balance is called as Owner Fund.

There are two more names to owners funds which are often quoted in phrase or if you read various information on reports, sometime they call that net worth of a particular company is 100 crore, that net worth is another name given to owners fund. Sometimes it is referred to as equity; so, it is said that equity of company is 500 crore, that equity refers to owners fund. Keep in mind this is rather tricky word; there is a type of capital known as equity capital, that equity capital is different and is a type of capital; now, only equity means owners fund, so it includes capital plus reserves.

Now, in the American terminology they call it equity, whereas in UK it is called as net worth, in India it is called as owners fund; this terms are used interchangeably. Since in a company shareholders are the owners, instead of owners fund it is also called as shareholders funds. Please go to your balance sheet in it may be shown as shareholder fund or owners fund in your balance sheet.

Now, many of you might be investing in mutual funds, if you do not invest then you can start investing. Now, if you invest in mutual fund for that scheme everyday NAV is announced; NAV, you can search for NAV on Google, they would give lot of NAVs. Because every day as per the requirements of SEBI, NAV is required to be published, now this NAV that is also actually owners fund of that particular scheme.

Do you know what is the full form of NAV? Full form is Net Asset Value; here net asset refers to total assets minus total liabilities that means, it is nothing but the owners fund for that scheme. So, it is the total owners fund divided by number of units they calculate per unit in NAV and they publish it anyway. Since that the particular term is often used I felt that you should know that NAV is also nothing, but the owners fund.

Now, let us go in to all the three components; now, as you know the balance sheet is required to tally or balance sheet is required to match.

$$\text{Assets} = \text{Liabilities} + \text{Owners Fund}$$

(Refer Slide Time: 18:17)

Balance Sheet Equation

Assets = Liabilities + Owners Fund

Therefore,
Owners Fund = Assets – Liabilities

Owners Fund = Capital + Retained Earnings

NPTEL Financial Statements Balance Sheet 23

Now, you know that owners fund itself is capital plus retained earnings or reserves. So, owners fund can be calculated by two ways:

$$\text{Owners Fund} = \text{Assets} - \text{Liabilities}$$

$$\text{Owners Fund} = \text{Capital} + \text{Retained Earnings}$$

Now, let us go to balance sheet equation. Now, you all know that A that is assets is equal to L plus O.

$$\text{A} = \text{L} + \text{O}$$

Where, A= Assets, L= Liability and O= owner's fund

(Refer Slide Time: 18:47)

Balance Sheet Equation

A = L + O

1. Issue of shares by company

+ + (+ Bank, + Equity Shares)

2. Company borrows from bank

+ + (+ Bank, + Bank Loan Payable)

NPTEL Financial Statements Balance Sheet 24

Now, if you want to understand how the balance sheet is prepared; we will take 5 simple transactions and for that transactions try to understand impact on A, L and O.

Now, let us say a company is newly formed and it issue shares. Now, can you think of what will be the impact on A, L and O? Issue shares means what happens the prospective shareholders or investors approach the company they pay money, company will give them shares for that money, so company receives cash give shares. Now, can you think of what has happened to A L O? So, there is a plus in A; assets go up no change in liability owners fund go up. So, A plus O plus, are you getting and if you see in detail we have said plus bank, because bank balance of the company goes up and equity share balance also goes up. So, add to bank add to equity shares.

Now, those of who were commerce students you would have already studied journal entries. Now, what I am showing you is nothing but the journal entries, but just for the benefit of non-commerce people I am not using the terminology journal entry, but in the same way actually journal entries are derived. For every transaction some item of A L O changes and those items actually match there are equal number of debits and credits.

So, we are just trying to make it very simple for five sample transactions which are very easy transactions, but very basic. Most of the transaction of companies are based on these transactions. We are trying to understand the impact of A, L and O. Aare you

debtors or receivables balance decrease: so, plus in bank minus in debtors. Actually transaction 3 a and 3 b appears to be opposite, because 3 a is a payment 3 b is a receipt. But here we are not looking at payment or receipt both are exchange of assets. So, if you look carefully neither L is affected nor O is affected within A only one asset is reduced other asset is added, ok. So, are you getting it?

Now, let us get to 4. Now, have a look at 4 a: company repays bank loan and 4 b is payment of creditors or suppliers. Now, company repays bank loan, what will be the effect? We repay loan which we have borrowed earlier, so bank balance will come down, bank loan payable will also come down. If you remember entry number 2, entry number 2 exactly reversing earlier it was plus now minus, minus in bank minus in bank loan payable. And what about 4 b? 4 b is payment of creditors. That means, we have already purchased some goods. Now, we have to pay those vendors or supplier or creditors. That means our bank balance will be reduced, we are repaying, so minus in bank and minus in creditors, ok. So, A is minus L is also minus, no change in O. Are you getting it?

See these are very easy entries for those who have already learnt commerce, but for those who are doing it for the first time please look at them carefully. Because, based on the simple entries actually you can calculate or you can write down any entry, because the same entries are going to happen they may happen ten thousand times with slight changes, but the base remains same.

Now, go to the fifth entry. Now, company pays dividend to shareholders. Now, how it will be reflected? I hope you know what is a dividend: dividend means what happens is company earns profit, now company distributes this profit to the shareholders or to the owners that is called as Dividend. If you remember we saw business cycle, in business cycle your revenue minus expense you get profit that profit is either paid to owners or is plowed back or kept transferred back to balance sheet.

Now, we are assuming that that profit is paid to the owner or to the shareholders. Now, what will be the entry? We are making payment, so bank balance will come down, and what else will change? Are the assets changing? Because of bank yes, but no other asset is changing, are the liability changing? No, but O that is from the owner's fund there is a reserve that reserve balance is coming down, ok.

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Balance Sheet Equation

A=L+O

5. Company pays dividend to shareholders

| | | |
|---|---|----------------------|
| - | - | (- Bank, - Reserves) |
|---|---|----------------------|

NPTEL Financial Statements Balance Sheet 26

So, minus in A and minus in O or you can say minus in bank minus in reserves, are you getting. These were just the simple transactions we can look at hundreds of transactions, but once the basic logic is clear I hope you will be able to understand more and more transactions.

So, with this we are completing our session on balance sheet and in our next class we will start with profit and loss account. Namaste

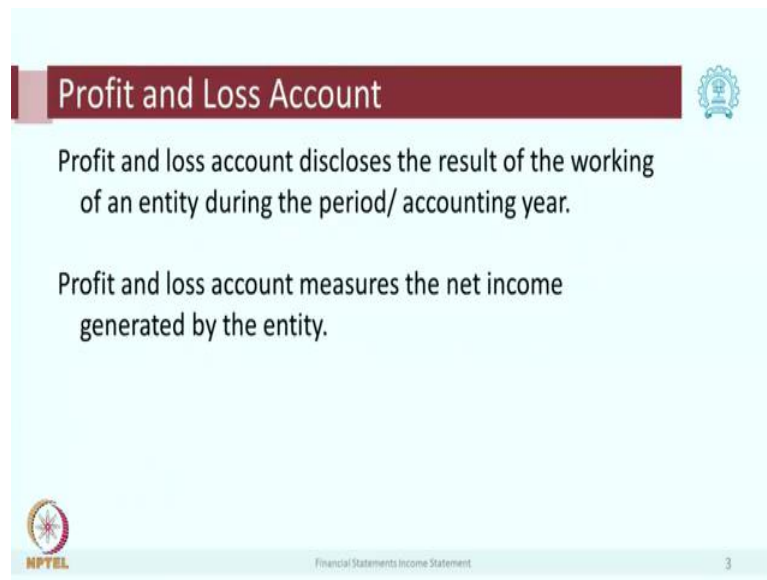
Financial Accounting
Prof. Varadraj Bapat
School of Management
Indian Institute of Technology, Bombay
Lecture – 08
Profit and Loss Account 1

Namaste. Welcome everybody to our sessions on Financial Accounting. We have already discussed what is accounting, then we started with financial statements. And in our last sessions we have discussed one of the most important financial statement that is balance sheet. We have also seen the format of balance sheet a short form then in detail as per schedule III of Companies Act.

So, can you tell me what does the balance sheet give you? The balance sheet is a statement which shows the financial position of the entity as on a particular day. Normally it is prepared at the end of the year, you have a list of assets, you have a list of liabilities and you also have a balancing figure as owners fund or equity shareholders money that is there in the balance sheet. Today we are going to start with the next financial statement which is profit and loss account; sometimes it is called as income statement.



So, for business entities in India we call it P and L account, in some countries like us it is called income statement. For non-profit organizations like trusts and societies it is called as income and expenditure account, but the basic concept is that of profit and loss account. So, today in the session we will discuss what is P and L account? And try to understand what are the elements of P and L account. Now P and L account discloses the results of operations of the entity.

(Refer Slide Time: 02:17)



Profit and Loss Account

- Profit and loss account discloses the result of the working of an entity during the period/ accounting year.
- Profit and loss account measures the net income generated by the entity.

Financial Statements Income Statement 3

If you are a company; obviously, you would be looking for the profit. So, P and L account will show you the profit during a particular year or during a particular month. If you are a nonprofit organization then you will prepare income and expenditure account and it will give you the surplus.

Now for every entity to calculate the profit, you will need to know the incomes and expenses. Now in our first session we had a look at the money cycle or at the business cycle; from the business cycle you will come to know what are the incomes, you will also come to know what are the expenses and they would be listed out and the difference between them would be the surplus or would be the profit of the entity.

(Refer Slide Time: 03:15)



So, the major components of P and L account are incomes and expenses.

(Refer Slide Time: 03:19)

The table is titled "Profit & Loss A/c (Short Format)" in a dark red header. It has two columns: "Particulars" and "Amount". The rows are as follows:


| Particulars | Amount |
|--------------------|--------|
| Sales | XX |
| Cost of Goods Sold | (XX) |
| Gross Profit | XX |
| Other Expenses | (XX) |
| Tax | (XX) |
| Net Profit | XX |

The slide includes logos for NPTEL and a university in the top right and bottom left corners. The footer text reads "Financial Statements Income Statement" and the number "5".

And this is a simple format or a short form of P and L account; so, it starts with sales most of the entity's income is the sales. Then less cost of goods sold gives you gross profit, then you deduct other expenses or operating expenses taxes that is the net profit; this is a very simple format of P and L.

Now let us look at the Company Act format as per the schedule III of Company Act; now instead of sales the word uses revenue from operations.

(Refer Slide Time: 04:03)



| Particulars (format as per revised schedule III) | | Year Ended | Year Ended |
|--|-------------------------|------------------|------------------|
| | | 31st Mar 2011 | 31st Mar 2010 |
| I. | Revenue from Operations | - | - |
| II. | Other Incomes | - | - |
| III. | Total Revenue (I + II) | - | - |

Financial Statements Income Statement

6

Now, what do you mean by revenue from operations? For a simple understanding in the earlier slide I had used the word sales; which is more or less same as revenue, but now the term revenue because entity might not be selling the goods it can also be providing variety of services.

So, the revenue it generates from services plus the revenue it generates from sales both together; it is called as revenue from operations. Operations indicate that this relates to day-to-day functioning of the entity; that is why any money or any income which is generated from the normal course of business would be shown as revenue from operations.

Next to that there is other income; now what is other income? As the name suggests it is other than revenue if any incoming generated; it is shown separately. Now you can add both of them, so in step number III; you get total revenue which is I plus II, but now the users of that P and L account want to know how much is a revenue generated from operations and how much is other income? That is why it has to be classified; in item I, you only show the revenue from operations in item II; you show other incomes and in item III; it is a total of I plus II.

Now, what is an example of other income? Can somebody think of the example. Suppose we have deposited some money in the bank, we have a surplus cash we deposit in a bank at the end of the quarter or at the end of the 6 months; bank gives us some interest, that

interest is an example of other income. It is not a income from our regular business, it is not a sale of goods or it is not a supply of services done by us. But from our surplus money we invested, we got some income from that investment in the form of interest then it is an example of other income.

Same way sometimes, if we sell our fixed asset at profit then the profit which you generate will be an example of other income. The loss which you incur by selling asset is also other income ok. So, search items which are not in the normal course of business, but they are also revenue in nature they would be shown as other income; now both together forms the total revenue for that entity. Now item number IV is expenses; now all expenses of the concern in that particular year or that for that period are listed out.

Company Act has specified certain headings, so you just like in balance sheet there were certain headings; there are certain headings in P and L account all your expenses you are to fit in those headings.

(Refer Slide Time: 07:07)

| Profit & Loss A/c (Format) | | |
|---|---|---|
| IV. Expenses: | | |
| Cost of Materials Consumed | - | - |
| Purchases of Stock-in-Trade | - | - |
| Changes in Inventories of Finished Goods, Work-in-Progress and Stock-in-Trade | - | - |
| Employee Benefit Expenses | - | - |
| Finance Costs | - | - |
| Depreciation and Amortization Expense | - | - |
| Total Expenses | - | - |

NPTEL Financial Statements Income Statement 7

So, the first item is cost of material consumed; now what do you understand here by material consumed? Suppose you are a manufacturing entity, you would purchase raw material, you may also purchase some components, some spare parts; now the cost of all these items is considered as material consumed.

If it is in stock; you will not take it here what is actually consumed in the period is shown as cost of material consumed. Next is purchase of stock in trade; now, what do you understand by stock in trade? Now, if you are a trading entity you will buy goods and sell them as it is as finished goods that will be an example of stock in trade.

Sometimes even manufacturing companies buy finished goods sell finished goods. So, whatever you purchased as a ready item; what raw material you consume will be in item number I, but what you purchased and sold as it is to the customer that will be shown as purchases of stock in trade. Now next item is very interesting changes in inventory of finished goods, work in progress and stock in trade; keep in mind all these are different types of inventories or stocks in your hand.

Now, if there is any change in those stocks that will be shown. Do you think of any other type of inventory? Actually there is one more type are you remembering it? There is also a raw material inventory, but that is not shown here because you remember in item number I, we have considered raw material consumed. So, we have not considered opening and closing stock; what is actually consumed is taken to P and L. But in case of stock in trade or in case of finished goods, we have considered purchase of stock in trade not consumed actual purchase.

So, out of that purchase some of the amount of stock in trade is not sold out; remains with the entity as a closing stock, there might be some amount of stock in the beginning which is known as opening stock. Now opening stock minus closing stock is your change in stock; now that change in the stock in trade will have to be included here. Same way whatever finished goods you have or whatever work in progress you have any change there on will be shown as changes in the inventories. Now this is a very important item and you have to be very careful about the sign of these changes.

Because see first item that is cost of material consume; whatever you consume is an expense; purchase whatever your purchase is an expense. But in case of change if there is decrease in the inventory earlier you have more inventory, now you have less inventory there is a decrease; that shows that you have consumed that in inventory it becomes your expense it has a positive sign.

But suppose there is an increase in the inventory, then there will be a negative sign getting it? So, earlier you have got less inventory; now you have got more inventory; that means,

there is a increase in the inventory that will be shown in the expenses with the negative sign because it is a like your income it reduces your expense ok. So, look at the balance sheet or of your own company; you be careful because this change in my inventory will be small item, but it can have a positive sign it can also have a negative sign ok.

The next item is employee benefit expenses, so in simple terms you can say it is a salary expense. But it may include some other employee benefits like overtime, like bonuses, like work visits, like the cost of any other facilities given to employees, the cost of recruitment of those employees; all that items would be clubbed together in the heading employee benefit expense. The next item is also very interesting it is called as finance cost.

Now, what do you mean by finance cost? You are using money, if you are paying any cost for raising those finances that will be called as a finance cost. What will be an example of finance costs? The best and simple example is payment of interest. Suppose you have obtained loan from the bank; at the end of every quarter normally you will have to pay interest that interest will be considered as finance cost.

If you pay interest on your debentures, interest on lease all this will be considered and included in finance cost. In fact, even the cost of raising the debentures; some charges which you incur as one time charges, they would also be amortized that is a part of that will be included in the finance cost ok.

The next item is also a different type of item; that is depreciation and amortization expense. Now what is meant by this item? After this session we are going to discuss; we are going to have a separate session on depreciation, but as of now you can understand that depreciation is a fall in the value of fixed assets. Now fixed assets are there in the balance sheet, if their value falls. Because as you use the asset suppose you own a car; when you use your own car, you do not have to pay any rent, but the value of your car is falling that fall in the value is called as a depreciation and that depreciation is considered as a expense in the balance sheet.

Any fixed asset which you are using will lose value; at the end of the year its value will be less than the value in the beginning. There are various methods of calculating depreciation that we are going to discuss later. But as per the method which is used by

your company whatever is a fall in the value that will be shown separately as a depreciation in the profit and loss account.

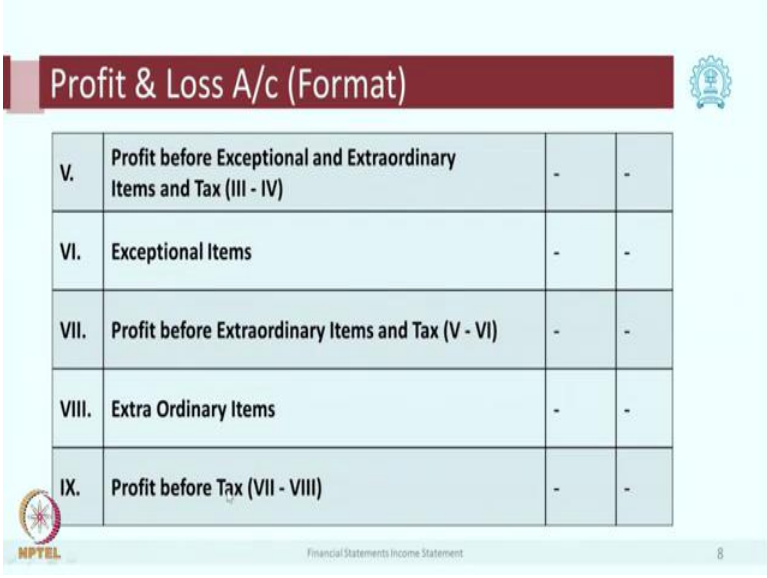
Keep in mind that this is a unique expense because it is a non-cash expense. All the expenses starting from cost of raw material consumed to finance cost; we were paying in cash. Suppose you hire somebody you pay salary, suppose you take loan, you pay interest; suppose you purchase raw material, you pay for the raw material. Like that there will be a cash cost involved in other items, but in depreciation, there is no cash cost.

We have purchased say a car or we have purchased some machinery at that time you have paid in cash. But now that car is being used for 5 years; let us assume, there will be no cash to be paid every year. I think you are getting me, If we hire that asset on rent then we can pay rent but if it is our own asset then no cash cost will involve. But even if you are not paying in cash, the value of your asset is falling and that value fall in the value is to be estimated and calculated and to be shown in P and L account as a depreciation. Now what do you understand by amortization? Because there are two items depreciation and amortization; I think most of you are able to judge it. Because there are two types of fixed assets there are tangible assets when they lose value it is called as being depreciated, there are intangible assets when they lose value it is called as amortized.

So, suppose you have got software, you have purchased software and the license is for 3 years; that means, every year; one third of the cost will be reduced in the beginning if you pay 3 lakhs for 3 years, then you can calculate that for each year 1 lakh rupees is a fall in the value of that software; at the end of three years it will become 0; that 1 lakh which is calculated each year is called as amortization. So, like that for any intangible asset, there is a reduction in the value that will be calculated it is just like depreciation; only thing is it is on intangible assets. So, there is a separate name for it known as amortization.

So, all the expenses for any company are to be put under six heads; keep in mind you can have more expenses also, but you would put them under the most appropriate head and at the end of the six items you calculate the total expenses.

(Refer Slide Time: 16:49)



The slide displays a Profit & Loss Account (A/c) in a standard format. The title 'Profit & Loss A/c (Format)' is in a dark red header. A table with five rows and three columns is shown. The first column contains Roman numerals (V to IX), the second column contains descriptions of profit components, and the last two columns contain dashes (-) representing zero values. Logos for NPTEL and a gear icon are present. The footer includes 'Financial Statements Income Statement' and the number '8'.

| V. | Profit before Exceptional and Extraordinary Items and Tax (III - IV) | - | - |
|-------|--|---|---|
| VI. | Exceptional Items | - | - |
| VII. | Profit before Extraordinary Items and Tax (V - VI) | - | - |
| VIII. | Extra Ordinary Items | - | - |
| IX. | Profit before Tax (VII - VIII) | - | - |

Now, we have got next heading; heading V that is profit before exceptional and extraordinary items and tax. So, it is III minus IV; earlier we have seen this III was referring to the total revenue minus total expenses; this gives you profit, very simple. Whatever is the Total revenue you minus total expense from that, what you get is a profit; only thing is you are yet to calculate or take into consideration some other items which are exceptional extraordinary and taxes. That is why it is called as profit before exceptional and extraordinary items and taxes; what these items are? We will just take into account.

But right now we are at item number V which you can say is a profit calculated as a initial profit. Now from that you are going to deduct two items; item number VI is exceptional item, item number VIII is extraordinary item. Now what is an exceptional item? As the name suggests, if certain item is not likely to recur every year it is not in the normal course of business, it is required to be separately shown and it will be categorized as an exceptional item.

Can you think of any example of exceptional item? Let us see there is a major flood in the factory and because of flood your stocks are damaged, your machinery is damaged, you will have to incur lot of repairs after the flood to restore your machinery and make your factory in proper order. So, the loss of stock, damage to the machinery and

repairing cost all these taken together; if the amount is significant keep in mind I am talking of major flood.

Normal flood like every year water logging, then it is not an exceptional item; if it is a significant loss because of a major flood, then that will be separately shown as a extraordinary item. Same way you can also say about fire, any such eventualities which is not in the normal course; it is not likely to recur every year, you will need to classify it.

Now here the judgment is given to the management whether a particular item is to be classified exceptional or to be shown as a normal item. If they would have treated it as a normal item it would have come in the normal expenses. For example, your raw material is destroyed in flood; if it is a minor amount you would anyway including cost of raw material consumed, you do not have to separately show.

But if it is a sizable amount; we will show it as exceptional item because it is not going to happen every year. Same way, there are extraordinary items; if the happening is even more exceptional than exceptional then it will be called as extraordinary. For example, flood is so much devastating that it has completely destroyed our factory then it can be considered as a extraordinary item.

Keep in mind this is a rarest of a rare case; normal if flooding happens then either it is exceptional nor extraordinary. If there is a major flood which might occur somewhere in 10, 20 years once then it is exceptional. If flood is so large that it has totally destroyed our factory something which you expect once in 100 years perhaps and it may have impact in the existence of your entity itself, then you will characterized it as a extraordinary item.

Now, the discretion is given to management to categorize is that either exceptional or extraordinary. Now why these items are shown separately? Because the users of financial statement; that is those who are reading the P and L should know whether a particular item is going to happen every year or no. Normally we assume that the items which are categorized as expenses are in the normal course of business; so they will happen repeatedly regularly we have already defined P and L it is a statement which shows normal incomes and expenses.

So, it is assumed that they are going to be recurring in nature; however, if there is a major loss which is not going to recur; you will go categorize it as a exceptional or extraordinary. Keep in mind that this cannot be recorded in the balance sheet because that is also a revenue item; it is not creating any new asset that I can write it in the balance sheet. In fact, it is destroying my existing assets; that is why it has to be removed from balance sheet and those losses how to be booked somewhere in P and L; so, special headings are created to show it as exceptional and extraordinary.

Now when somebody is reading P and L and they look at a exceptional or extraordinary expense, they would understand that this is not a normal expense. So, next year we can expect to have more profits because there will not be exceptional and extraordinary losses in the next year when I am referring to losses it can also be profits sometimes.

Can you think of an exceptional item of profit? Just think over; suppose we own a piece of land. We have purchased land for 5 lakhs in 1950, today in 2019 or in 2020; after 70 years the land which was purchased for 5 lakhs, perhaps today might have a value of 5 crores. So, 5 lakh rupees land if we sell in 5 crore we will make a profit of 4 crore 95 lakhs.

Now all profits are shown in P and L; so that profit is also shown in P and L, can we show it in our revenue? Obviously, no because it is not our business to sale land, neither can we show it as other income; though it is other income it is not going to recur every year because if we sell land this year then, next year no land available for sale. It is not like sale of our normal goods; that is why this 4 crore 95 lakhs is an example of extraordinary item. Remember here that we said extraordinary item, they have not said extraordinary expense it can be income as well as expense.

So, you will have to careful about the sign here; this is not always a negative sign, it can be negative sometimes it can be positive also. In addition to that management will have to write a note below explaining what is a extra exceptional extraordinary item and why they have categorized that item as exceptional or extraordinary. So, I will advise you now you go back to your balance sheet for your own company, check if there are any exceptional or extraordinary items and write a note as to why they are classified so; fine.

So, I hope you have got this; so now we were at V, profit before exceptional extraordinary then we will deduct exceptional items, we will deduct extraordinary items; so you get IX which is profit before tax.

(Refer Slide Time: 24:59)

| Profit & Loss A/c (Format) | | | |
|----------------------------|--|---|---|
| X. | Tax Expense : | | |
| | ▪ Current tax | - | - |
| | ▪ Deferred Tax | - | - |
| XI. | Profit/ (Loss) for the period from Continuing | - | - |
| | Operations (IX - X) | | |
| XII. | Profit/Loss from Discontinuing Operations | - | - |

Financial Statements Income Statement 9

Now from that item X is tax expense; so we will deduct current taxes and deferred taxes to get profit or loss for the year from continuing operations. Now what is a current tax and what is a deferred tax? I think we have discussed it earlier I will just repeat again.

So, on the profits which you have earned in IX, you will have to pay some money to government that is a taxes. If those taxes are due in the current year, they would be called as current taxes; if they are allowed to be paid and after 2 years, 3 years, 4 years something like that they would be called as deferred tax; still we this show them in the today's P and L.

Because they are on the profits of this year, but they can be paid afterwards they will go to balance sheet. So, tax expense is categorized as current differed; so you get profit from continuing operations.

(Refer Slide Time: 26:11)

| Profit & Loss A/c (Format) | | | |
|----------------------------|---|---|---|
| XIII. | Tax Expense of Discontinuing Operations | - | - |
| XIV. | Profit/(Loss) from Discontinuing Operations (after Tax) (XII - XIII) | - | - |
| XV. | Profit/ (Loss) for the Period (XI + XIV) | - | - |

NPTEL
Financial Statements Income Statement
10

Then separately you have to show profit from discontinuing operations; that means if some business is stopped, then those profits will have to be profits or losses will have to be shown separately the taxes on those discontinuing operations. Like some factory which is closed, but you get some profit or loss from there; so, profit before tax and profit after tax from ex discontinuing operation is shown in item number XIV.

And finally, item number XV is profit or loss for the year which is total of XI; that is profit or loss from continuing operation plus XIV. So, continuing plus discontinuing both the profit after taxes are added and you get the final result, it is like a final scorecard for that business as profit or loss for the year. Now this was the format as per schedule III of Companies Act.

So, we stop here and in next session we will continue the profit and loss account.
Namaste.

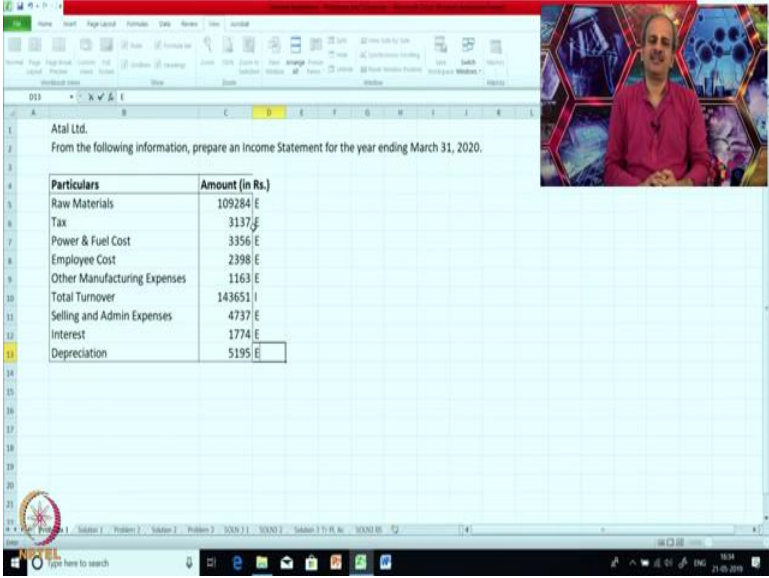
Financial Accounting
Prof. Varadraj Bapat
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Lecture – 09
Profit and Loss Account 2

Namaste. We have already discussed the basics of financial statements, then we have seen balance sheet both the basic format and the company format and we have also seen income statement or profit and loss account formats.

Now, let us try to prepare some basic financial statement in the form of Profit and Loss Account. This is not in the full fledged company format; this is for us to understand the basic format of income statement or P and L and to calculate the profit.

(Refer Slide Time: 01:05)



Atal Ltd.
From the following information, prepare an Income Statement for the year ending March 31, 2020.

| Particulars | Amount (in Rs.) |
|------------------------------|-----------------|
| Raw Materials | 109284 E |
| Tax | 3137 E |
| Power & Fuel Cost | 3356 E |
| Employee Cost | 2398 E |
| Other Manufacturing Expenses | 1163 E |
| Total Turnover | 143651 I |
| Selling and Admin Expenses | 4737 E |
| Interest | 1774 E |
| Depreciation | 5195 E |

So, the first case for that Atal limited, now a list of balances related to incomes and expenses are given and from that we have to make income statement. So, raw materials, taxes, power and fuel, employee cost you know all of these are various expenses, manufacturing expense is another expense. So, all these are being marked as a expense category right; total turnover is our revenue or our income. So, I will just mark it as a income and selling and admin expense, interest and depreciation are expenses.

So, in P and L it is very simple we will note income and we will reduce the expense from the same, we will break it down into two parts trading part and P and L part. So, please prepare the solution first and then check it with the solution which I am going to show. You can pause your video complete the work and then only look have a look at the solution.

(Refer Slide Time: 02:39)

| Particulars | Amount (in Rs.) |
|------------------------------|-----------------|
| Total Turnover | 143651 |
| Less: | |
| Raw Materials | 1,09,284 |
| Power and Fuel Cost | 3,356 |
| Employee Cost | 2,398 |
| Other Manufacturing Expenses | 1,163 |
| Selling and Admin Expenses | 4737 |
| Depreciation | 5195 |
| Total Operating Exps | 1,26,133 |
| EBIT/Operating profit | 17,518 |
| Less: | |
| Interest | 1,774 |
| EBT | 15744 |
| Less: | |
| Tax | 3137 |
| EAT | 12607 |

So, in the interest of time we are immediately showing you the solution I hope you have made it yourself. So, the total turnover is the first item; here only one income item we have in the form of turnover this is also known as top line for the business from this certain expenses are deducted.

That is raw material, power, employee expense, manufacturing expense, selling expense and depreciation. What we have not reduced is or charged is interest because the items which are charged here are known as operating expenses. So, we will deduct first the operating expense which gives us a figure of operating profit it is also known as EBIT or PBIT; PBIT or EBIT refers to Earning Before Interest and Tax or Profit Before Interest and Tax; then less interest we get EBT or profit before tax. Now why is interest deducted separately in a separate step can somebody tell me the answer, can you think of it?

Because interest is not a regular expense related to the business; if you look at other items like raw material, power, employee, manufacturing etcetera they were essential part to run that business; whereas interest is a repayment made to bank or to some party

for loan which we have taken. So, it is not integral part to the operations of business; it is considered as a finance cost. If we have invested our own money of capital; we do not have to pay interest, interest is being paid because we have borrowed money, it does not necessarily have to do with the operations of business.

So, we have not kept it in operating expense we have reduced it separately. So, we get two levels of profit; first we have calculated EBIT and then we have calculated EBT. We have also deducted taxes separately whereas, where we will finally, get profit figure known as EAT or PAT. Now why is profit deducted separately; because profit as nothing to do with our policies. As per the prevailing law as per the taxation policy of the government the taxes have been calculated and they have been deducted to know the final profits available after taxes.

But we would also like to get one level before that to calculate profit before tax. So, that we know that from our own business we have got operating profit, we also deduct interest. So, we need to know how much profit we have made it our self that is profit before tax and then finally, what profit remains with us is a profit after tax. So, I hope you are all able to make it yourself; now let us go to the next case.

(Refer Slide Time: 06:19)

| Particulars | Amount (in Rs.) | |
|-----------------|-----------------|---|
| Cash | 2800 BS | A |
| Trade debtors | 10000 BS | |
| Rent | 2750 E | |
| Salaries | 6000 E | |
| Trade Creditors | 9350 BS | L |
| Insurance | 2000 E | |
| Petty Expenses | 1500 E | |
| Opening Stock | 10000 E | |
| Sales | 132500 I | |
| Purchases | 90000 | |
| Capital | 52950 | |

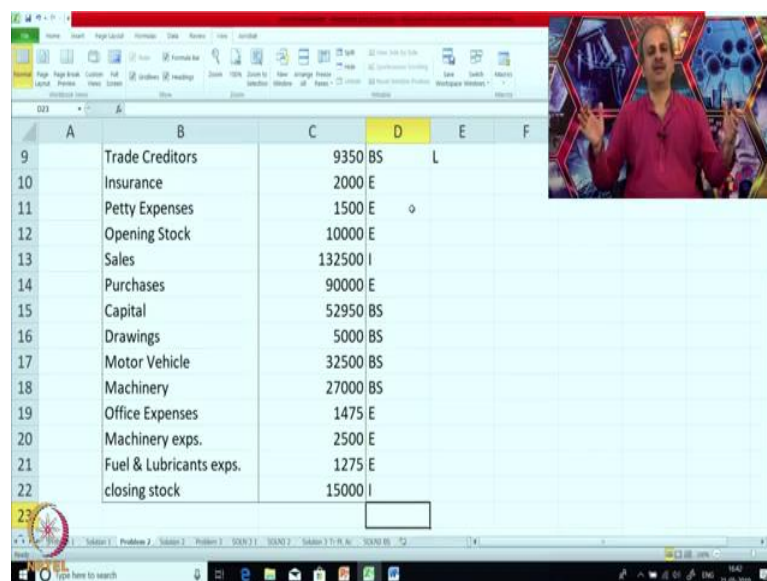
Next case here the balances of Shiva are given; certain items have been given and from this you have to make profit and loss account. But now we are going to make in two levels first the trading account and next the P and L account. The trading account is the

upper part of P and L, where we will record those items which are directly related to trading or manufacturing ok. This is a horizontal form of P and L we will make; in the last case we have made a vertical form now we are going to make a horizontal form ok.

Now, have a look at these balances mark the items of income and expense and then prepare trading and P and L account. So, cash what will you mark it as? Is it an income or expense? The answer is no actually you know it is a balance sheet item it is an asset in the balance sheet. So, it is not required as far as the P and L is concerned, but right now we will just mark it as BS. So, BS is balance sheet; so that you know that it is a balance sheet item those of you want to make balance sheet also you can even mark A after that because it is an asset item. But right now I am not going to give much time on it because we are going to focus on preparation of P and L.

Trade debtors; again a balance sheet item, rent again a balance sheet item? No; rent is an expense; so you should mark as E; salary again an expense, trade creditors balance sheet item; you know it is a liability you can mark it as L; if you are keen. Insurance, it is an expense petty expenses of course, are expenses; opening stock this is the last year stock which we are going to use it now; so, it becomes an expense item for us. Sales; sales is an income item, purchases; expense item, capital neither income neither expense it is a balance sheet item.

(Refer Slide Time: 09:05)



| | A | B | C | D | E | F |
|----|---|-------------------------|--------|----|---|---|
| 9 | | Trade Creditors | 9350 | BS | L | |
| 10 | | Insurance | 2000 | E | | |
| 11 | | Petty Expenses | 1500 | E | | |
| 12 | | Opening Stock | 10000 | E | | |
| 13 | | Sales | 132500 | I | | |
| 14 | | Purchases | 90000 | E | | |
| 15 | | Capital | 52950 | BS | | |
| 16 | | Drawings | 5000 | BS | | |
| 17 | | Motor Vehicle | 32500 | BS | | |
| 18 | | Machinery | 27000 | BS | | |
| 19 | | Office Expenses | 1475 | E | | |
| 20 | | Machinery exps. | 2500 | E | | |
| 21 | | Fuel & Lubricants exps. | 1275 | E | | |
| 22 | | closing stock | 15000 | I | | |

Drawings, again a balance sheet item; motor vehicles balance sheet item, machinery is a balance sheet item, office expense is an expense machinery expenses mark well these are maintains or such expenses on machinery they are not for purchase or for acquisition of machine. So, machinery is a balance sheet, but machinery expense is a expense item. Fuel and lubricant another expense and last item closing stock; this is an income item we are this is the remaining stock which we will use it in the next period.

So, for this period it becomes an income item; got it? Now only pick up E and I items prepare a profit and loss account in the horizontal format; upper part is known as trading lower part is known as P and L. So, please make your solution; I will halt here please pause the video and then after you are ready see the remaining part of video.

(Refer Slide Time: 10:43)

| Trading Account | | | |
|------------------------------|-----------------|---------------|-----------------|
| DR | | CR | |
| Particulars | Amount (in Rs.) | Particulars | Amount (in Rs.) |
| Opening Stock | 10,000 | Sales | 132,500 |
| Purchases | 90,000 | Closing Stock | 15,000 |
| Fuel and Lubricants Expenses | 1,275 | | |
| Gross Profit | 46,225 | | |
| | 147,500 | | 147,500 |

| Profit and Loss Account | | | |
|-------------------------|-----------------|--------------|-----------------|
| Particulars | Amount (in Rs.) | Particulars | Amount (in Rs.) |
| Rent | 2,750 | Gross Profit | 46,225 |
| Salaries | 6,000 | | |
| Insurance | 2,000 | | |
| Petty Expenses | 1,500 | | |

So, here we are now this is a solution of trading account. So, you can see the sales and closing stock are shown on credit side, this side is known as credit side where we show incomes this side is known as debit side.

I am not going to jargons of why debit, why credit, but normally this is called as credit. I will just mark it; CR normally stands for credit and DR stands for debit. On debit side or on expense side we start with opening stock then record the items which are related to the core operations; so we have recorded purchases and fuel.

(Refer Slide Time: 11:39)

| Particulars | Amount (in Rs.) | Particulars | Amount (in Rs.) |
|--------------------------------|-----------------|--------------|-----------------|
| Gross Profit | 46,225 | | |
| | 147500 | | 147500 |
| Profit and Loss Account | | | |
| | | | |
| Particulars | Amount (in Rs.) | Particulars | Amount (in Rs.) |
| Rent | 2,750 | Gross Profit | 46225 |
| Salaries | 6,000 | | |
| Insurance | 2,000 | | |
| Petty Expenses | 1,500 | | |
| Office Expenses | 1,475 | | |
| Machinery Expenses | 2,500 | | |
| Net Profit | 30,000 | | |
| | 46225 | | 46225 |

Whereas those which are general nature of expenses like rent etcetera are recorded in P and L account. So, rent, salary, insurance, petty expense, office expense and machinery expenses have been recorded in P and L; of course, this classification is not very strict.

Some items like for example, machinery expenses if it is in a factory it can be written in a trading account, but we have assume that this is a small business which is not a manufacturing per say these are like more of a maintenance of machinery for day to day use. So, we have kept it in general expense category in the P and L account ok.

So, now based on your sales and closing stock we have charged first two items that is opening stock, purchases and fuel and the balance is called as gross profit. Are you able to calculate the gross profit? I will just show you the process; take the sum, the same amount will be carried over here since this is total I will make it bold.

Now, calculate the balance on the debit side that is 46225 that represents the profit from trading account, which is known as gross profit. Now this gross profit, we are caring it over on the credit side and then we will charge all the expense. Again following the same process take a total, take total on debit side also you will get a balance of 30000, this 30000 represents your final profit; generally known as net profit. Are you getting it? Net profit is the most important figure, so I am just making it bold.

So, for this particular period we have recorded all incomes and expenses and got a profit of 30000; this is the traditional way of writing it in a horizontal form all debit on one side and credit on one other side. More modern format is making a income statement in the vertical form which we had already seen in the last case; got it? Now let us go to the next one.

(Refer Slide Time: 15:15)

| in the books of Amar Ltd. | |
|--|-------------|
| From the following balances as on 31 st March 2020, Prepare Trial Balance, Profit and Loss Account and Balance Sheet | |
| Particulars | Amount(Rs.) |
| Mr. A's capital a/c | 10,00,000 |
| Mr. A's drawing a/c | 20,000 |
| Purchase of finished goods | 20,00,000 |
| freight inward for finished go | 20,000 |
| wages | 1,20,000 |
| salaries | 1,50,000 |

Now, this is more of a interesting item from the books of Amar limited, we are going to prepare trial balance, P and L account and balance sheet. So, far in the earlier cases we have seen how to prepare balance sheet, we have also seen how to prepare P and L; now we are going to next step where for the same case we will prepare P and L as well as balance sheet. In fact, we will also prepare one more statement known as trial balance. So, here there are list of balances; these balances would have been extracted from their ledger.

Now what is ledger they have made list of balances list of accounts if they calculate the balance of each account; they get the final balance as on 31st March 2020; they will make a list and this is what the list is. Now, what is a trial balance? Trial balance means this particular list will be categorized into debit balances and credit balances and we will check the total of debits and credits. Why do we check this? Because we want to check arithmetic accuracy of the accounts, this does not mean that 100 percent accuracy is ensured. But at the first stage trail balance helps us to know whether arithmetic accuracy

is there, whether we have missed any balance, whether any particular account has any issues. So, we will make a list of balances, prepare the trial balance and then make P and L and balance sheet ok.

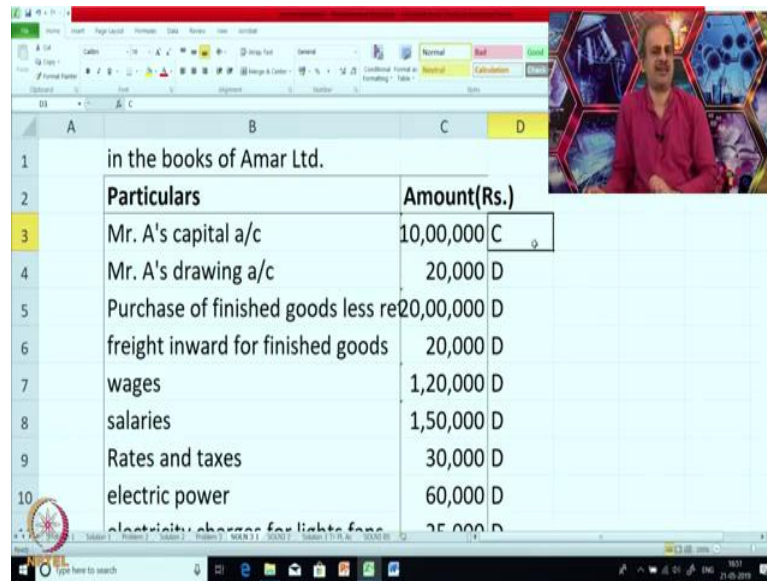
So, for this list of balance now; please take a printout. For all the cases I have been telling you that based on this print out; prepare the solution yourself and then check with my solution there is a small error here.

(Refer Slide Time: 17:21)

| | A | B | C | D |
|----|---|-----------------------------------|-----------|---|
| 19 | | sales less return | 30,00,000 | |
| 20 | | bad debts written off | 10,000 | |
| 21 | | discount (debit balance) | 5,000 | |
| 22 | | general expenses | 36,000 | |
| 23 | | postage and telegram | 15,000 | |
| 24 | | opening stock as on 1 April 2019: | 330,000 | |
| 25 | | factory land | 80,000 | |
| 26 | | factory building | 60,000 | |
| 27 | | plant and machinery | 5,00,000 | |
| 28 | | furniture and fixtures | 1,05,000 | |
| | | sundry creditors | 2,00,000 | |

Because we are given balance is on 31st March 2020. So, this opening stock must be on 1st April 2019, by typo error it was shown as 18; so I have now corrected it. Now please correct it in your sheet also and with these balances first make a trial balance. Now let us go to the solution I hope you have also made a trial balance.

(Refer Slide Time: 18:05)



| Particulars | Amount(Rs.) | |
|------------------------------------|-------------|---|
| Mr. A's capital a/c | 10,00,000 | C |
| Mr. A's drawing a/c | 20,000 | D |
| Purchase of finished goods less re | 20,00,000 | D |
| freight inward for finished goods | 20,000 | D |
| wages | 1,20,000 | D |
| salaries | 1,50,000 | D |
| Rates and taxes | 30,000 | D |
| electric power | 60,000 | D |
| electricity charges for lights fee | 25,000 | D |

Now, what I have done here is first I have marked every item as C and D. What is C and D? Credit and debit; like capital account this is the money which investors have put in our business; so, this has credit balance this is the amount which is repayable.

Drawings represents the money which we have paid to the owner mister A. So, we will mark it as D debit; purchase is an expense item, so we have mark it as D. Freight is a expense item we have marked it as D like that all the items first have been listed as C or D ok. C items can either become a liability in the balance sheet or can become an income item in the income statement. But right now we are not going for that we are just listing out items as C or D and let us prepare the trial balance from same.

(Refer Slide Time: 19:11)

| Trial Balance as on 31st March 2020 | | | |
|--|-------------|---|---------|
| Particulars | Amount(Rs.) | | |
| Mr. A's capital a/c | 1000000 | C | |
| reserve account | 50000 | C | |
| sales less return | 3000000 | C | |
| sundry creditors | 200000 | C | |
| closing stock | 350000 | C | 4600000 |
| Mr. A's drawing a/c | 20000 | D | |
| Purchase of finished goods less return | 2000000 | D | |
| freight inward for finished goods | 20000 | D | |
| wages | 120000 | D | |
| salaries | 150000 | D | |
| Rates and taxes | 30000 | D | |
| electric power | 60000 | D | |

So, here now all C items have been taken together and we have one taken one total of all C items ok. So, this is like a trial balance, but we will prepare exact trial balance from this. We were given list of balances as on 31st March 2020 then we have mark this items as C and D and now we are going to make a trial balance as on 31st March 2020.

(Refer Slide Time: 20:35)

| Trial Balance as on 31st March 2020 | | | |
|--|-------------|---------|-----------|
| Particulars | Amount(Rs.) | | Amount(%) |
| | credit | Debit | |
| Mr. A's capital a/c | 1000000 | | |
| reserve account | 50000 | | |
| sales less return | 3000000 | | |
| sundry creditors | 200000 | | |
| closing stock | 350000 | | 4600000 |
| Mr. A's drawing a/c | | 20000 | |
| Purchase of finished goods less return | | 2000000 | |
| freight inward for finished goods | | 20000 | |
| wages | | 120000 | |
| salaries | | 150000 | |
| Rates and taxes | | 30000 | |

So, what we have done is; all the items which we were marked as C, we have kept under the column C and all items which are marked as D have been kept in the column D.

And then we will take totals of credit column and debit column. Are you getting it? This simple statement is known as a trial balance; now this becomes a starting point for preparation of P and L and balance sheet. Now based on this let us go for preparation of P and L and balance sheet; I hope you are ready with the solution. Are you ready to see the solution? Since we have done it before; I hope you know the process for example, A's capital, where will you take it as?

(Refer Slide Time: 22:27)

| | | credit | Debit | | |
|----|--|---------|---------|----|---|
| 5 | Mr. A's capital a/c | 1000000 | | BS | L |
| 6 | reserve account | 50000 | | BS | L |
| 7 | sales less return | 3000000 | | PL | I |
| 8 | sundry creditors | 200000 | | | |
| 9 | closing stock | 350000 | | | |
| 10 | Mr. A's drawing a/c | | 20000 | | |
| 11 | Purchase of finished goods less return | | 2000000 | PL | E |
| 12 | freight inward for finished goods | | 20000 | | |
| 13 | wages | | 120000 | | |
| 14 | salaries | | 150000 | | |
| 15 | Rates and taxes | | 30000 | | |
| 16 | electric power | | 60000 | | |
| 17 | electricity charges for lights fans | | 25000 | | |
| 18 | office rent | | 30000 | | |

You know it is a liability item in the balance sheet. If you want you can go on marking it like this; results again a liability item in the balance sheet. Sales less returns, this is a profit and loss income item.

See now your work is very simple because we have separated credit balances and debit balances. If you go to let us say purchases; it is a profit and loss expense item almost all debits are going to be profit and loss expense few would be balance sheet assets. Only one for example, drawing will be reduced from the balance sheet liability side ok.

So, now your job will be simple; using this data let us go to income statement and the balance sheet. So, if you are ready we will go to the solution.

(Refer Slide Time: 23:49)

The screenshot shows an Excel spreadsheet with two tables. The first table is the Trading account, and the second is the Profit and Loss account.

| Trading account | | | |
|------------------------------------|-----------------|-------------------|-----------------|
| Particulars | Amount (in Rs.) | Particulars | Amount (in Rs.) |
| Opening Stock as on 1st April 2019 | 330000 | Sales less Return | 3000000 |
| Purchase of Finished Goods Less | 2000000 | Closing Stock | 350000 |
| Freight Inward for Finished Goods | 20000 | | |
| Wages | 120000 | | |
| Gross profit | 880000 | | |
| | 3350000 | | 3350000 |

| Profit and Loss Account | | | |
|-------------------------|-----------------|--------------|-----------------|
| Particulars | Amount (in Rs.) | Particulars | Amount (in Rs.) |
| Salaries | 150000 | Gross profit | 880000 |

So, here is a solution for P and L account; are you getting it? So, trading account we have got two credit items sales and closing stock; the total is 3350000 and there are four debit items, opening stock, purchase, freight inward and wages. So, we get gross profit of 880000; I hope it is matching with you.

(Refer Slide Time: 24:59)

The screenshot shows the continuation of the Profit and Loss account table from the previous slide.

| Particulars | Amount (in Rs.) | Particulars | Amount (in Rs.) |
|-------------------------------------|-----------------|--------------|-----------------|
| Salaries | 150000 | Gross profit | 880000 |
| Rates and Taxes | 30000 | | |
| Electric Power | 60000 | | |
| Electricity Charges for Lights Fans | 25000 | | |
| Office Rent | 30000 | | |
| Travelling Expenses | 100000 | | |
| Insurance Premium | 180000 | | |
| Advertisement Expenses | 40000 | | |
| Bad Debts Written-off | 10000 | | |
| Discount (Debit Balance) | 5000 | | |
| General Expenses | 36000 | | |
| Postage and Telegram | 15000 | | |
| Depreciation | 50000 | | |

This 880 is then carried to the lower part of P and L known as profit and loss account.

(Refer Slide Time: 25:09)

| | A | B | C | D | E | F | G |
|----|---|-------------------------------------|--------|---|---|--------|---|
| 16 | | Rates and Taxes | 30000 | | | | |
| 17 | | Electric Power | 60000 | | | | |
| 18 | | Electricity Charges for Lights Fans | 25000 | | | | |
| 19 | | Office Rent | 30000 | | | | |
| 20 | | Travelling Expenses | 100000 | | | | |
| 21 | | Insurance Premium | 180000 | | | | |
| 22 | | Advertisement Expenses | 40000 | | | | |
| 23 | | Bad Debts Written-off | 10000 | | | | |
| 24 | | Discount (Debit Balance) | 5000 | | | | |
| 25 | | General Expenses | 36000 | | | | |
| 26 | | Postage and Telegram | 15000 | | | | |
| 27 | | Depreciation | 50000 | | | | |
| 28 | | Net Profit | 149000 | | | | |
| 29 | | | 880000 | | | 880000 | |

And then we will list out all the expenses to get a net profit of 149000 have you got this?

(Refer Slide Time: 25:21)

| | A | B | C | D | E | F | G |
|----|---|-------------------------------------|------------------------|--------------------|------------------------|---|---|
| 13 | | | | | | | |
| 14 | | Particulars | Amount (in Rs.) | Particulars | Amount (in Rs.) | | |
| 15 | | Salaries | 150000 | Gross profit | 880000 | | |
| 16 | | Rates and Taxes | 30000 | | | | |
| 17 | | Electric Power | 60000 | | | | |
| 18 | | Electricity Charges for Lights Fans | 25000 | | | | |
| 19 | | Office Rent | 30000 | | | | |
| 20 | | Travelling Expenses | 100000 | | | | |
| 21 | | Insurance Premium | 180000 | | | | |
| 22 | | Advertisement Expenses | 40000 | | | | |
| 23 | | Bad Debts Written-off | 10000 | | | | |
| 24 | | Discount (Debit Balance) | 5000 | | | | |
| 25 | | General Expenses | 36000 | | | | |
| 26 | | Postage and Telegram | 15000 | | | | |
| 27 | | Depreciation | 50000 | | | | |

This is the profit and loss account; let us go to balance sheet now. Now, based on the items which are given in the trial balance; prepare the balance sheet; I am deliberately not showing you the solution, I hope you are able to make it yourself now.

(Refer Slide Time: 25:49)

| Balance Sheet as on 31st March 2020 | | | |
|-------------------------------------|----------------|------------------------|----------------|
| Liabilities | Rs | Assets | Rs. |
| Mr. A's capital a/c | 1000000 | factory land | 80000 |
| Mr. A's drawing a/c | -20000 | factory building | 60000 |
| reserve account | 50000 | plant and machinery | 500000 |
| Net Profit | 149000 | furniture and fixtures | 105000 |
| sundry creditors | 200000 | sundry debtors | 600000 |
| | | cash in hand | 20000 |
| | | cash in bank | 14000 |
| | 1379000 | | 1379000 |
| | | | 0 |

So, balance sheet on 31st March 2020; if you have made it yourself earlier, check it if not make it now along with me. Now, from the trial balance those items which were; those items which were marked as balance sheet items, now carry them to balance sheet. Then from debit side there are many assets item, carry them to asset side. After that; take total of assets and liabilities it should match; is it matching? If not what is a problem? Which item is missing?

You have to go back to trial balance and find out whether item is missing and also check whether your carried profit from profit and loss account because, it must be added in the balance sheet. So, we have not yet added profit; so this net profit let us add, now is it matching? Still there is a difference we need to find out which item has been wrongly added; so there is a difference of 20000.

If you look carefully, we have excluded this drawing of 20000 that also needs to be considered. So, it is reduced from capital, it is going to be a minus figure and once you consider this it is going to tally. Is it matching? Are you getting it? This is how trial balance helps you to find out the errors. Trial balance helps you to find out which item was missing and which item was wrongly added or which item the amount is wrong and from trial balance you can make P and L and balance sheet.

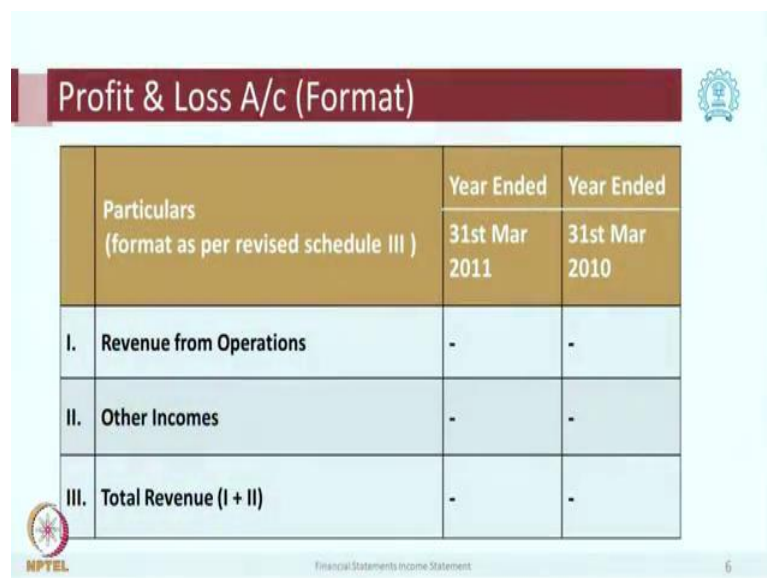
In coming sessions we will do it for company, but this is based on a proprietary concern type of a simple transaction and the balance sheets from the simple transactions.
Namaste

Financial Accounting
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School of Management
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Lecture – 10
Profit and Loss Account 3

Namaste. Welcome to Financial Accounting. We have discussed about balance sheet which is one of the most important statements of financial nature. In the last statement or in the last session, we had started with discussion on Profit and Loss Account.

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| Particulars (format as per revised schedule III) | Year Ended | Year Ended |
|--|------------------|------------------|
| | 31st Mar 2011 | 31st Mar 2010 |
| I. Revenue from Operations | - | - |
| II. Other Incomes | - | - |
| III. Total Revenue (I + II) | - | - |

We had almost done, we will just have some more discussion today. So, as you all know profit and loss account is a statement which gives you profit or loss and in case of nonprofit entities it is called as a surplus for a particular period. It has to list all incomes and all expenses.

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So, it has two parts; income part and expense part and this is our short form a very simple form of P and L and we are also seen in detailed form as per the schedule III of companies act. So, its starts from revenue; revenue or the income of the entity, then other income; you get total revenue.

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The table is titled 'Profit & Loss A/c (Format)' in a dark red header. It lists various expense categories under the heading 'IV. Expenses:'. Each row has two columns for numerical values, both containing a hyphen (-). The slide includes logos for NPTEL and a university in the top right and bottom left corners. The footer text reads 'Financial Statements Income Statement' and the number '7'.

| IV. Expenses: | | |
|---|---|---|
| Cost of Materials Consumed | - | - |
| Purchases of Stock-in-Trade | - | - |
| Changes in Inventories of Finished Goods, Work-in-Progress and Stock-in-Trade | - | - |
| Employee Benefit Expenses | - | - |
| Finance Costs | - | - |
| Depreciation and Amortization Expense | - | - |
| Total Expenses | - | - |

Then in item number IV, you consider the expenses. There are six categories of expenses, starting from cost of material to depreciation. I had told you that change in inventory is slightly confusing item because it is not a direct expense as such. What

happens is you have got opening inventory you have got closing inventory, if there is a reduction in the inventory. So, more opening inventory less closing inventory, there will be a decrease in inventory which is an expense.

So, in the it is in the under the head expenses will have a positive sign. But if you have got less inventory in the beginning more inventory in the end so, increase in the inventory is mean actually conveys that there is less expenditure in the period; you are keeping more inventory for future that is since it is an under the expense head. Increase in the inventory would you have a negative sign.

So, I had told you that go to your balance sheet of your company and see the sign of this item, it can be positive, it can also be negative. While for all other items it will be positive; positive means it is added to expense. Then employee benefits, then financial cost; financial cost is slightly unique type of expense because it is related to your business, but it is specifically for raising of funds.

So, if you have taken loan, you will have to pay interest; if you have issued debenture, you will have to pay interest; if you have leased an asset that is you are taking somebody else's asset for use, then you will have to pay financial cost for the lease that is also finance cost. So, all these items are added in finance cost and the last item of expense is also unique in nature that is depreciation and amortization. Do you remember what is depreciation? There is a reduction in the value of fixed asset. If it is for tangible fixed asset, we call it depreciation; if it is for intangible fixed asset, it is called as amortization.

Now, how the depreciation is calculated, we will see in the next session. But as of now whatever is a depreciation as calculated represents an expense of the entity for that period. Suppose you have purchased a machinery for 5 lakhs and the life of the machinery is let us say, 5 years. You cannot charge the whole 5 lakhs in year 1, but you also cannot say that nothing is a cost throughout the 5 years. At the end of 5 years, we will consider 5 lakhs.

So, this 5 lakh rupees, you will credit over its useful life which is 5 years may be you can take 1 lakh each year that 1 lakh represents the depreciation for that year. I hope you are getting it. More methods of depreciation we will see later on, but depreciation is one of the expense it is unique because it is non cash in nature; you do not pay any cash for it, but there is a fall in the value of assets, so you record it ok.

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The slide displays a table titled "Profit & Loss A/c (Format)" with a dark red header. The table has five rows and three columns. The first column contains Roman numerals from V to IX. The second column contains descriptions of profit components. The third and fourth columns contain hyphens (-). The slide also features a logo in the top right corner, an NPTEL logo in the bottom left corner, and the text "Financial Statements Income Statement" and the number "8" in the bottom center.

| V. | Profit before Exceptional and Extraordinary Items and Tax (III - IV) | - | - |
|-------|--|---|---|
| VI. | Exceptional Items | - | - |
| VII. | Profit before Extraordinary Items and Tax (V - VI) | - | - |
| VIII. | Extra Ordinary Items | - | - |
| IX. | Profit before Tax (VII - VIII) | - | - |

So, after taking these six items, you get total expense. Now 3 minus 4 gives you profit this is your initial profit. Now, a few more items are considered there, they are known as exceptional and extraordinary. Do you remember what these items are? These items are non recurring in nature. Normal course of business, we do not expect them every year like say fire, like some major accident I am not talking of a very small fire or a very small accident, that is in normal course, that will be in item IV.

But some big happening which causes major losses or major incomes, they would be categorized as exceptional incomes or expenses the losses because of them would be under this item. In rare cases, there can be also exceptional incomes. What is an example? Last time we said sale of asset; asset like a land not your normal goods, then it is your revenue. But if you sell land maybe once in 10 years, 15 years, 50 years like that it can happen, it will be categorized as a exceptional and extraordinary item; it is shown either in 6 or 8.

It needs to be separately categorized because readers of P and L account should know that this is not a profit in the normal course of business. So, it is separately shown, so item V is your normal profit to that you adjust for VI and VIII. First you take VI, then you get profit before extraordinary item and tax then you take VIII; you get profit before tax. So, by after you deduct VIII in IX you have considered all items exceptional and extraordinary, you have only not considered the taxes.

Now, from IX we will reduce the taxes, so you have a tax expense. Now, what do you mean by tax expense? There are variety of taxes for example, GST. Will you include GST here? The answer is no because GST is a indirect tax. They indirect taxes which are incurred are part of your cost. So, it will be already included in these expenses.

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| Profit & Loss A/c (Format) | | | |
|----------------------------|--|---|---|
| X. | Tax Expense : | | |
| | ▪ Current tax | - | - |
| | ▪ Deferred Tax | - | - |
| XI. | Profit/ (Loss) for the period from Continuing | - | - |
| | Operations (IX - X) | | |
| XII. | Profit/Loss from Discontinuing Operations | - | - |

So, what you are considering here in tax expense is only taxes on your profits which is nothing, but income tax. So, profit before tax; here the word tax refers to income tax only. Now from that you are deducting two types of taxes, it is both are income tax only, but under the provision of income tax certain taxes are allowed to be deferred; that means, you can pay them after 2 years, 3 years, 4 years etcetera. Most of the taxes you have to pay now; they are called as current taxes. If you are allowed to defer the amount of tax, it will be called as a defer tax.

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| XIII. | Tax Expense of Discontinuing Operations | | |
|-------|---|---|---|
| XIV. | Profit/(Loss) from Discontinuing Operations (after Tax) (XII - XIII) | - | - |
| XV. | Profit/ (Loss) for the Period (XI + XIV) | - | - |

So, from IX, you will this is profit before tax you will deduct the tax expense, then you will get XI. Now this is a profit from your normal business. So, it is a profit for the period from continuing operations. Now, some part of the business, you might have stopped that business. For example, certain factory is closed now or certain line of business is closed then again the readers of P and L should know that this is a profit or loss coming from a closed business. So, it is to be separately categorized in XII as profit from discontinuing operations ok.

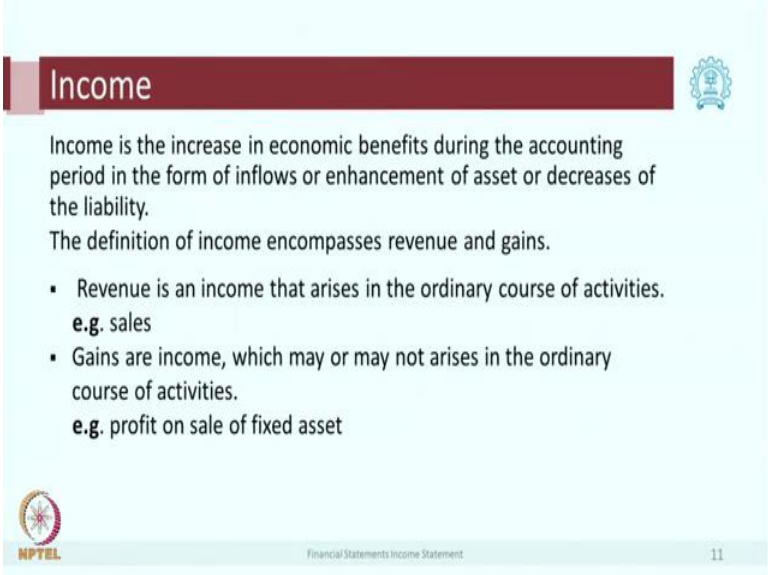
So, at XI, you have calculated all the profit from continuing operation, then profit from discontinuing operation, you reduce any tax expense on discontinuing operation. So in XIV, you get profit or loss from discontinuing operation. Now, this XII sorry this XI plus XIV together gives you profit or loss for the period.

Now, they have written loss in bracket because suppose this figure is negative, it will be shown in bracket which indicates that you have incurred the loss for the period. It says for the period, I think you all know that profit and loss account itself is paid for a particular period may be a year or a quarter or for a month. So, unlike a balance sheet, suppose last year sales or last year's expenses cannot be shown in P and L account whatever profit you have incurred is a profit for the particular period.

I hope you understood P and L, if you have any queries please discuss them on our discussion forum. Now, we will just consider one or two important concepts. One

important concept is income because there we had said revenue here; we had said revenue from operations.

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Income

Income is the increase in economic benefits during the accounting period in the form of inflows or enhancement of asset or decreases of the liability.

The definition of income encompasses revenue and gains.

- Revenue is an income that arises in the ordinary course of activities.
e.g. sales
- Gains are income, which may or may not arise in the ordinary course of activities.
e.g. profit on sale of fixed asset

 Financial Statements Income Statement 11

So, first of all we should be clear as to what is a income. Now, income is defined as increased in economic benefit during a particular accounting period. Normally it reflects in inflows or enhancement of asset either you get cash or some of your assets are enhanced or your liabilities are reduced, then it is called as a income.

Every income is not revenue, income is of two types. It can be revenues or it can be gains. Income which you get from a normal business activity or from a day to day business activity is called as revenue and income which occurs because of an occasional activity because of a onetime activity is called as a gain.

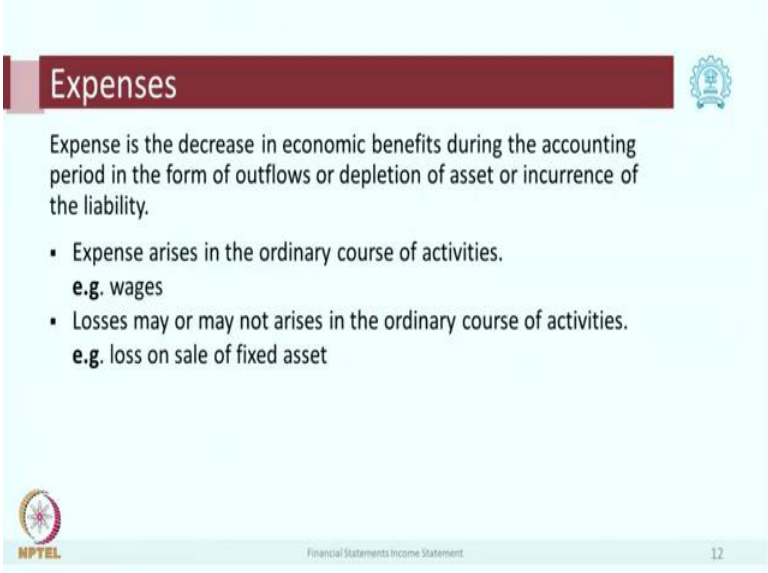
So, we had already seen one example that we have a piece of land you sale it after 10, 15 or 20 years. This is not your normal business, you are not into a developer or as a builder. For a builder buying and selling of land will be normal course that will be a revenue, but for any other company sale of land or a sale of fixed asset would be a onetime activity; it is not a nor normal or a ordinary activity. So, any gains from sale of fixed asset would be categorized as a gain.

So, all the incomes are into revenue and gains keep in mind in P and L account the item number I is revenue, so you do not write any gain there. Are you getting me? So,

whatever is your normal operations; if there is any sale or any revenue from provision of services that will be one that is your normal business. Other than that is categorized as other incomes, so you would have wondered here it is called revenue, but here it is called income. Because here you can show revenue as well as gains which are not from normal businesses ok.

So, for example, if you have purchase shares, you will get some dividend on it or if you make profit by selling, then dividend as well as the gain from sale both together would be shown as other incomes. Same way, there are other gains which we had categorized as exceptional or extraordinary items like from sale of a big land. Are you getting me?



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Expenses

Expense is the decrease in economic benefits during the accounting period in the form of outflows or depletion of asset or incurrence of the liability.

- Expense arises in the ordinary course of activities.
e.g. wages
- Losses may or may not arise in the ordinary course of activities.
e.g. loss on sale of fixed asset

 Financial Statements Income Statement 
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So, here just a conceptual understanding as to what is a income. The other one is expense. Now almost everybody knows expense because every now and then we keep on incurring some expense. So, expense happens means what for a normal persons if his cash reduce then that person calls as a expense because there is a outflow of cash. Sometime there is a reduction in the value of asset like depletion in the asset or sometime suddenly a new liabilities created. All this put together lead to decrease in economic benefit which is called as an expense.

Now, expenses are also of two type. When it is in the normal course, then we just call it as an expense. For example, if you pay salary if you pay rent, if you pay electricity charges, if you pay travelling expenses; all this is a example of are examples of expenses.

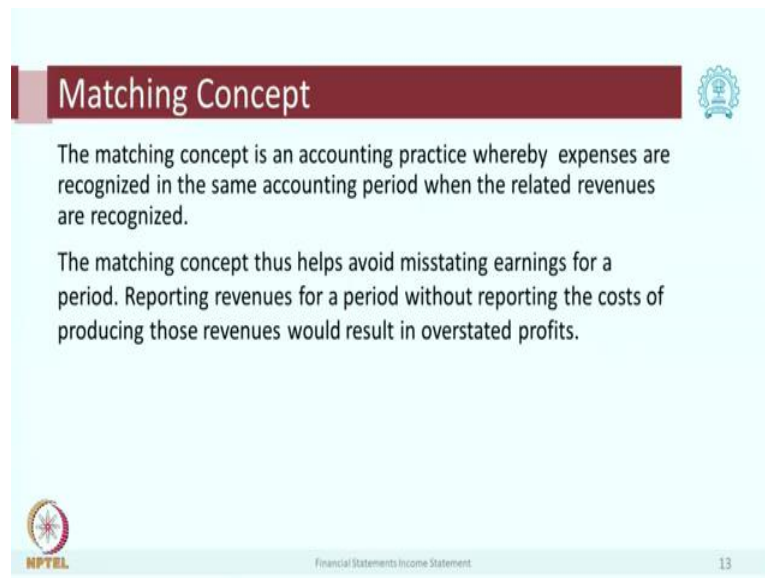
There is also a peculiar type of expense which is known as loss, so it is not in a normal course.

So, if you have purchase machinery life is expected to be 5 years, then every year you will depreciate; depreciation is your expense. But suddenly the machinery proves to be a bad machinery, it is not serving your purpose either it is of a outdated technology or there are some problems with running of machinery, so you will have to dispose of the machinery in the second year for zero value. So, the whole amount is lost, then we will not call it as a day to day expense, we will call it as a loss on sale of machinery and it will be categorized as loss. Are you getting?

So, any expense of such type which is not day to day or normal, can you give any other example of any such loss? So, suppose you have purchased a patent; patent has a life of 4 years, you were expecting that that technologies usable for 4 years, but within next year a better technology has come; I think we are all in knowledge era. So, you are aware that last year you purchased a new mobile, but this year now you there is a better mobile available, so you feel the old mobile is outdated.

So, whatever expense which is incurred in buying that particular patent is not of any use you might have to write it off, then that is also an example of a loss. So, as you got expenses, we divide into two types. If you go back to P and L, you can see here in item IV the term used is expenses. So, from the revenue we deduct only those items which are normal in nature. Those which were not normal we are categorizing them mostly as exceptional or sometimes as extraordinary and in some cases as relating to discontinuing operations, but normally the item in IV, items in this IV are day to day types of expenses. Are you getting? So, this was like the P and L is essentially a list of incomes and expense.



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Matching Concept

The matching concept is an accounting practice whereby expenses are recognized in the same accounting period when the related revenues are recognized.

The matching concept thus helps avoid misstating earnings for a period. Reporting revenues for a period without reporting the costs of producing those revenues would result in overstated profits.

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Now, in the last part, we will look at an at a important concept known as matching concept. Now, why there is a need to list incomes and expense? There is a need because of an accounting principle which is known as matching. So, at the end of the year as per the accounting norms or as per the accounting requirement, you have to make a list of all incomes and all expense. Why there is such a requirement? Because unless you do that you will not be able know profit or loss that is why accountants have made it a rule that incomes and expenses should be listed at the end of the period and that net result should be available in P and L account.

Now, matching concept avoids misstatements in earnings. So, what happens is suppose you have generated revenue in the current period, the expense which is related to that should also be recognized in the same period. If you record revenue now, you will show lot of profits in this year; expense will come in the next year, but that year in revenue is not there because you will again show lot of losses in the next year, so that leads to a misstatement.

So, matching concept says that whenever you recognize the revenue also recognize the expense related to that. So, neither there is a excessive profit in earlier year and sudden losses in the next year that is avoided. Similarly, it should not happen that now you record expense, but you suddenly record revenue in the next year which is also a

misstatement. Can you give an example of such a happening that revenue is recorded now, but expense suddenly comes later?

Let us say you are selling some item and you give the customer guarantee for 5 years, you record revenue now, show the profit also now, but the guarantee is for next 5 years; that means, in the next 5 years whatever is a repair etcetera on the item sold, we will have to be incurred by the business in year 2, 3, 4 and 5. But in year 1 you are recorded all the revenue. So, how will you avoid that?

If you remember in our earlier class, we had discuss that we create a provision exactly how much will be incurred because of guarantee nobody knows, but we will create a reasonable provision for year 2, 3, 4 and 5 and record it write in year 1. This is due to matching concept. Can you think of any other example? I think you have heard about depreciation in last two classes, little bit discussion on happen on depreciation happen.

For example, if you purchase machinery of 5 lakhs having a life of 5 years. Now, you have paid entire 5 lakhs in year 1, but you will use the machinery write up to year 5. Is it right full that the whole expense shown in year 1 only? The answer is no because you are going to use that machinery in year 1, 2, 3, 4 and 5. So, revenue which is generated by using that machinery is spread over 5 years, so what we do is the expenses there on are also spread over 5 years.

So, what we do is we create different types of provisions. If you remember we had discussed in the balance sheet a concept called provision what is the need of provision is because of the matching concept. Same way why you have to provide for depreciation is also because of the matching concept; I am just discussing matching concept because this is a base for P and L.

Why was P and L account prepared? It was because of the matching concept like that actually there are several principles and concepts in accounting. So, I am going to discuss as and when the relevant statement comes into picture, so that you are not suddenly board and you can relate the concept to the relevant statement I hope you are getting a.

So, with this discussion we have completed the discussion on P and, we already had discuss balance sheet, so you have understood the basics statements now. I know we

have not done any cases or problems we will do them in later sessions, but overall understanding of statements have happened you can read this statements and once again remind you that you have to download annual report of your company whichever company you choose start reading their P and L account and balance sheet along with my lectures.

So, that you also see the actual statement instead of just theoretical discussion, in coming sessions we will discuss some relevant concepts. For example, what is depreciation, how do you calculate and value inventory, what are important accounting rules. We will discuss a few concepts like this and then we will go for actual preparation of P and L and balance sheet. Till that time keep refreshing yourself by reading those P and L and balance sheets. So, with this we will stop here. Namaste.

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Lecture – 11
Depreciation 1

Namaste to all of you, we are starting with the 3rd module. In the first two modules, we have discussed the basics of financial statements. In module 1 if you remember we started with introduction, then we discussed what is balance sheet, what is the format of balance sheet, what are the assets, liabilities, equity. We also saw how are the major entries entered into; so, we had briefly discussed five important entries.

In module 2, we had started with discussion on balance sheet and P and L little more in detail. So, we have also discussed what is P and L and the format of P and L. I am once again reminding you that right from second session, I have been telling you that you need to identify your company, download the financial statements of a listed company and study the balance sheet P and L and all the statements as we are discussing in the class.

Because it is not just theory also read, observe what you are seeing in the financial statement of your company. And if you find any derivation, then what we are teaching or if you feel that there is something more to discuss, please put it on our discussion forum and you will be getting answers, you can also discuss with other members of the class. So, today we are going to start with the module 3, as you can see it is on Depreciation. If you have minutely read the P and L account, there is one item in P and L known as depreciation and amortization; that is something we are going to discuss today. It also appears in the balance sheet especially with reference to fixed assets.

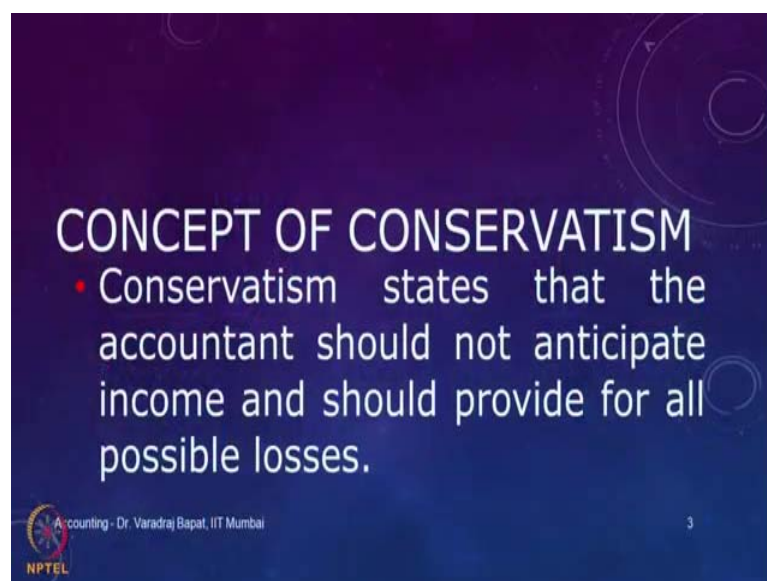
Now, in our module 3, we are going to discuss two important things; one is depreciation and the other is valuation of inventory because these two are very important items in both P and L and balance sheet; so, right now let us start with depreciation. Now what do you understand by depreciation? Many of you might already know and we have also discussed what is depreciation earlier.

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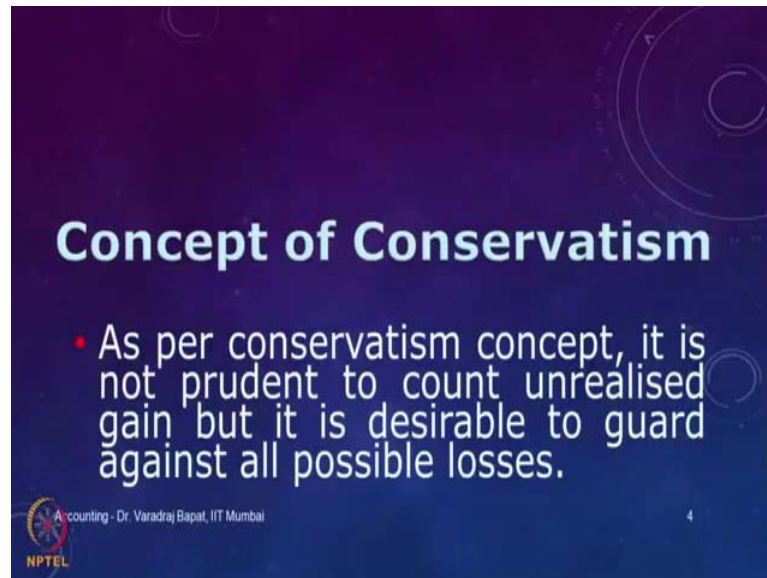


Now, while beginning this module, we are going to also discuss one very important concept that is known as concept of conservatism and then we will continue with the discussion on depreciation. Now what do you mean by concept of conservatism? Do you know what it is? As the name suggest, it is about not showing profit unless it is extremely confirmed, but showing on losses whenever there is a slight likelihood of a loss. To put it in specific terms, it states that accountant should not anticipate any income, but shall provide for all possible losses.

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Concept of Conservatism

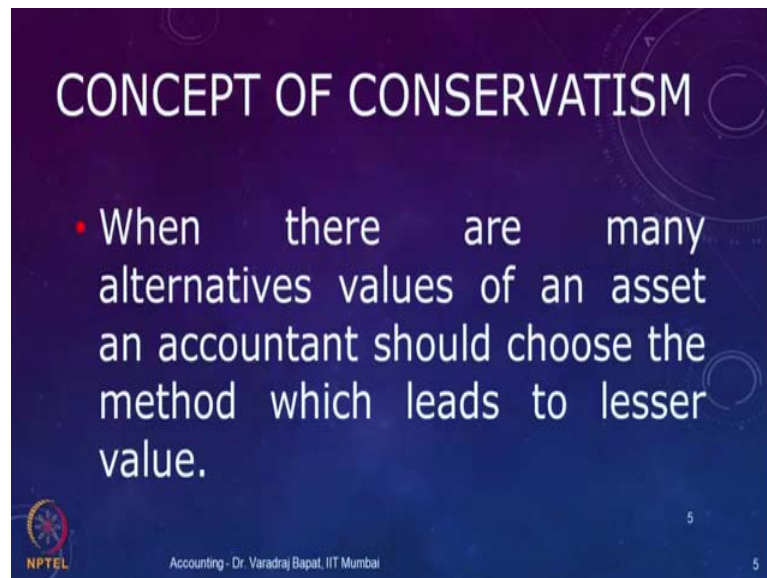
- As per conservatism concept, it is not prudent to count unrealised gain but it is desirable to guard against all possible losses.

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So, as per this concept it is not prudent to count unrealised gain, but it is desired to guard for all possible losses.

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CONCEPT OF CONSERVATISM

- When there are many alternatives values of an asset an accountant should choose the method which leads to lesser value.

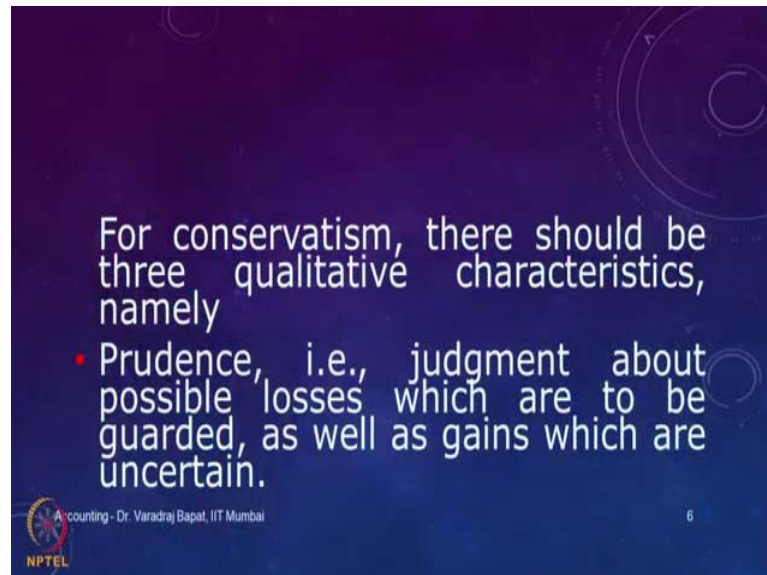
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So, when the alternative values of assets are available accountants need to choose the one which leads to lesser value. So, there is a possibility that a particular asset can have two values. As per one method the value is 50000, as per the other method it is 45000. Now to be on safer side as per the concept of conservatism, we will say that let us value the asset at 45000. Because instead of showing excessive value, it is better to be on a safer

side or on the conservative side because, we do not want the value in the balance sheet to be inflated. We are if it is slightly on a lower side ok.

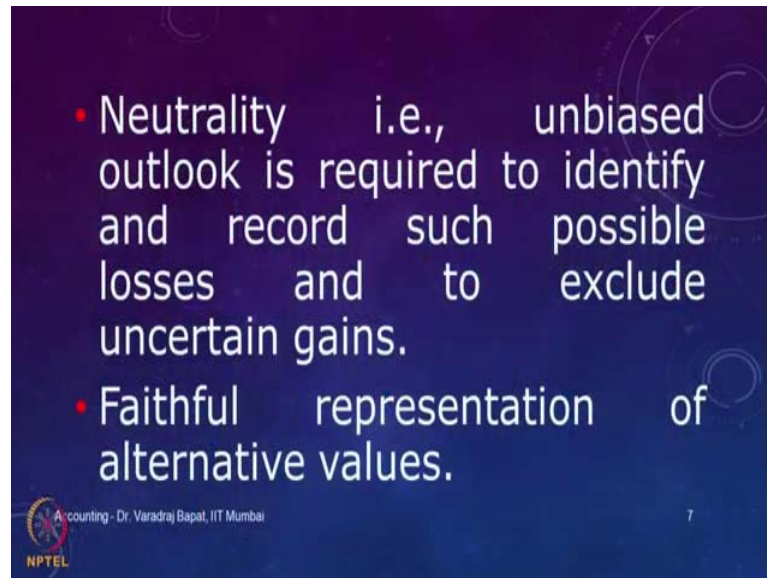
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Now, for conservatism there are three important qualitative characteristics; the first one is prudence. So, the judgement about the losses which are to be guarded as well as the gains which are uncertain. So, even if there is a slight possibility of a loss, we account for it.

If you remember we have discussed provisions when we discuss the balance sheet. So, whenever there is a likelihood of a loss, there is no certainty that loss will arise, but there is a chance that there will be a loss, what we do is we estimate the likely loss and make a provision and show it in the balance sheet as a liability. But when it comes to gains that there may be some gain then we do not account for it. So, this is the first qualitative characteristic known as prudence.

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The second one is neutrality. Unbiased outlook is required to identify and record such possible losses and to exclude all uncertain gain. Now when you are sitting in the chair of managing director or assembly who is manager, there is likelihood that you would like to show better results. So, you would like to show more profits, but accountant is supposed to be neutral. Accountant needs to have an unbiased view and ensure that any slight chance of loss should be identified and recorded while whatever the profits or gains we are recording, they should have hundred percent certainty. Any possible uncertain gain should be excluded.

And the third one is faithful representation of alternate values. So, when accountant is recording or showing an item in the balance sheet, first of all faithfully identify all possible values and then while recording the asset take the lower value. When it comes to balance sheet liability side, we would record and we would create provision for all possible losses.

When it is for preparing of P and L when a loss is being accounted in the balance sheet automatically it will also be recorded in a profit and loss statement. So, to an extent the profit will be understated and we will ensure that because of any uncertain gain the profit is not over stated. Are you getting me; now, this concept of conservatism is very important and it is at a root of several accounting treatments.

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Example

1. Closing stock is valued at Cost or market price whichever is lower
2. Depreciation is charged every year even though cost of the asset has not decreased.

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Two important examples are there on the screen. The first one is the closing stock is valued at cost or market value whichever is lower. So, in the balance sheet while showing the inventory, a particular item of stock or inventory will have a cost. If its market value is more than the cost which is more a likelihood that the cost is 10000, the market value is 12000. In such scenario, we will not record unrealised profit of two 2000 because we have not yet sold the item. It has a market value of 12, but its cost is only 10 so, we will continue to show it at 10.

However, suppose the cost is 10, but market value falls to 9000, then there is a possibility of loss of 1000. We have not yet sold the particular item at 9000, but its market value has come down to 9000. In such scenario that item of stock, we will record at 9000.

So, we will already record a loss which is likely to happen. That is why, any item of closing stock should be valued at cost or market value whichever is less. Now after today's session, we will look into details of valuation of inventory, but right now just keep it as an example of conservatism; are you getting me?

Now the next one; the next one is the topic which we are going to discuss today that is about depreciation. Now, most of you know that depreciation refers to fall in the value of fixed asset. Now such fall might not have happened in a particular period, but still because of conservatism, we take the cost of asset, we look at the life of the asset and

spread that cost over its life. So, we will go on reducing the balance sheet value of the asset every year, we will not wait till the asset is fully exhausted.

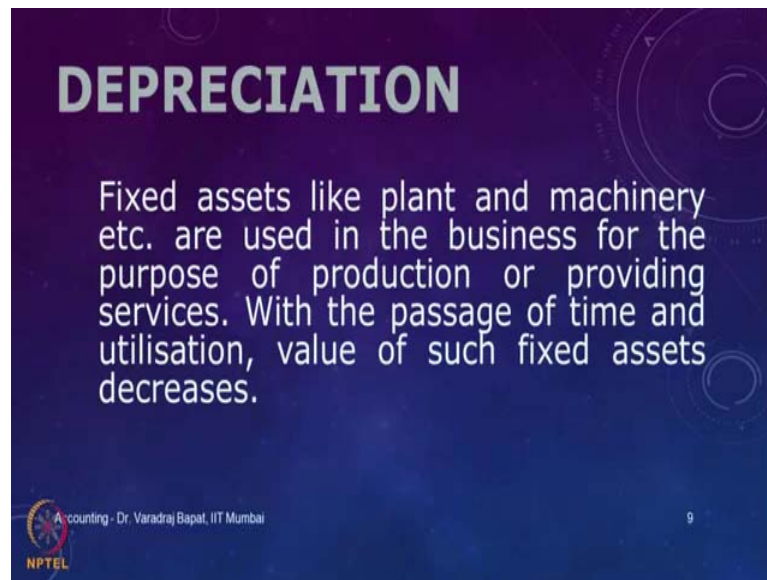
So, suppose you purchase the machinery at 10000, it has a value a life of 5 years. We will not wait for 5 years to for it to lose its value; every year this 10000 rupees will be spread over the period of 5 years. So, value is 10000, the life which is estimated is 5 years so, we will distribute 10000 by 5 that is 2000 each year and make a provision for depreciation every year.

So, the concept of conservatism is at the root of the need to provide depreciation ok. There are some more examples also, but these two are very prominent one hence, we are also going to discuss them in this course. Now can you think of any other example? Are you able to feel think that there is any other possibility where we use conservatism; I think some of you are guessing correct.

Suppose we make a credit sale, the amount is yet to be collected from the customer. So, we show it in the balance sheet as a debtor or a receivable. Now there is a likelihood that few of our customers do not pay their dues on time and eventually they do not pay at all. So, there will be a need to create a provision for this. This is normally is known as RDD or Reserve for Doubtful Debts. So, any customer any debtor, if is likely to not pay; we will immediately make a provision ok. So, like that we can have some more examples also, but right now let us go ahead.

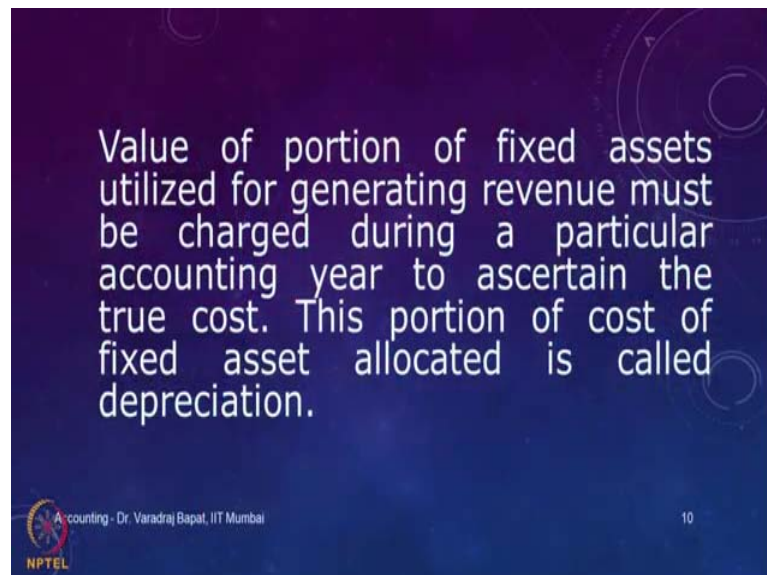
Now, we will discuss about depreciation.

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Now, depreciation especially it is for fixed assets which are used in business either for production or for supply of services. Now, typically they lose value as we use a particular asset, the value of asset is likely to fall because of its use. Even if you do not use the asset just by a passage of time also, the asset value is gradually reduced.

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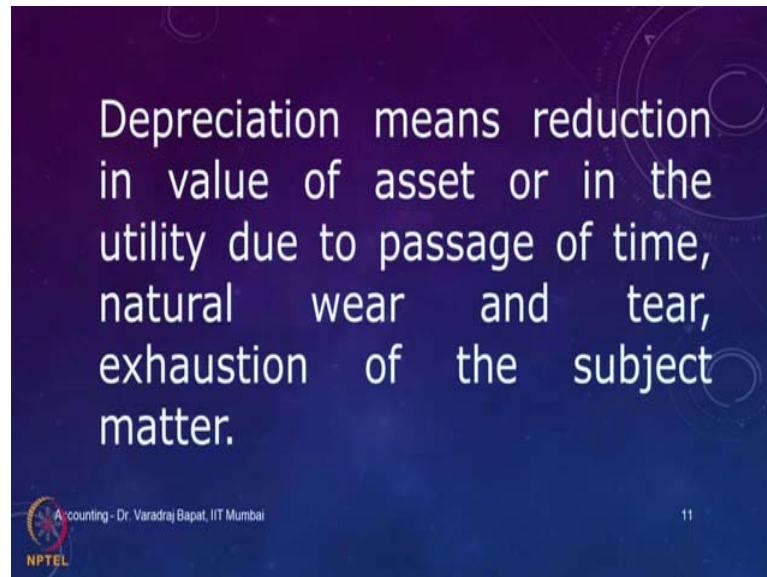


Now, that portion of value of asset which slowly reduces its value, it is necessary that that loss of value is charged to profit and loss account because we are using that asset to

generate revenue. So, against current revenue, there is a necessary to charge expense for loss of value of fixed asset.

Now, the portion of cost which is a loss of value for the current period is called as a depreciation for that particular period.

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What it means is, it is a reduction in the value of fixed asset or it is reduction in the utility of that particular asset due to variety of reasons. It can be due to passage of time, it can be due to natural wear and tear, it can be due to obsolescence or it can be due to exhaustion of subject matter. But there is a gradual and continuous fall in the value that we are recording as depreciation. So, we have just discussed the major causes of depreciation.

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The first one; that is, lapse of time. Now if you purchase a brand new car, do not use it. Suppose you purchase say a vehicle at 15 lakhs, do not use it for 2 years. After 2 years, will it have a value of 15 lakhs? The answer is no, because just by lapse of time even if you do not use it because it has become older vehicle, it loses its value.

So, one important cause which is irrespective of uses lapse of time, the other is wear and tear because most of the assets we are buying to use them. So, as we use them, there is some wear and tear there is some value loss because of utilisation; so, that is accountant. The third one is obsolescence of technology because new technologies are coming up that is why the older assets would soon become outdated.

In today's era, the biggest reason for depreciation is obsolescence because much better products, much better technology, much better services are available every now and then. So, even before the useful life is lost by wear and tear, it gets lost due to obsolescence. I think the best example is our mobile phones, I know everybody wants to change mobile phones within say 6 months or 1 year.

The old phone might not be still unusable, but newer phone might give much better utilities. That is why with better availability of either hardware or software, one tends to replace the assets faster that is mainly because of obsolescence. If you as observe carefully, many of the apps either on our mobile or on computer, they need to be deleted

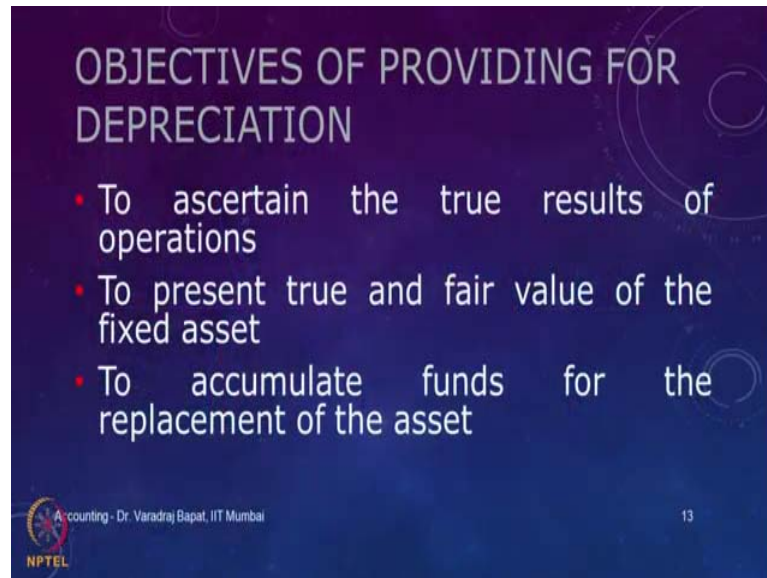
or updated continuously because the older versions are no longer, the best versions and the newer versions are available that is also because of obsolescence.

The fourth reason is exhaustion; the exhaustion of subject matter. Can you think of it is related to which asset? Anyone has a clue because most of the assets which we normally use like say mobile phones, computers, machinery or furniture; they are subject to first three reasons, but not much to exhaustion. So, which are the assets which are subject to exhaustion? I think some of you are guessing it correctly, it is asset like a mine.

So, in mine what happens is as we are extracting a particular mineral, the value of the mine falls not by time loss or not by obsolescence, but mainly because whatever is mineral in that mine goes down; the stock of that mineral goes down. So, for a specific assets like mines or like oil wells, the exhaustion is a major reason for depreciation ok. I hope, you are getting all the causes correct. So, these are the objectives of providing depreciation.

Now, we are generating revenue to know the correct profits we should also account for costs in that period. I think we have seen in P and L account that matching concept is a important concept of P and L. So, it is necessary that though we are not paying for depreciation in cash, we should account for this loss which is not a cash loss, but it is a loss of value of asset which is for generating this revenue. So, to ascertain the correct results in P and L account, it is necessary to make a provision for depreciation. It is equally true to present the true and fair value of fixed assets.

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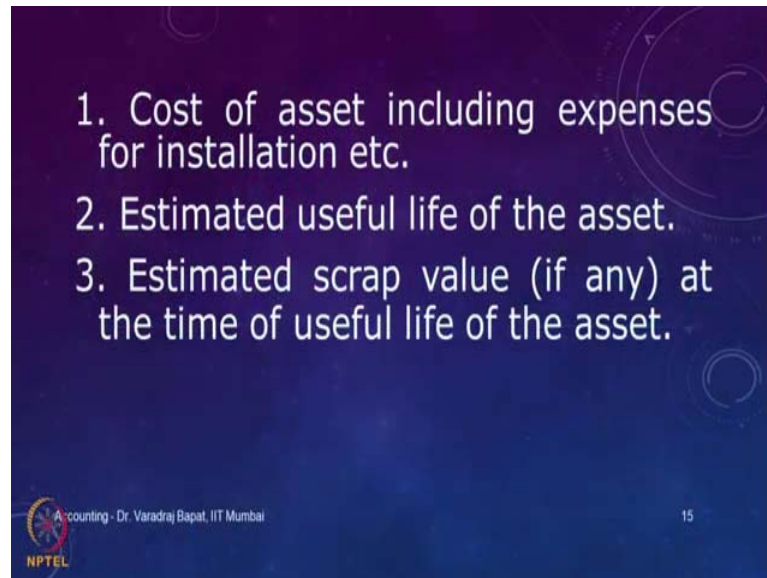


Because if a particular let us say, example of mobile phone if a mobile phone is purchased for 20000, it has a life for 2 years; that means, at the end of year 1, its value is down from 20000 to 10000. If in the balance sheet, we continue to show 20000, it will be a wrong representation. That is why we need to make a provision; I am here assuming that 20000 is a depreciation is a value each year the depression is 10000; first year 10000, second year 10000. So, we will make a provision for 10000 in year 1 so, valuable reduced from 20000 to 10000 which will be a true and fair value ok.

Now, the third one is to accumulate the funds for replacement. So, suppose after 2 years we want to buy another mobile for 20000, we need to set aside that much of money. Because if we do not do anything for 2 years, after 2 years suddenly we will realize that the old phone is now no longer usable. So, what we do is every year let us say, we keep aside 10000 10000 so, that at the end of 2 years we have got enough money for replacement of earlier assets ok.

Now, how do you calculate? Now it is very difficult to calculate the exact amount, but what we do is, we make an estimate. So, that we get the closest possible amount, what are the important factors for estimation?

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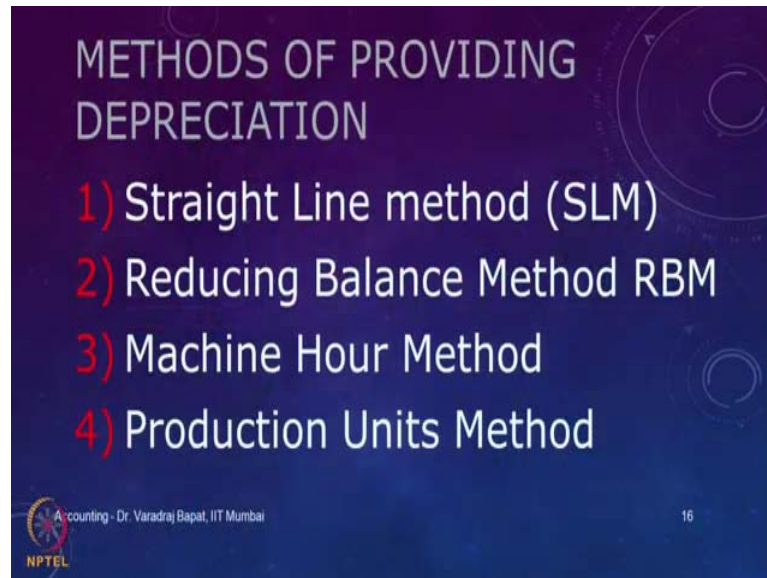
The first one is of course, the cost of asset; keep in mind that the cost should include expenses like installation. So, if you have purchased a machinery, it will need some installation. That installation cost should also be added to the cost of asset then we try to estimate the useful life of the asset.

So, suppose if a machine is likely to be used for 4 years in a productive and an efficient manner, it may have a total life of 5 years, but in the 5th year it may face with lot of accidents or possibility of more repairs. So, we may not want to use it in 5th year, we may want to use it in the most profitable manner for 4 years in which case the useful life; see the total life is 5, but the useful life can be considered as 4.

Now, we look at the estimates provided by the manufacturers and also our own experience to calculate the useful life of a particular item. The third one is scrap value at the time of useful life. So, suppose we are going to use the machine only for 4 years, at the end of fourth year we may sell it as a second hand asset to someone else or we may scarp it and it will give you some scrap value.

So, whatever is a value which is a sellable value at the end of that useful life that will be also considered. So, these three factors are first estimated and based on that the depreciation is calculated.

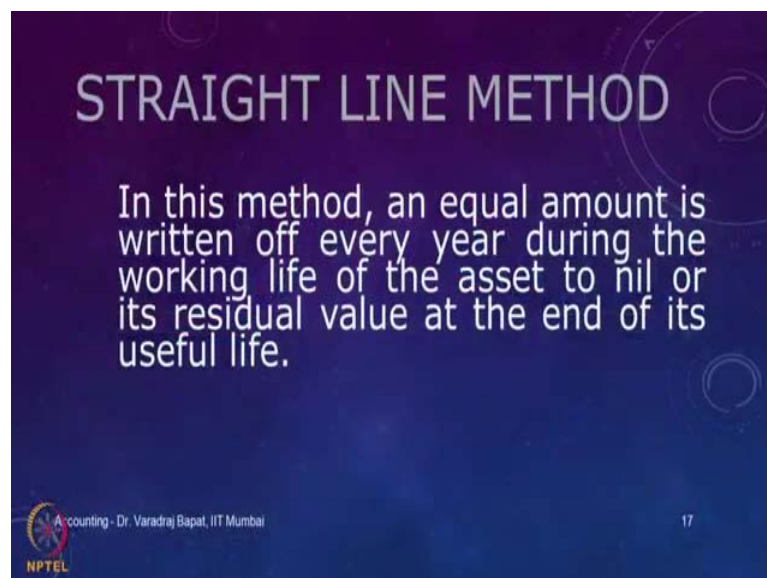
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Now, there are variety of methods for providing for depreciation, four methods are particularly popular. The first one is straight line method, the next as you can see is Reducing Balance of RBM, machine hour and production units.

Now, let us see or discuss them one by one.

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Now, straight line method is very simple; we estimate the useful life and spread over the entire depreciable cost over its useful life. So, suppose a particular machine is purchased for 10000, it has a total life of 5 years, but useful life is 4 years. So, 4 will be our

denominator, 10000 is a cost. Let us say, it is likely to have a scrap value of 2000 so, 10 minus 2; that means, 8000 is a depreciable amount to be written off over a period of 4 years so, 8000 by 4 so, each year depreciation will be 2000. Now this remains constant for all the 4 years, that is why it is called as a straight line method ok.

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SLM: The underlying assumption of this method is that the particular asset generates equal utility during its lifetime.

| | |
|---------------|---|
| Depreciation= | $\frac{\text{Cost of Asset-Scrap Value}}{\text{Useful Life}}$ |
|---------------|---|

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Now, this is a formula; cost of asset minus the scrap value at the end of useful life divided by useful life. So, you get annual depreciation which remains fixed throughout its life.

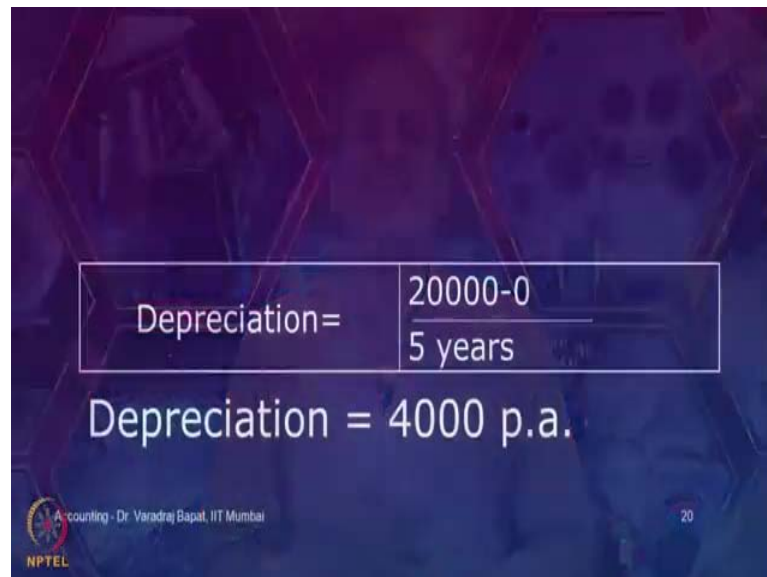
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Example
Cost of machinery: 18000
Installation Charges: 2000
Useful Life of Asset: 5 Years
Calculate Depreciation as per SLM

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So, here is an example. I think it is very simple so, all of you can calculate it orally. So, cost of machinery is 18000, installation charges are 2000, useful life is 5 years, we are assumed that scrap value is 0. So, how much is a depreciation 18 plus 2 so, total cost is 20 to be written off over a period of 5 years.

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Depreciation = $\frac{20000-0}{5 \text{ years}}$

Depreciation = 4000 p.a.

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So, 20 upon 5; that means, 4000 per annum is a depreciation. I think very simple everybody is able to calculate. Are you getting?

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REDUCING BALANCE METHOD

Under this method, a fixed percentage of diminishing value of the asset is written off each year. The annual charges of the depreciation decrease from year to year.

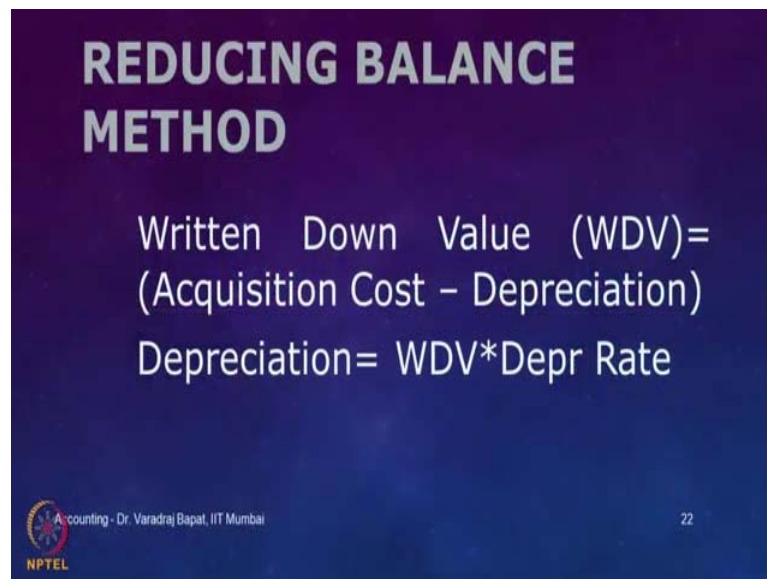
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Now, let us make go to the next method. The second method is known as reducing balance method. Now here what we do is instead of calculating a fixed annual amount, we calculate a fixed percentage or a fixed rate. Now every year whatever is a value of machinery at the beginning, we charge it at a particular rate and calculate the depreciation for that year.

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REDUCING BALANCE METHOD

Written Down Value (WDV) =
(Acquisition Cost - Depreciation)

Depreciation = WDV * Depr Rate

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So, depreciation is calculated as,

Depreciation = WDV * depreciation rate.

Now what is WDV?

Written Down Value = acquisition cost - depreciation.

So, in year 1; if you go by our earlier example, our machineries cost was 18000, suppose the rate of depreciation is 10 percent 18000 into 10 percent; that means, 1800 will be the depreciation for year 1.

But in year 2, we will not charge 10 percent on 18000, what we will do is first we will say 18000 minus 1800; that means, the cost of machine or the value of machine known as WDV is itself reduced which has come to now 16200 on that we charge 10 percent. So, we will get 1620 as a depreciation for year 2; let us look.

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RBM: The main advantage of this method is that total charge to total revenue is uniform when the depreciation is high, repairs are negligible and as the repairs increases the burden of depreciation gets lesser and lesser.

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Now, the main advantage of this method is that the total charge of depreciation is now not uniform, over a period of time it falls. Because in the later years your repair expense is high, it is good to charge more depreciation in the earlier year and charge lesser depreciation in the later years. So, this is the formula, depreciation is WDV into depreciation rate.

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Example

Cost of machinery: 50000
Scrap Value of machine: 5000
Useful Life of Asset: 10 Years
Depreciation %: 15% p.a.

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Let us take one very simple example. The cost of machinery is 50000, the scrap value is 5000 useful life is 10 years and depreciation rate is calculated at 15 percent.

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RBM:
For First Year Depreciation = $50000 * 15\%$
= 7500

For Second Year
Depreciation = $42500 * 15\%$
= 6375

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So, we will try to calculate depreciation for first 2 years. In the first year, it simple 50000 into 15 percent that is 7500. Now in the second year, we will not charge 15 percent on 50000 first we take 50000 minus 7500. So, 42500 is a WDV on that we will charge 15 percent. So, year 1, depreciation is 7500; year 2, it is 6350; year 3, it will be further reduced. Each year the depreciation is reduced that is why it is known as written down value method.

So, I hope you have understood first two methods. Just compare them; straight line and written down. In the next session we will discuss a little more about them. Namaste.

Thank you.

Financial Accounting
Prof. Varadraj Bapat
School of Management
Indian Institute of Technology, Bombay

Lecture – 12
Depreciation 2

Namaste. If you remember in the last session, we had started our discussion on the concept of conservatism. Can somebody tell what is conservatism very briefly? By conservatism what we mean is, any possible loss we need to provide for; possible I am saying not certain even if there is a chance of a loss, we should provide. But if there is a possible gain, but it is not certain then we will not account for it. So, accountants follow a very prudent path or a conservative path and normally assign a lower value when two values are available. We had seen two examples of this.

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Example

1. Closing stock is valued at Cost or market price whichever is lower
2. Depreciation is charged every year even though cost of the asset has not decreased.

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One is because of the application of the concept of conservatism; the closing stock is to be valued at cost or market value whichever is lower. The second one was depreciation is required to be provided every year.

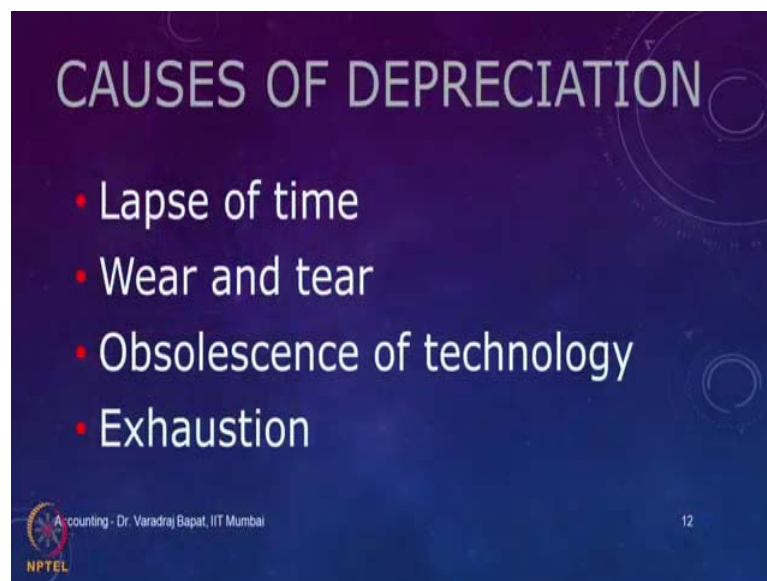
Now, most of you would have read your annual report. Just look at the financial statements. After the financial statement, in the note number 1 company would have given important accounting policies. Please go through those accounting policies. Several of those accounting policies are based on the concept of conservatism. Please try

to identify them. We have just given two examples of valuation of stock and depreciation, but some more examples you can find if you read carefully ok.

So, let us go ahead with today's session. Then in the last session, we had started discussion on depreciation. First of all how do you define depreciation?

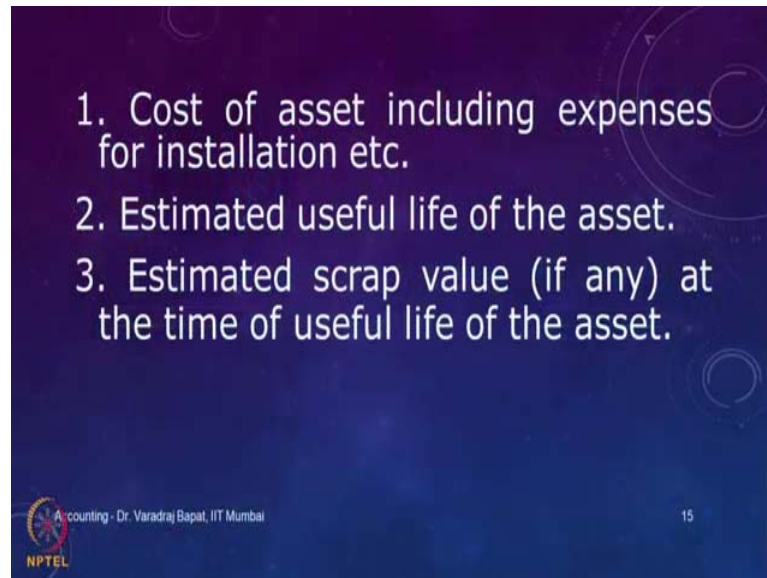
See depreciation is a loss in value as the name suggest, but it is a continuous and gradual loss in value of fixed assets. In case of other assets like inventory or like investment, values can go up and down. But for fixed asset from the date of purchase, till the date it is scrapped out the value of asset continuously falls and that fall is what is known as depreciation. So, it is a gradual and continuous fall in the value of asset mainly because of four reasons. Do you remember those four reasons? I think most of you are remembering.

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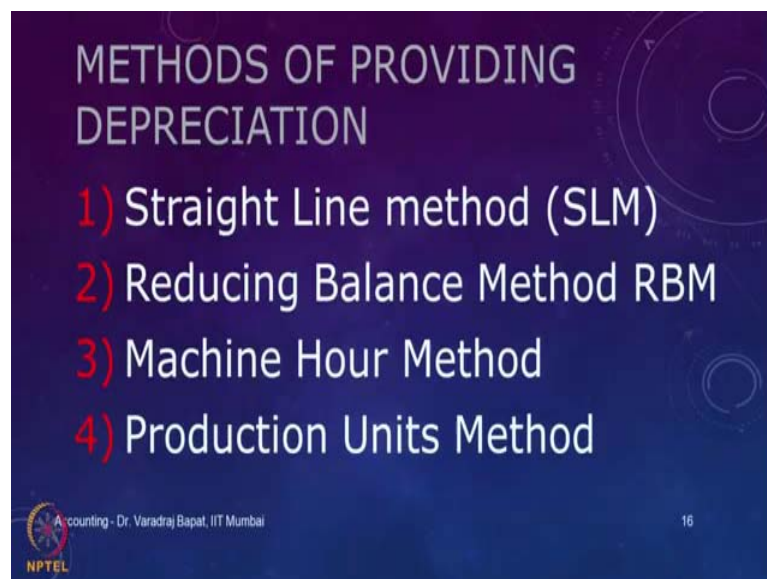
So, lapse of time, wear and tear, obsolescence and exhaustion. Particularly the first three are important for most of the assets and exhaustion; the fourth one is for which asset? It is only for assets like a mine ok. Now, we went into the discussion on the methods of depreciation. Now to calculate any depreciation, we need three important estimates. First one is mostly actual that is a cost of asset, then estimate of the useful life and the estimate of the scrap value.

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Based on these three we try to calculate annual depreciation for each and every tangible and intangible asset. Now, to calculate them, there are four methods there are several methods, but four methods we are going to discuss in these this.

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The first two are very important; the straight line and reducing balance. Last time we had discussed straight line. Do you remember what is straight line method?.

I will just give you a very simple example. Suppose we have purchased one asset say, machinery for 1 lakh. It is useful life is 4 years, scrap value is let us say 10000. What

will be the depreciation every year? 1 lakh minus 10000; that means, 90000 is to be distributed over a period of 4 years. So, we will simply divide 90 by 4. So, 90000 upon 4 is a depreciation per annum. Getting it? So, it will be 22500 and this is known as straight line method. You can see the formula ok; cost of asset minus scrap value upon useful life.

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SLM: The underlying assumption of this method is that the particular asset generates equal utility during its lifetime.

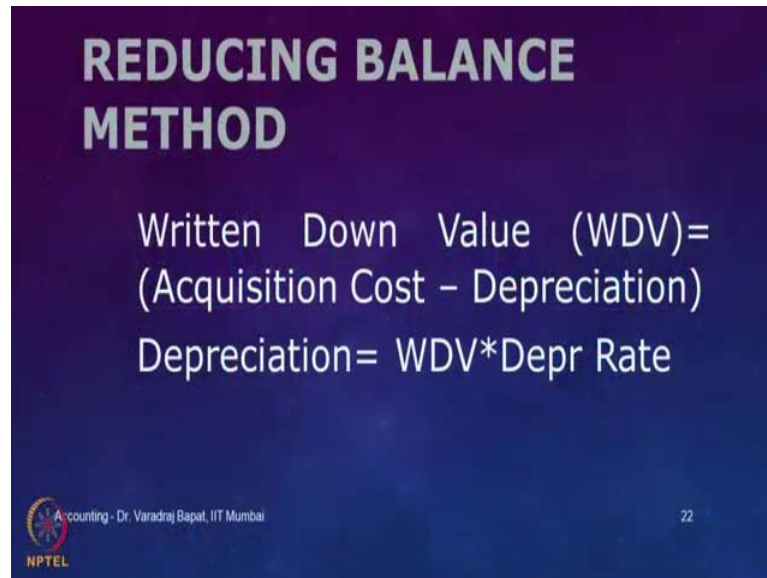
| | |
|---------------|---------------------------|
| Depreciation= | Cost of Asset-Scrap Value |
| | Useful Life |

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Now, what will happen due to this is the depreciation remains constant throughout the useful life. The second method is known as reducing balance method. Now in reducing balance method what happens is instead of annual depreciation which is fixed, we calculate a we arrived at a depreciation rate. So, suppose the same machine; let us say is having a value of 1 lakh in the beginning. And, suppose the rate of depreciation is taken as 25 percent, then in year 1; it will be 1 lakh into 25 percent that is 25000. In year 2, we will not apply 25000 on 1 lakh. We will take 1 lakh minus the first year's depreciation that is 25000. So, 75000; the 75000 is known as written down value.

See acquisition cost minus depreciation. Now on 75000, 75000 into 25 percent is a second years depreciation; in third year it is 75 minus the second years depreciation that is 22500 and so, we will get a further reduced value, on that we will charge the same rate that is 25 percent. So, effectively the amount of depreciation will go on reducing every year that is why it is known as reducing balance method.

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REDUCING BALANCE METHOD

Written Down Value (WDV)=
(Acquisition Cost – Depreciation)

Depreciation= WDV*Depr Rate

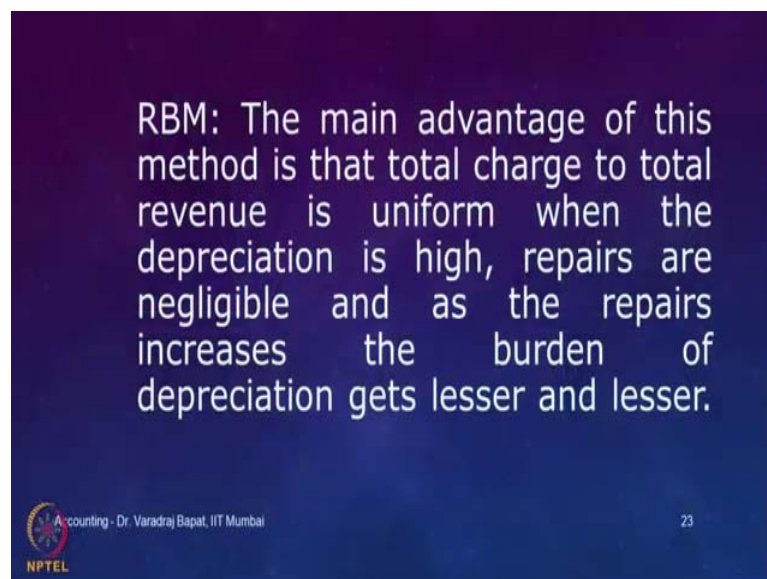
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Last time we had stopped our discussion with the comparison of the two methods; straight line and reducing. Now, between the two methods, which method is better in your opinion? I think those who like simplicity, we will say that straight line is simple. So, it is good. There are some advantages of straight line, but there are a lot of advantages with reducing balance. Now in reducing balance, what happens is the value of depreciation falls over a period of its useful life. In the earlier year, the depreciation is higher; in the later year, the depreciation is lesser.

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RBM: The main advantage of this method is that total charge to total revenue is uniform when the depreciation is high, repairs are negligible and as the repairs increases the burden of depreciation gets lesser and lesser.

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Now, this is a very good thing because every year the cost of repair is likely to increase because the machine is becoming older. So, it is good to charge more depreciation in the initial years and lesser depreciation in the later years. Because initial years repair will be less, but depreciation is high; later year let us skip depreciation less. So, that repair more of repair can be born that is one approach, that is also another advantage is reducing balance. Because in the initial year there is significant loss in the value that gets better reflected in the balance sheet; if we charge more depreciation in the earlier years which happens in reducing balance.

That is why income tax act allows only one method that is reducing balance method in companies act both the methods are allowed; straight line as well as reducing balance.

If you are reading the balance sheet of your company which you have chosen, please read their depreciation schedule. In the depreciation schedule, then we have mention the method as well as the rate at which they are charging depreciation. I hope you getting it. Now let us go.

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RBM:
For First Year
Depreciation = Acquisition
value * Rate
For Second Year on words
Depreciation = Written down
value * Rate

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So, this is a formula once again you can have a look at it. Last time we had done these calculations.

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MACHINE HOUR METHOD

Where it is possible to keep a record of the actual running hours of each machine, depreciation may be calculated on the basis of hours worked.

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Now, let us go to the third method that is known as machine hour method. Now what happens is in case of certain machines, the life depends on how many hours you use the machine.

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The machine hour rate of depreciation is calculated after estimating the total numbers of hours that machine would work during its whole life.

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So, the depreciation is also calculated as per the likely life which is calculated in terms of its working hours.

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Example
Cost of machine: 500000
Estimated working hours: 40000
Scrap Value: 10000
The pattern of distribution of effective working hours:

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So, this is an example. If the cost of machine is 5 lakhs and estimated working hours are 40000 scrap value is 10000.

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Year hours
1-2: 5000 per year
3-5: 7000 per year
6-8: 3000 per year
Compute depreciation p.a.

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Now, there given the pattern of effective working hours. Let us say in year 1-2, it is 5000; 3-5 it 7000 and 6-7, it is 3000. Now how do you compute depreciation? Now, what we will do is we know the cost and we also know that the estimated working hours are 40000; scrap value is 10000; so, instead of charging straight line depreciation which will be uniform or instead of charging depreciation at a certain rate. We will calculate it on

per hour basis and then based on the hours in that particular year, we will compute the depreciation.

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Solution:
1-2
$$\frac{5000 \times (500000 - 10000)}{40000}$$
$$= 61250 \text{ p.a.}$$

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For example, firstly, we will we know that the total depreciation total number of working hours are 40000. Now the cost of machine is 5 lakhs minus 10000; that means, basically we have to depreciate 490000 over its useful life. In year 1 and 2, it is a new machine yet to settle. So, useful hours or useful hours are only 5000; so, 5000 upon 40000 into 490000. So, the cost is the depreciation is 61250 in year 1 and 2. Are you getting?

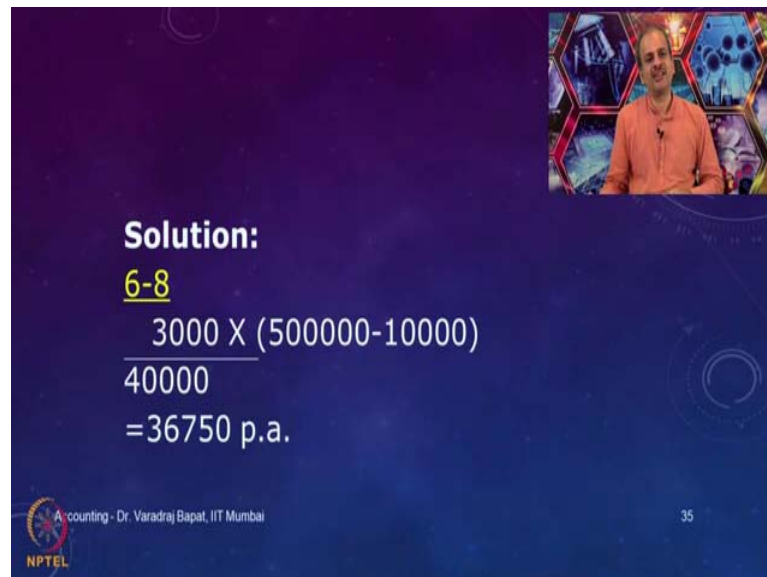
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Solution:
3-5
$$\frac{7000 \times (500000 - 10000)}{40000}$$
$$= 85750 \text{ p.a.}$$

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Now, in year 3, 3 to 5; now the amount to be depreciated is same 5 lakh minus 10000 that is 490000. In year 3 to 5, the estimated number of hours are 7000. So, 7000 divided by the total hour that is 40000. So, each year we are getting 85750 as depreciation from year 3 to 5, fine.

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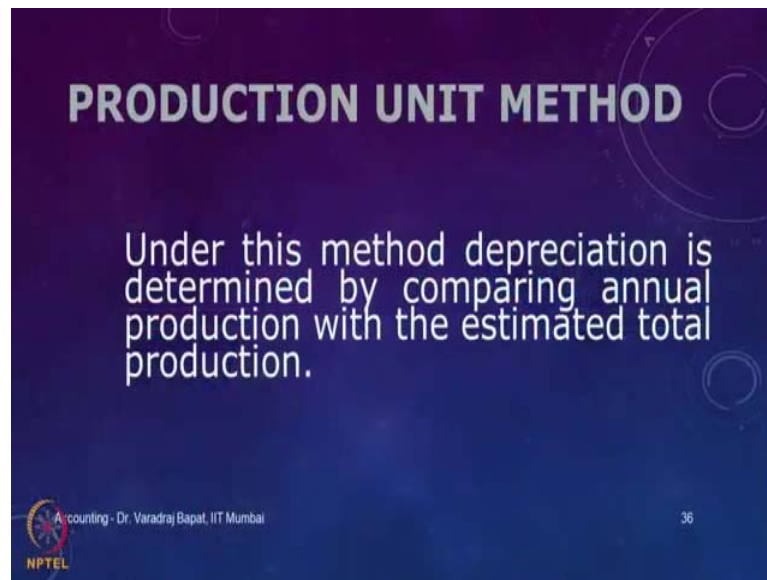
Solution:
6-8
$$\frac{3000 \times (500000 - 10000)}{40000}$$
$$= 36750 \text{ p.a.}$$

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And for year 6 to 8, now the machine as rather become older. So, the useful hours per year are only 3000; so, 3000 upon 40000 in to 5 lakh minus 10000 which is constant. So, in year 6 to 8, the annual depreciation is only 36750. Are you getting?

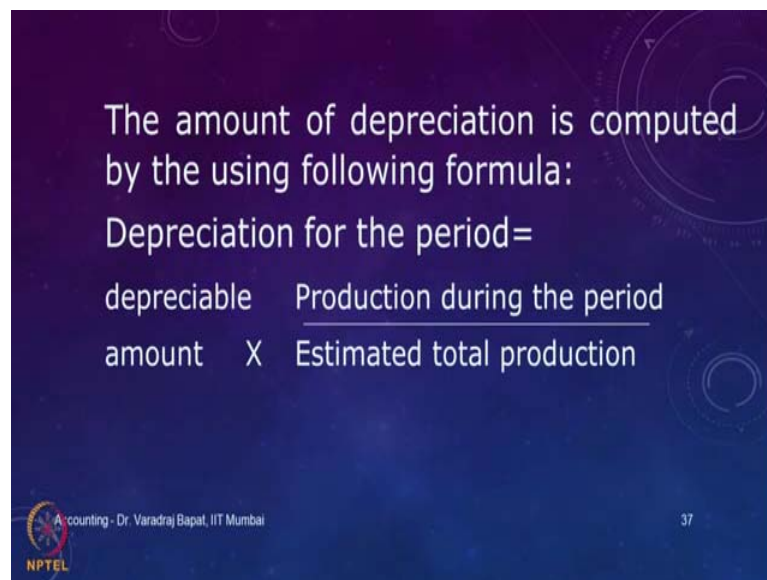
So, here instead of reducing it over a period, we are going by its utilization. So, in a year how many hours you use, accordingly the depreciation is charged. Are you getting? This is known as machine hour method and fourth one which we are going to discuss is production unit method.

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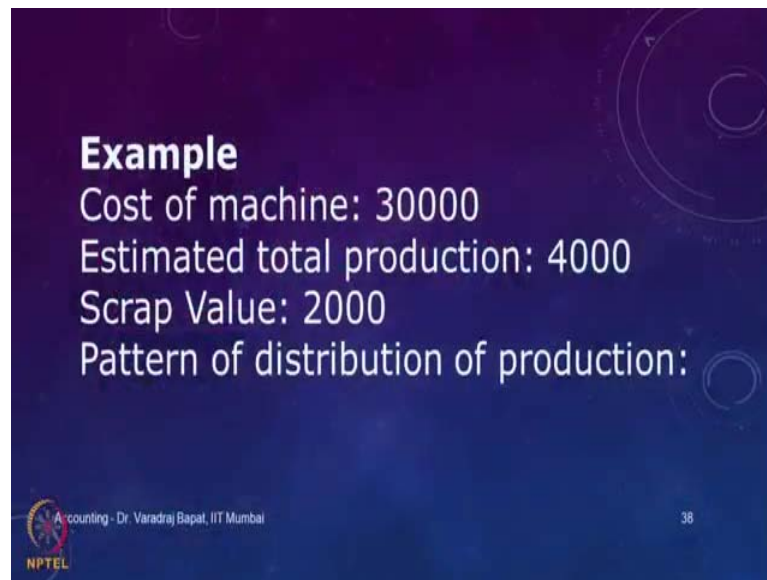
Now, in production unit method, what we are doing is we are looking at the annual production and the depreciation will be charged based on the production in that year.

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Now, this is the formula we use. So, what we do is, total depreciable amount will be divided by the estimated total production. Out of the total production whatever is a production units for that particular period that much portion will be depreciated in that period.

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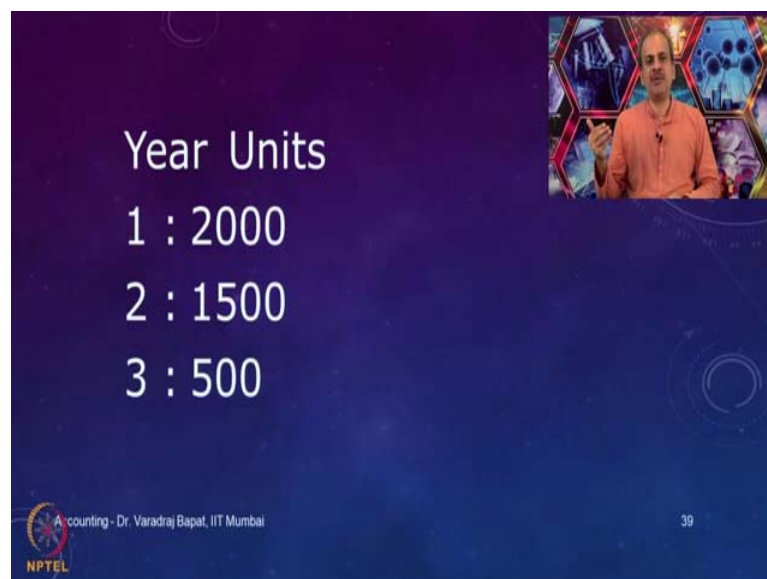


Example
Cost of machine: 30000
Estimated total production: 4000
Scrap Value: 2000
Pattern of distribution of production:

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Let us check this example. So, cost is 30000, estimated total production is 4000; it is in terms of unit, the scrap value is 2000. So, basically you will see that 30 minus 2; that means, 28000 is a depreciable amount which is mainly for the production of 4000.

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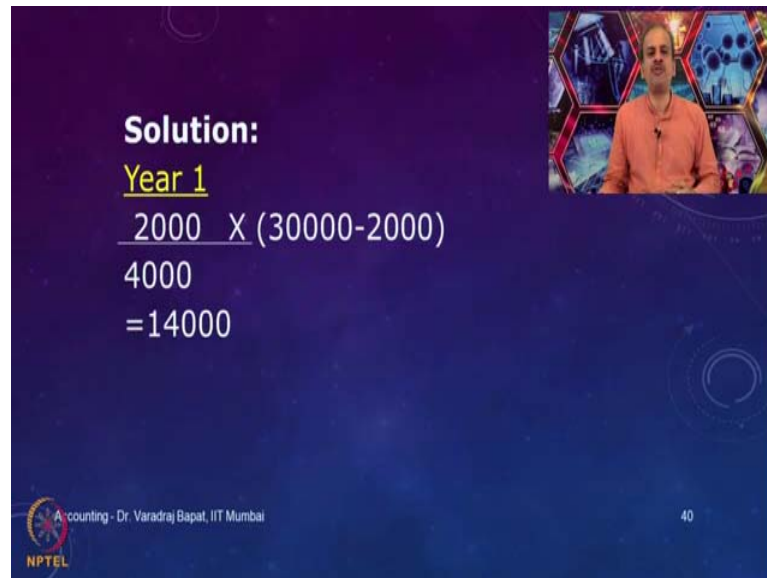


Year Units
1 : 2000
2 : 1500
3 : 500

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Now, this 4000 is spread over three years in this manner. In year 1, estimated is 2000, year 2, 1500 and year 3, 500. So, what we will do is the depreciation is for 4000 units, we will spread it over as per the estimates of units.

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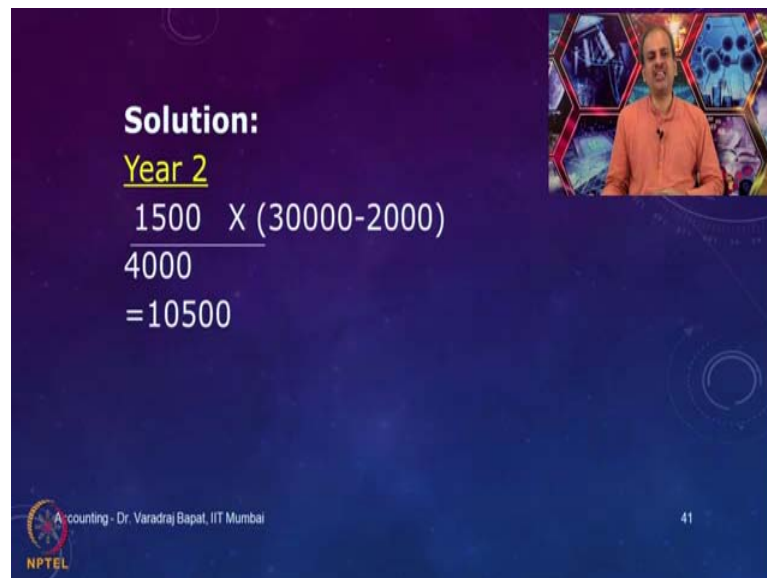
Solution:
Year 1
$$\frac{2000 \times (30000 - 2000)}{4000}$$
$$= 14000$$

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NPTEL 40

The slide features a dark blue background with a grid of hexagonal icons in the top right corner. A small video inset in the top right shows a man in an orange shirt. The NPTEL logo and course information are in the bottom left, and the slide number '40' is in the bottom right.

So, in year 1, 30 minus 2 that is 28000 is to be basically depreciated and here we take 2000 divided by 4000; that means, for year 1, the depreciation is estimated to be 14000.

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Solution:
Year 2
$$\frac{1500 \times (30000 - 2000)}{4000}$$
$$= 10500$$

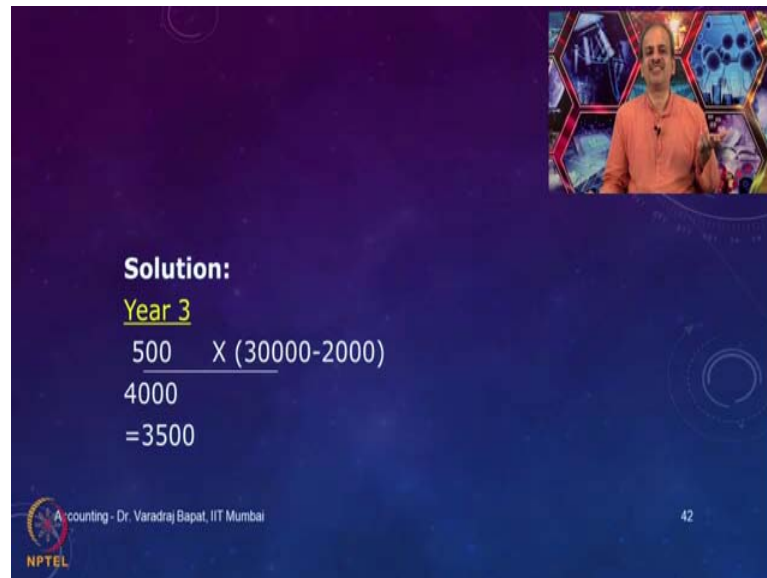
Accounting - Dr. Varadraj Bapat, IIT Mumbai
NPTEL 41

The slide features a dark blue background with a grid of hexagonal icons in the top right corner. A small video inset in the top right shows a man in an orange shirt. The NPTEL logo and course information are in the bottom left, and the slide number '41' is in the bottom right.

In year 2, the formula is same it is 1500 upon 4000; that means, we are calculating it based on 10000; we are calculating it to be 10500. Now can you do it year 3? Just have a look once again.

So, 30 minus 2; that means, basically 28000 upon 4000 and in year 3, the estimated units are just 500. So, you can do it orally also; 500 into 28000 divided by 4000.

(Refer Slide Time: 14:50)



Solution:
Year 3
500 X (30000-2000)
4000
=3500

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NPTEL
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Are you getting it? This is the calculation. So, you are getting 3500 per year. Are you getting? There are some more methods, but they do not have much of practical utility. The first two methods that is straight line and reducing balance are the most important methods and almost all companies use any one of the two, particularly the second method that is reducing balance is most important. Most of the companies using and as per income tax act, it is mandatory to use reducing balance method.

The third and fourth method are not use normal in financial accounting, but they will be useful for managerial or for cost accounting. That is why, I have covered it in this particular session ok. So, with this our discussion on depreciation is over. I will once again remind you to look at the depreciation schedule as per your own company and that will give you some more inputs. So, with this now having discussed about depreciation, let us have a look at how it appears in the annual report. I have been telling you in every session that you decide a company, go to the annual report of that company and as we discuss have a look at the statements which are as published by a particular company.

(Refer Slide Time: 16:30)

Topic 2.7: Property, plant and equipment

In this section we discuss the Property, plant and equipment account. Exhibit 5 shows the Non-Current assets section of Tata Motors' 2017 and 2016 balance sheets, including the Property, plant and equipment.

Exhibit 5: Non-current assets section of Tata Motors' balance sheet (Rs in crores)

| | 2017 | 2016 |
|---|-------------|-------------|
| I Assets | | |
| I Non-Current Assets | | |
| a Property, plant and equipment | 58,594.56 | 64,927.07 |
| b Capital work-in-progress | 10,186.41 | 4,750.97 |
| c Goodwill | 473.32 | 759.80 |
| d Other intangible assets | 35,676.20 | 41,544.89 |
| e Intangible assets under development | 23,512.01 | 19,345.97 |
| f Investments in equity accounted investees | 4,698.01 | 3,763.95 |
| g Financial assets | | |
| i Other investments | 690.76 | 770.03 |
| ii Finance receivables | 10,753.13 | 9,671.55 |
| iii Loans and advances | 753.66 | 505.48 |
| iv Other financial assets | 2,413.12 | 1,825.11 |
| h Deferred tax assets (net) | 4,437.34 | 3,917.03 |
| i Non-current tax assets (net) | 240.20 | 1,265.81 |
| j Other non-current assets | 2,847.36 | 2,309.02 |
| | 1,58,927.50 | 1,67,312.48 |

Definition: Property, plant and equipment account includes all tangible, non-current assets such as Buildings, Roads, Bridge and culverts, plant, machinery and equipment, computers and other IT assets, vehicles, and furniture, fixtures and office appliances.

Property, plant and equipment – 2017 Annual report – page F-83 and F-84
 Property, plant and equipment are stated at cost of acquisition or construction less accumulated depreciation less accumulated impairment, if any. Freehold land is measured at cost and is not depreciated. Heritage assets, comprising antique vehicles purchased by the Company, are not depreciated as they are considered to have a residual value in excess of cost. Residual values are reassessed on an annual basis. Cost includes purchase price, taxes and duties, labour cost and direct overheads for self-constructed assets and other direct costs incurred up to the date the asset is ready for its intended use. Interest cost incurred for constructed assets is capitalized up to the date the asset is ready for its intended use, based on borrowings incurred specifically for financing the asset or the weighted average rate of all other borrowings, if no specific borrowings have been incurred for the asset. Depreciation is provided on the Straight-Line Method (SLM) over the estimated useful lives of the assets considering the nature, estimated usage, operating conditions, past history of replacement, anticipated technological changes, manufacturers warranties and maintenance support. Taking into account these factors, the Company and its domestic group companies have decided to apply the useful life for various categories of property, plant and equipment, which are different from those prescribed in Schedule II of the Act. Estimated useful lives of the assets are as follows:

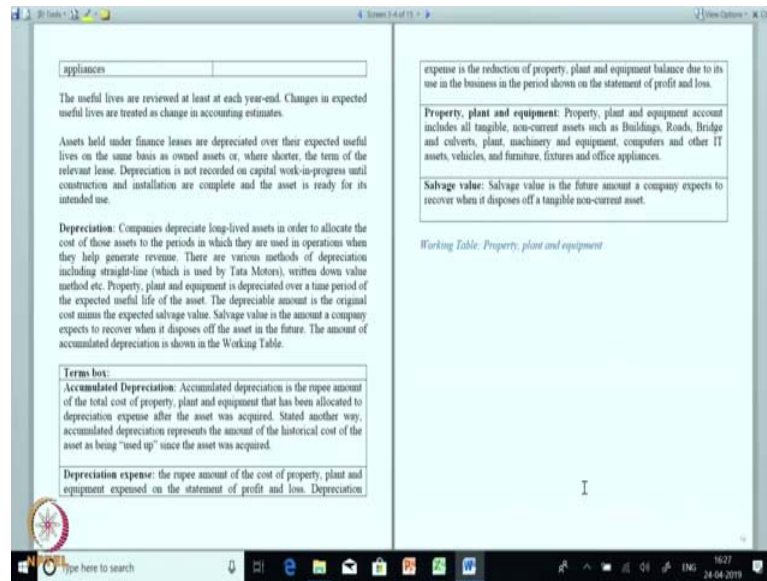
| Type of Asset | Estimated useful life |
|---------------------------------------|-----------------------|
| Buildings, Roads, Bridge and culverts | 4 to 60 years |
| Plant, machinery and equipment | 3 to 30 years |
| Computers and other IT assets | 3 to 6 years |
| Vehicles | 3 to 11 years |
| Furniture, fixtures and office | 3 to 21 years |

Now, here I am showing you extracts from Tata motors annual report so, that you will actually have a feel of how it looks like. So, right now, we are in the section of balance sheet; within balance sheet, you can have a look at assets. I hope it is visible; though the font is little small, but this is how actually it is in the annual report of Tata motors. So, you can see item a is property plant and equipment. This is something which we were discussing about when we were discussing depreciation. Over all within noncurrent assets, a list of asset is provided and then the description of each asset is given. So, property plant and equipment is described.

Now, in the end if you look there is a table which is showing the type of the asset and estimated useful life. I think this is very interesting because for calculation of depreciation, we have seen we want to estimate useful life of a particular asset and that will be the basis for calculation of depreciation. So, here you can see the types, building, then roads, bridges and culverts. For that the life is reasonably wrong. So, it is 4 to 6 years. Then plant machinery equipment, it is 3 to 30 years. Computers and it related assets is 3 to 6 years, vehicles 3 to 11 years, furniture fixtures 3 to 21 years.

So, reasonably long range, but for a particular class of assets, they have defined some estimated useful life Now for a particular asset within that range, they would decide the useful life.

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Now, next they have given definitions of some of the terms like depreciation, then the terms in the box have also been defined like accumulated depreciation. So, I hope you remember, what is depreciation. This is a loss or reduction in the value of asset in a particular year. Now for that asset, the depreciation for year 1 is say 10000; year 2, 8000; year 3, 4000; then what we do is we accumulate or collect the depreciation. So, in year 1, it will be 10, in year 2, it will be 10 plus 8, 18; in year 3, it will be ten 8 and 4, 22.

Like that the total depreciation or accumulated depreciation is calculated and it is to be disclosed in the balance sheet. After that, there is a item called as depreciation expense. Depreciation expense refers to the depreciation for that particular year and the last item given over here is salvage value; salvage value or scrap value. This is at the time of disposal, what value you have is called as a salvage value ok.

(Refer Slide Time: 19:36)

The screenshot shows a presentation slide titled "Topic 2.3: Goodwill". It contains two tables side-by-side. The left table is titled "Cost of assets" and the right table is titled "Cost of assets". Both tables show financial data for the years ending 31/03/2016 and 31/03/2017. The tables include columns for Land, Buildings, Plant and equipment, Intangible assets, and Total. The right table also includes columns for Current assets, Non-current assets, and Total. The data shows the calculation of net carrying amount (WDV) by subtracting accumulated depreciation from the cost of assets.

| Cost of assets | | Cost of assets | |
|----------------------------|----------------|----------------|----------------|
| 2017 | 2016 | 2017 | 2016 |
| Land | 10,000 | 10,000 | 10,000 |
| Buildings | 20,000 | 20,000 | 20,000 |
| Plant and equipment | 30,000 | 30,000 | 30,000 |
| Intangible assets | 40,000 | 40,000 | 40,000 |
| Total | 100,000 | 100,000 | 100,000 |
| Accumulated depreciation | (20,000) | (20,000) | (20,000) |
| Net carrying amount | 80,000 | 80,000 | 80,000 |

Now this is a very important. Note: I know it is little difficult to read, but I have given it here because as it is as what is in the annual report. So, it starts with the assets which are owned by the company. So, it says owned assets, then the category of assets are given starting with land, building, then plant and equipment, furniture and fixtures and so on.

Now, the cost as at April 1, 2016 that is the opening balances are given, then additions, then currency translation differences, then disposal. Now the total of all this will be the cost as on March thirty first, 2017; that is the closing cost. So, just to give the cost of the asset; the original cost, there are four items disposal will of course, be reduced, but the total will be the cost at the end. Now the next is accumulated depreciation as on April first 2016. So, at the beginning of the year, what is the depreciation than the depreciation which is added, depreciation which is written off, the depreciation on disposal. Then at the end, you are got accumulated depreciation as at the end of the year.

So, we considered all the cost, then all the accumulated depreciation cost minus accumulated depreciation is a net carrying amount. We were discussing about WDV written down value. It is same as the net carrying account amount has been discussed.

(Refer Slide Time: 21:26)

In this section, we discuss Tata Motors' Goodwill account. Exhibit 6 shows the non-current assets section of Tata Motors' balance sheet.

Definition of Goodwill. Goodwill arises when an acquiring company a) purchases a controlling interest (more than 50% of the outstanding equity share) in a target company and b) pays more than the fair value of the Net assets (Net assets = Total assets - Total liabilities) of the target. Goodwill (also referred to as *Externally purchased goodwill*) is classified as an intangible, non-current asset.

Goodwill on Tata Motors' balance sheet: Exhibit 6 shows that Tata Motors has goodwill of Rs.673.32 at March 31, 2017 and Rs. 759.80 at March 31, 2016 which is a decrease of Rs. 86.48.

Exhibit 6: Non-current assets section of Tata Motors' balance sheet
(Rs in crores)

| | 2017 | 2016 |
|--|--------------------|--------------------|
| I Assets | | |
| I Non-Current Assets | | |
| a. Property, plant and equipment | 59,594.56 | 64,927.07 |
| b. Capital work-in-progress | 10,156.81 | 6,559.97 |
| c. Goodwill | 673.32 | 759.80 |
| d. Other intangible assets | 97,870.20 | 41,244.89 |
| e. Intangible assets under development | 23,512.01 | 19,367.97 |
| f. Investments in equity accounted investees | 4,696.01 | 3,763.95 |
| g. Financial assets | | |
| i) Other investments | 690.76 | 770.03 |
| ii) Finance receivables | 10,753.43 | 9,671.25 |
| iii) Loans and advances | 757.66 | 503.88 |
| iv) Other financial assets | 2,911.12 | 1,825.51 |
| h. Deferred tax assets (net) | 4,437.34 | 3,917.03 |
| i. Non-current tax assets (net) | 260.20 | 1,265.81 |
| j. Other non-current assets | 2,847.36 | 2,309.02 |
| | <u>1,56,927.30</u> | <u>1,57,217.48</u> |

Goodwill – 2017 Annual report – page F-94
As at March 31, 2017, goodwill of Rs.115.41 crores and Rs.557.91 crores relates to the automotive and related activity segment (Tata and other brand vehicles including financing thereof) and "others" segment respectively.
As at March 31, 2016, goodwill of Rs.130.98 crores and Rs.628.82 crores relates to the automotive and related activity segment (Tata and other brand vehicles including financing thereof) and "others" segment respectively.
As at March 31, 2017, goodwill of Rs.557.91 crores has been allocated to software consultancy and services cash generating unit. The recoverable amount of the cash generating unit has been determined based on value in use.

Now, a few more things; now this is related to intangible assets. Now this is about the goodwill. One of the important intangible assets is goodwill. Now, what happens is when company acquires other assets, it may pay more than what amount is a fair value of that asset. So, suppose you are acquiring assets worth 15 crore, but you are paying 18 crore let us say. So, you are paying 3 crore more 18 minus 15, 3 crore which you are paid will be considered as goodwill.

There is another category of goodwill which is known as self generated goodwill, but it is not disclosed in the balance sheet. What is disclosed in the balance sheet is called as a purchased goodwill which is classified as intangible asset in the balance sheet. So, here we are looking at a purchase goodwill. So, first the definition of goodwill is given and then the value of goodwill as is disclosed in the balance sheet, you can have a look. Under the assets non-current assets, there is items c called as goodwill ok.

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Value in use has been determined based on future cash flows, after considering current economic conditions and trends, estimated future operating results, growth rates and anticipated future economic conditions.

As at March 31, 2017, the estimated cash flows for a period of 5 years were developed using internal forecasts, and a pre-tax discount rate of 11.78%. The cash flows beyond 5 years have been extrapolated assuming 2% growth rates. The management believes that any reasonably possible change in the key assumptions would not cause the carrying amount to exceed the recoverable amount of the cash generating unit.

Working Table: Goodwill
(Rs in crores)

| | 2017 | 2016 |
|----------------------------------|---------|---------|
| Balance at the beginning | 138.00 | 71.16 |
| Impairment | (54.26) | |
| Currency translation differences | (21.25) | (21.00) |
| Balance at the end | 62.49 | 29.16 |

Excerpt from Tata Motors' 2017 annual report – page F-81 and F-85

Purchase consideration in excess of the Company's interest in the acquiree's net fair value of identifiable assets, liabilities and contingent liabilities is recognized as goodwill.

Impairment of Goodwill: Cash generating units to which goodwill is allocated are tested for impairment annually at each balance sheet date, or more frequently when there is an indication that the unit may be impaired. If the recoverable amount of the cash generating unit is less than the carrying

amount of the unit, the impairment loss is allocated first to reduce the carrying amount of any goodwill allocated to that unit and then to the other assets of the unit pro rata on the basis of carrying amount of each asset in the unit. Goodwill impairment loss recognized is not reversed in subsequent period.

Topic 2.9: Other intangible assets

In this section, we discuss the other intangible assets (other than Goodwill that was discussed in the previous section) account. Exhibit 7 shows the non-current assets section of Tata Motors' 2017 and 2016 balance sheets which include the Other intangible assets account.

Now, if you go little ahead, there is a working table which is given in the for the goodwill. It is similar to that for a tangible asset, but slight different; first balance at the beginning, then it is called as impairment. That means if asset loses its value, it is called as impairment. So, some amount is provided as impairment. There is currency translation differences because though that goodwill is in foreign currency and the balance at the end. You can just have a look at what is impairment. Now cash generating units to which goodwill is located are tested for impairment annually.

So, what it means is, you have paid for certain amount as a goodwill assuming that that particular unit or that particular part of the business would be able to generate cash. If that business does not have that capacity any longer; that means, the depreciation is no longer applicable. In such cases, the depreciation is written off or its value is removed from the balance sheet that process is called as an impairment.

(Refer Slide Time: 24:05)

Exhibit 7: Non-current assets section of Tata Motors' balance sheet (Rs in crores)

| Assets | 2017 | 2016 |
|---|--------------------|--------------------|
| I. Non-Current Assets | | |
| a. Property, plant and equipment | 19,594.56 | 64,927.07 |
| b. Capital work-in-progress | 10,166.83 | 6,550.97 |
| c. Goodwill | 472.32 | 729.80 |
| Other intangible assets | 35,876.20 | 41,244.79 |
| d. Intangible assets under development | 2,252.01 | 19,567.97 |
| f. Investments in equity accounted associates | 4,656.01 | 3,763.95 |
| g. Financial assets | | |
| i) Other investments | 690.76 | 770.03 |
| ii) Finance receivables | 10,753.11 | 9,671.25 |
| iii) Loans and advances | 753.66 | 303.88 |
| iv) Other financial assets | 2,911.12 | 1,825.31 |
| h. Deferred tax assets (net) | 4,437.34 | 3,957.03 |
| j. Non-current tax assets (net) | 260.20 | 1,265.81 |
| k. Other non-current assets | 2,847.36 | 2,309.02 |
| | 1,56,822.50 | 1,87,712.48 |

Definition of other intangible assets: Intangible assets are non-current assets without physical form and are usually generated as the result of the acquisition of other businesses. In case of Tata Motors, other intangible assets include Patents and technical know-how, Computer software, Dealer network, and Intellectual property rights.

Other intangible assets – 2017 Annual report – page F-84
Intangible assets purchased, including those acquired in business combinations, are measured at cost or fair value as of the date of acquisition where applicable less accumulated amortization and accumulated impairment.

if any. Intangible assets with indefinite lives are reviewed annually to determine whether indefinite-life assessment continues to be supportable. If not, the change in the useful-life assessment from indefinite to finite is made on a prospective basis. Estimated useful lives of assets are as follows:

| Type of Asset | Estimated useful life |
|--------------------------------|-----------------------|
| Patents and technical know-how | 2 to 12 years |
| Computer software | 1 to 8 years |
| Dealer network | 20 years |
| Intellectual property rights | 3 to 10 years |

The amortization period for intangible assets with finite useful lives is reviewed at least at each year-end. Changes in expected useful lives are treated as changes in accounting estimates. Customer related intangible assets consists of the Company's dealer network.

Internally generated intangible asset
Research costs are charged to the Statement of Profit and Loss in the year in which they are incurred. Product development costs incurred on new vehicle platform, engines, transmission and new products are recognized as intangible assets, when feasibility has been established, the Company has committed technical, financial and other resources to complete the development and it is probable that asset will generate probable future economic benefits. The costs capitalized include the cost of materials, direct labour and directly attributable overhead expenditure incurred up to the date the asset is available for use. Interest cost incurred is capitalized up to the date the asset is ready for its intended use, based on borrowings incurred specifically for financing the asset or the weighted average rate of all other borrowings if no specific borrowings have been incurred for the asset. Product development cost is amortized over a period of 24 months to 120 months or on the basis of actual

Now, further we will go to other tangible assets. So, other intangible assets I am sorry. So, here in the assets after goodwill which you see item like other intangible assets are given. I think, we are already discussed intangible asset. Intangible assets are those assets which you cannot touch or feel. Now these assets are also required to be amortized. So, they are to be depreciated, but here since they are intangible that is called as they are to be amortized. Now you can see here type of the asset and estimated useful life. So, for patents, it is 2 to 12 years; for computer software, it is 1 to 8 years, then for dealer network, it is 20 years and for intellectual property rights, it is 3 to 10 years. So, I hope you are getting the difference.

For goodwill, there is no particular estimated useful life. It can remain perpetually, only thing is you test it for impairment. If that particular business or product has lost its value, then we will write off goodwill. We will call it as an impairment, but for other intangible assets, we will charge depreciation that is known as amortization. The calculation is same like for depreciation.

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production or planned production volume over such period. Capitalized development expenditure is measured at cost less accumulated amortization and accumulated impairment, if any.

Working Table: Other intangible assets
(Rs in crores)

| Intangible Assets | Balance at the beginning of the period | Additions | Disposals | Amortization | Impairment | Reversal of impairment | Balance at the end of the period |
|---|--|-----------|-----------|--------------|------------|------------------------|----------------------------------|
| Goodwill | 1,20,842.92 | - | - | - | - | - | 1,20,842.92 |
| Property, plant and equipment (including capital work in progress) | 71,478.04 | 69,781.39 | - | - | - | - | 1,41,259.43 |
| Goodwill and Other intangible assets (including assets under development) | 1,92,320.96 | 69,781.39 | - | - | - | - | 2,62,102.35 |

As a point of reference note that Tata Motors' Goodwill and other intangible assets (including assets under development) are Rs. 59,861.53 at March 31, 2017. Note that this amount is lesser than Tata Motors' Property, plant and equipment (including capital work-in-progress) which is Rs. 69,781.39 at March 31, 2017. This supports the fact that Tata Motors is considered to be primarily a manufacturer, since the value of its tangible assets is more than that of intangible assets.

Exhibit 8: Excerpt from Tata Motors' 2017 annual report - page 155

| | As at March 31, 2017 | As at April 1, 2016 | Change |
|---|----------------------|---------------------|-------------------|
| Property, plant and equipment (including capital work in progress) | 69,781.39 | 71,478.04 | (1,696.65) |
| Goodwill and Other intangible assets (including assets under development) | 59,861.53 | 61,672.66 | (1,811.13) |
| Total | 1,29,642.92 | 1,33,150.70 | (3,507.78) |

Terms box:
Amortization expense: The rupee amount of the costs of intangible assets expenses on the statement of profit and loss. Amortization expense is the reduction of the intangible asset balance due to its use in the business in a given period.
Total accumulated amortization: Total accumulated amortization is the aggregate rupee amount of intangible assets that have been expensed since the intangible assets were acquired. Stated another way, accumulated amortization represents the amount of the book value of intangible assets recorded as being "used up" since the intangible assets were acquired.

So, you will need an estimated life. So, that estimated life is given ok. Now there is one more working table again the font is small, but just you can have a look. It says working table for other intangible assets. So, just like for tangible assets, it starts with opening balances additions and so on and then accumulated depreciation is calculated and then you get the final value.

There is one more exhibit a. These are excerpt from the annual report page 155. Now here, the final disclosure is given. So, property plant and equipment that is the tangible assets total and goodwill and other intangible assets total which gives you the total of total ok. If this is not so, clearly visible I would request you to download the annual report of Tata motors and see it yourself, I am sure you are also looking at annual report of your own company.

But, I am just showing you because when actually you see it, you will have the feel of it. Then some term boxes are given like amortization, expense and total accumulated amortization. This is just like depreciation; amortization expense refers to amortization during the year and there is accumulated amortization just like accumulated depreciation. So, this was the actual extract of the annual report of Tata motors of 2016-2017 ok. Please have a look at it and I hope your, the concept of depreciation are more clear to you now. Namaste.

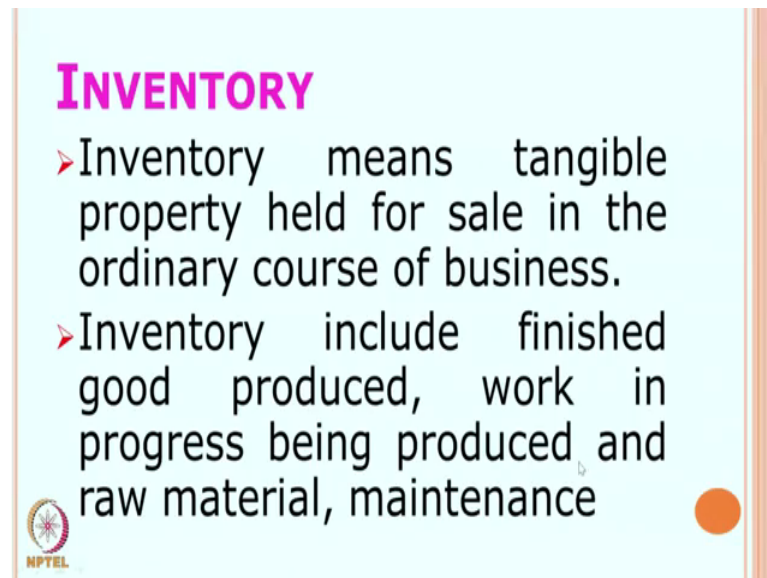
Financial Accounting
Prof. Varadraj Bapat
School of Management
Indian Institute of Technology, Bombay

Lecture – 13
Inventory Valuation

Namaste. Let us start our next module 3.2 which is on Inventory Valuation. I hope you remember our earlier modules, earlier we have discussed about balance sheet, we have also discussed about profit and loss account and in the last two sessions we have discussed about depreciation, its calculation and various methods of depreciation as well.

Today we are going to start with another important item in both P and L balance sheet which is known as inventory. So, we will specifically look at inventory valuation. Now what do you understand by inventory? It is also called as stock.

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So, this is referring to tangible property which is held for sale in the normal course of business. So, there are variety of inventories you can have, normally you start with purchasing of raw material. So, if there is any unused raw material which is lying at the end of a period or say year, then that will be called as stock of raw material or inventory of raw material; then the raw material is processed to make finished goods.

Now, in the course of processing if it is not completed. So, it is not finished goods neither it is raw material, then we will call it as a work in progress. There will be also goods which are ready for dispatch, but not yet sold so, you will have stock of finished goods. So, these are the three major items of stock RM stock, then WIP stock and FG stock this is in case of a manufacturing concern. For a trading concern, they may only have stock of finished goods sometimes it can be also called as a stock of purchased items which are meant for resale.

Now, apart from this, there could be some items which are retained for retained with us for maintenance purposes. They would also be forming part of spare parts, part of inventory of spare parts or such type of stocks. So, this is what is inventory. Now for example, if you are holding some land will it be an inventory? Can we classify it as an inventory? Mostly the answer is no because land is a fixed asset land is not meant for reset. You buy land generally you use it for construction purposes or you may use it for factory or you may use it for your shop.

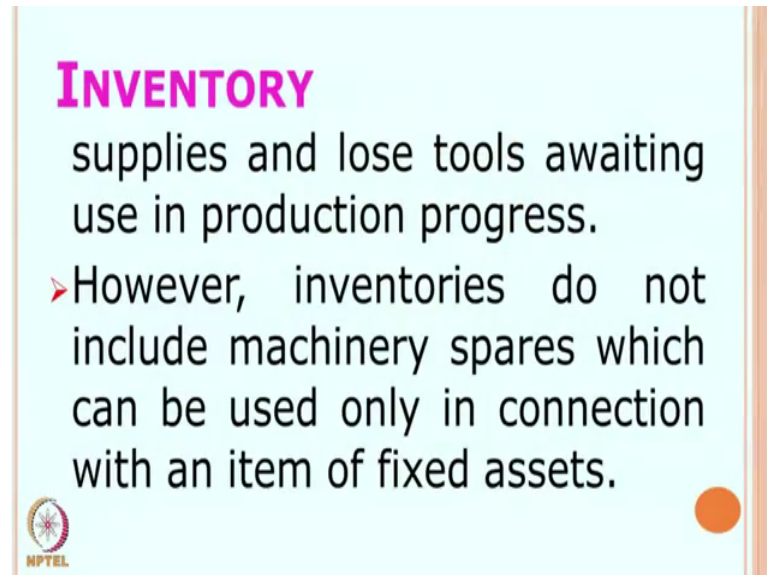
So, land becomes a fixed asset to be used and not to be resold. So, land would normally not be a part of inventory; now I am using the word normally. So, in which cases it will be a part of inventory can somebody tell? I think yes some of you are giving correct answers for a company which is into construction, for builders, developers for such companies land is an inventory. So, they buy land, either they sell land or they buy land then they construct a some flats or shops or godowns then they sell it as finished products.

So, for them land becomes an inventory, but other than them then the land should be classified should not be classified as inventory because, we are defining it as items which are for sale in the normal course of business. Now one more example for example: cars, can you treat cars as an inventory? Again mostly the answer is no car are cars are meant for own use so, they are classified as vehicles and put it as tangible fixed assets.

Only for certain companies car is an inventory for which company? For example, Tata motors they are manufacturers of car or Maruti they are manufacturers of car so obviously, for them car is an inventory; even for car dealers they are in to buying and selling of cars so, for them car is an inventory, but for all others it is not. So, I hope the point is clear any item which is normally bought and sold or you buy a raw material



process it and sell, then these items which are raw material, work in progress and finished goods these are the ones which you call them as inventory.

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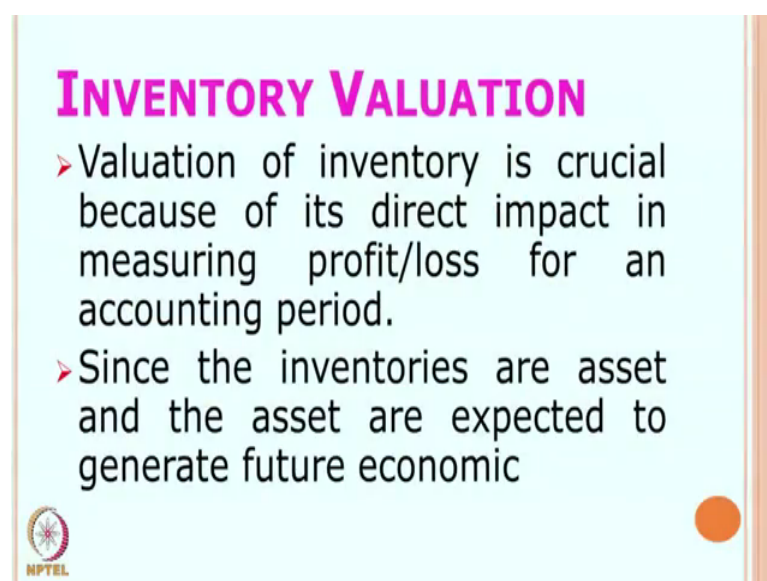
INVENTORY
supplies and lose tools awaiting use in production progress.

- However, inventories do not include machinery spares which can be used only in connection with an item of fixed assets.



Now, apart from these very small items like lose tools or maintenance supplies, they are also part of inventory because they would be also absorbed into the product. However, if you are keeping men machinery spares, then such items should be classified as fixed assets because they are not into for the purpose of selling ok.

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INVENTORY VALUATION

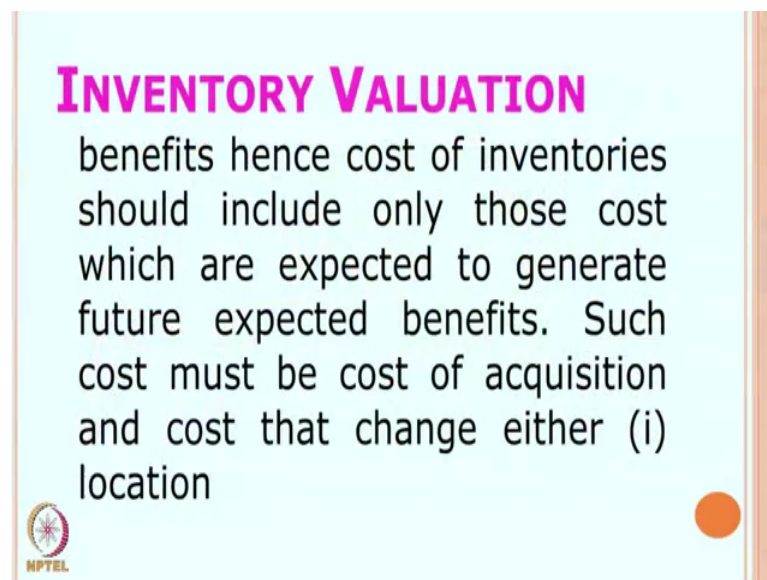
- Valuation of inventory is crucial because of its direct impact in measuring profit/loss for an accounting period.
- Since the inventories are asset and the asset are expected to generate future economic

Now, the valuation of inventory is very important because inventory is one of the items of your assets in the balance sheet. So, any overvaluation will mean that you are showing excess value of the asset. If you are under valuing inventory then also it is wrong because you are showing less value of your assets and this is very important item because on one side it affects our balance sheet, it also affects our P and L account because inventory is a item in P and L as well.

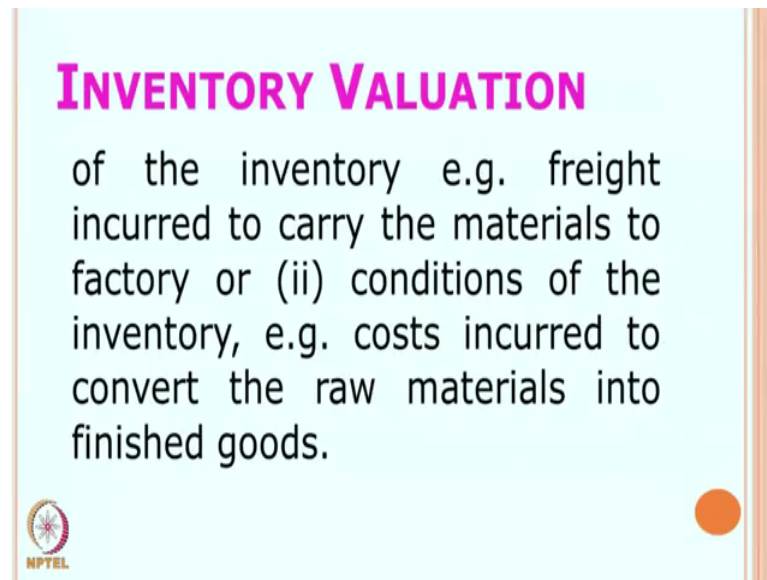
So, change in the inventory if you remember is a profit and loss item. So, it will impact our profit or loss for the period as well that so, for this reason it is very important to apply proper principles to arrive at a correct valuation of inventory. So, now we will look at what goes into the cost of inventory ok.

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So, cost of inventory one obvious part is the cost at which we have purchased or the cost of acquisition ok. So, if you have purchased raw material for 20,000, then the 20,000 which will come as a bill from our vendor that will be the cost of inventory, but apart from that we add a few more items. So, suppose we are bringing it in we are paying some carriage involved on it or some freight on it to bring it to our factory or to our storage godown, then the cost which is spent on carrying it inward will also be added to the cost of inventory because it is not just the purchase cost, but we are also looking at the change of location.

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INVENTORY VALUATION

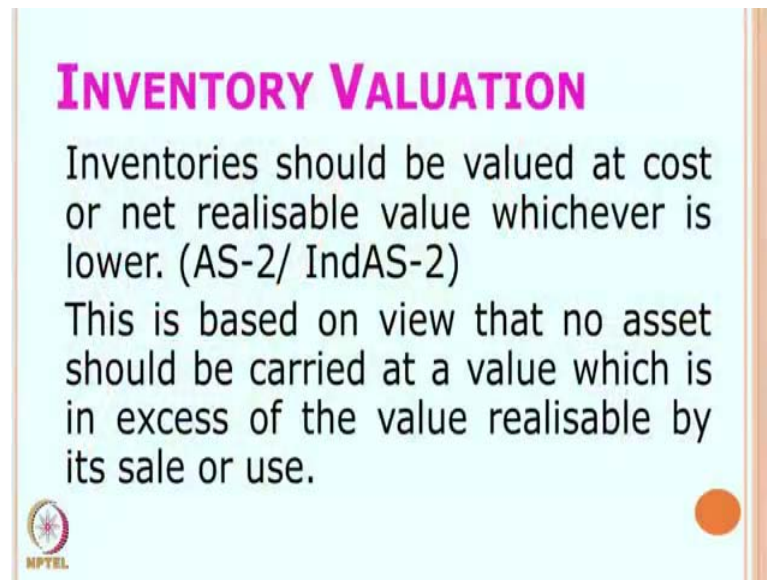
of the inventory e.g. freight incurred to carry the materials to factory or (ii) conditions of the inventory, e.g. costs incurred to convert the raw materials into finished goods.

If you are changing the location then it is added to the cost of inventory, if the condition of inventory change then those costs are also added. So, for example, we have purchased raw material for 20,000, we have spent 1,000 for the carriage. So, 20 plus 1 now the cost is 21, then we spend some 5,000 rupees to convert the raw material into finished goods.

Then when we are valuing finished goods inventory, we will take 20 plus 1 that is 21 plus 5. So, inventory will be valued at 26,000 ok. So, any amount which is spent for change of location or change of condition then that can be added for calculating the cost of inventory. In change of condition there can be some other things like we provided some finishing, we have added some extra items on it or we have changed the packing all these things can be added to the cost of inventory.



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INVENTORY VALUATION

Inventories should be valued at cost or net realisable value whichever is lower. (AS-2/ IndAS-2)

This is based on view that no asset should be carried at a value which is in excess of the value realisable by its sale or use.

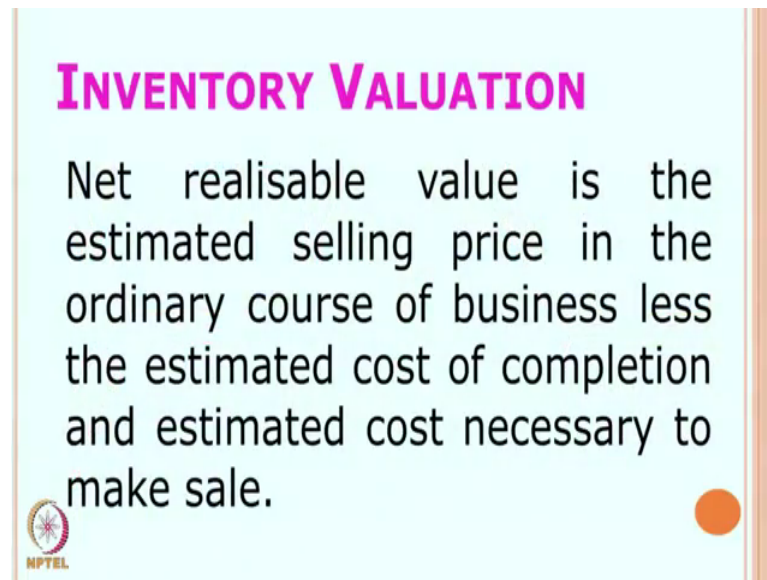
 

Now, there is an accounting standard 2 and in the new series there is IndAS 2 that defines how the valuation of inventory is to be done. So, as per AS 2 inventory should be valued at cost or net realisable value whichever is lower. I hope you remember that while discussing depreciation we had discussed some concept and that concept has direct bearing on the valuation of inventory, which was that concept do you remember? That was concept of conservatism.

Because of conservatism if inventory is say having cost of 26,000 as we discuss, but its market value has gone down to say 22,000; we will not take 26,000 in the balance sheet we will record it at only 22,000, but if the cost is 26, but its market value is 29. So, we have 3,000 rupees of profit, but the profit is still unrealized. So, we will not value it at 29 we will keep it at 26 only ok.



So, for the purpose of valuation it is the cost or net realizable value whichever is lower. So, you have understood what is meant by cost, but what do you understand by net realizable value can somebody tell what it is? It is very close to market value, but there is slight adjustment to the market value for calculating net realizable value so, it is the estimated selling price of that item in the normal course of business.

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INVENTORY VALUATION

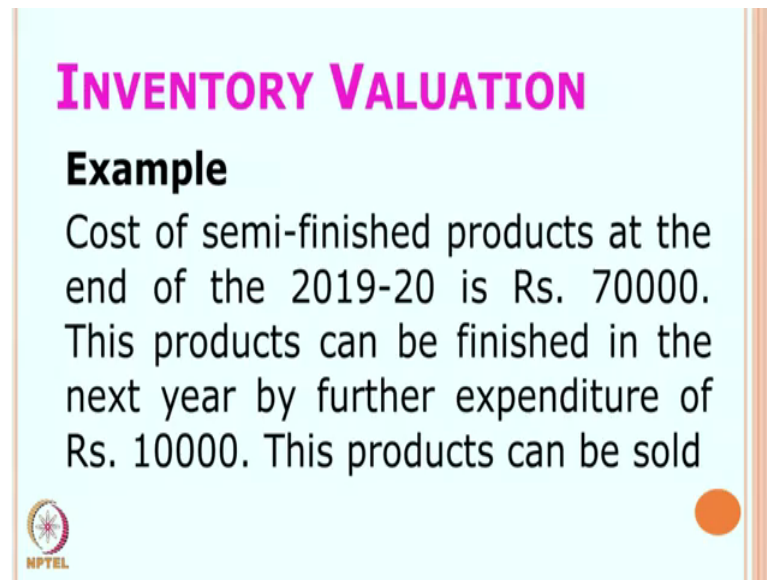
Net realisable value is the estimated selling price in the ordinary course of business less the estimated cost of completion and estimated cost necessary to make sale.

So, if you value the item at selling price we take that, but you may have to incur some cost for selling the item. So, the estimated selling price minus the cost which is required to complete the sale that will be reduced; now that can be selling expenses, it can be commission, it can be some packing which is required on it because we are not going to realise that much, but we will have to spend it, we will reduce it from the cost we will reduce it from the market value to arrive at net realizable value.

So, net realizable value refers to the amount which you will recover if you happen to sell that particular item of inventory in the normal course of business are you getting? Ok.


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INVENTORY VALUATION

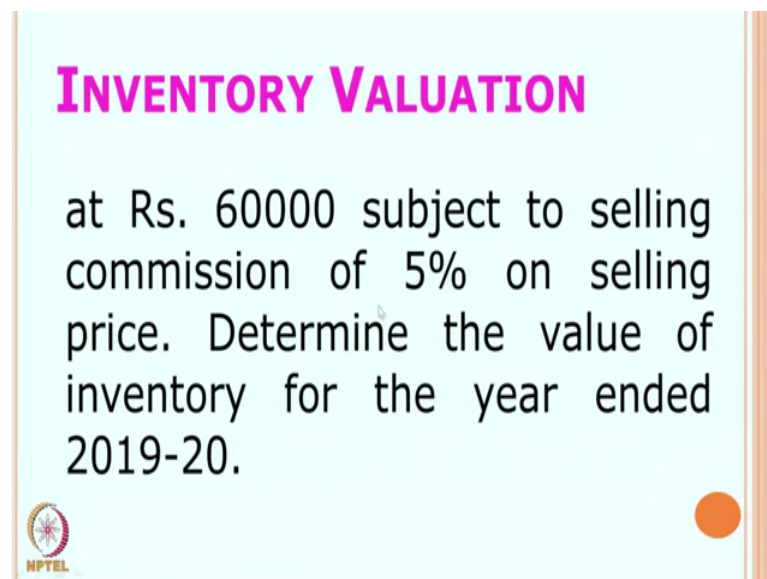
Example

Cost of semi-finished products at the end of the 2019-20 is Rs. 70000. This products can be finished in the next year by further expenditure of Rs. 10000. This products can be sold




Now, let us take a very simple case for calculation of net realizable value. Now suppose for the year end 19-20 now the cost of semi finished product is 70,000, we will have to spend further 10,000 rupees for finishing it and then the product can be sold at 60,000.

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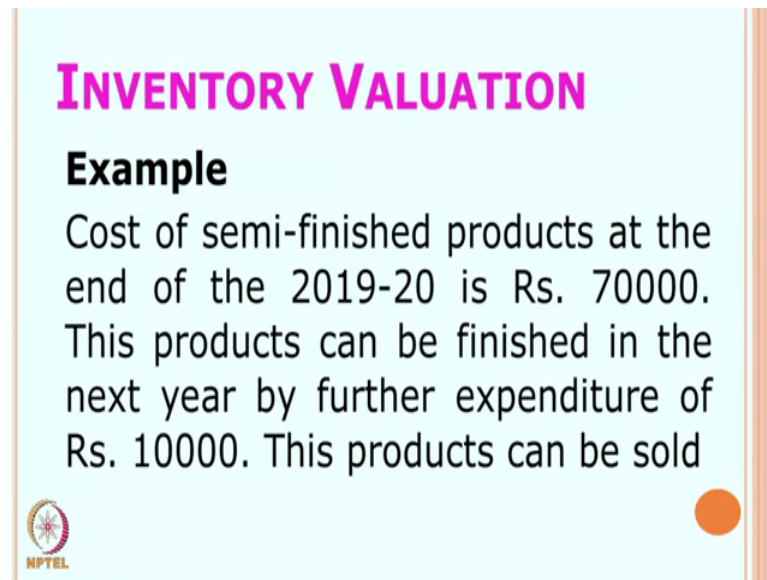
INVENTORY VALUATION

at Rs. 60000 subject to selling commission of 5% on selling price. Determine the value of inventory for the year ended 2019-20.



But again we will have to pay commission of 5 percent on the selling price. Now what will be the value of inventory in the balance sheet for year ended 19 and 20 just have a relook.



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INVENTORY VALUATION

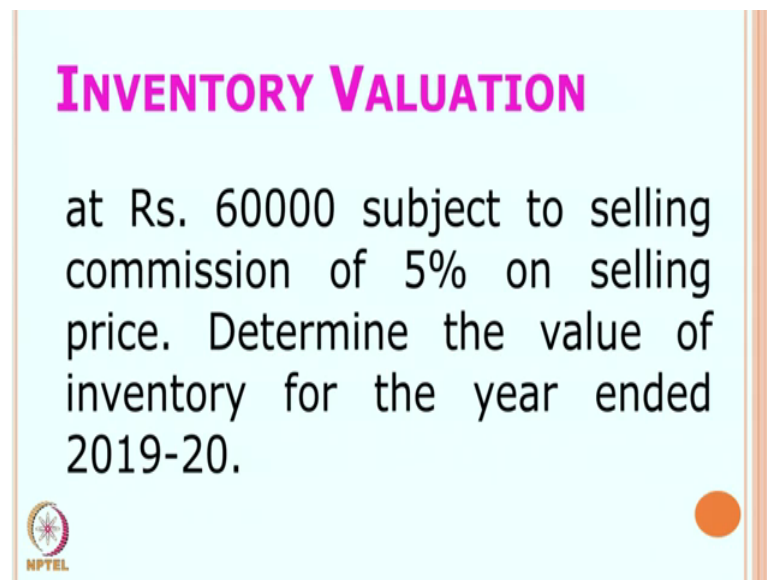
Example

Cost of semi-finished products at the end of the 2019-20 is Rs. 70000. This products can be finished in the next year by further expenditure of Rs. 10000. This products can be sold





So, how much will be the value will you pay 70 or will you pay 60 or something else because the cost is 70 as you can see but its selling price is unfortunately only 60.

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INVENTORY VALUATION

at Rs. 60000 subject to selling commission of 5% on selling price. Determine the value of inventory for the year ended 2019-20.




So, will you take 60? Actually you will have to calculate NRV or Net Realizable Value I will just show you the calculation.

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INVENTORY VALUATION

Solution:

| | |
|------------------------------------|-------|
| Selling Price | 60000 |
| Less: Estimated cost of completion | 10000 |
| Less: Commission | 3000 |
| Net realisable value | 47000 |




Now, see in any case the cost which is 70 we will not be able to consider because the market value is less than 70. So, we have started with the selling price which is 60, from that since this is a semi finished items some more cost is required to complete the item which is 10,000. So, estimated cost of completion which is 10 so, 60 minus 10 and we will have to pay commission of 5 percent on sales. So, 60,000 into 5 percent so, 3,000 is a commission, 60 minus 10 minus 3; that means, if you sell that item if you complete and sell that item you will realize 47,000, but the cost which you have incurred is 70.

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INVENTORY VALUATION

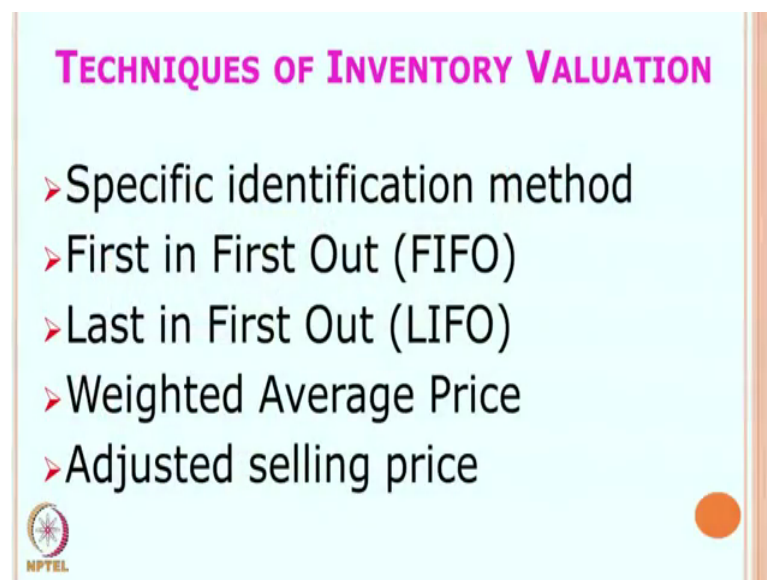
NRV : Rs. 47000
Cost : Rs. 70000
Therefore, value of inventory
(lower of cost and NRV): 47000



But in the balance sheet we are going to record only 47,000 are you getting? Cost or NRV whichever is lower that will be the value of inventory for balance sheet purposes. Now suppose just for discussion, if the cost of this item would have been 47,000 what we would have done? We would have still calculated this 60 minus 10 minus 3 net realisable value 47, but its purchase cost is 40.

So, 47 or 40 in which case we will consider it at cost that is at 4000 are you getting? Ok. So, this was one important basic rule for valuation that always go for lower of cost or NRV. Now, there are some techniques or some methods for valuation of inventory we will also discuss about them.

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Now, see there are five methods we have already seen how to calculate the cost, but when it comes to calculating the market value, we have to go into further technicalities. So, we are going to discuss five important methods that is specific identification FIFO, LIFO, weighted average and adjusted selling price.

Now, what happens is when the item is identifiable it becomes very simple we know how much is the cost for it. So, suppose you are making a painting or you are making a something like customized product like say tailor made garment or if you are selling a car, but it is not a normal car it is a designer cost car which is extremely costly in such cases you know that item that item can be identified and you can know the cost of that item.

But in many cases what happens you are into a bulk production scenario. So, you are making thousands of or in some cases lacks of units continuously, and it becomes impracticable. And, it is impossible for us to know the cost of a particular item in such cases what we do is, if we can identify always go for specific identification, but where we cannot identify, we will have to go for other methods one of the very popular methods and acceptable method is first in first out.

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FIRST IN FIRST OUT (FIFO)

The actual issue of goods is usually from the earliest lot on hand. The stock of goods on hand therefore, consist of the latest purchases. Thus, the closing inventory is valued at the price paid for such last shipment.

Now, in first in first out what happens is, suppose we have got 50 items which are the older items, new 200 items are coming and you have issued 30 items in a particular week or a month. So, 50 items are there, new 200 items have come in and 30 items are going out we will assume that since the 50 items are already there in the opening inventory, the 30 items which are issued must have been issued from the opening inventory.

So, this is a simple queuing system like we are in a queue, whoever has come first will get the ticket first, then second, then third, then forth. So, as per the chronology of the receipts whenever an item has come in the inventory, we will issue it in the same sequence. Keep in mind actually the issues may be random because all the units are alive and this is a scenario of mass production.


So, you exactly do not know which item is newer and which item is older, but for valuation purposes we will assume that the older items are issued out first, they will be valued at that cost and the remaining items which are comparatively new will remain in

the inventory and they will be valued at their purchase cost are you getting me? We will take a look at a simple example.

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FIRST IN FIRST OUT (FIFO)
Example:
Following are the purchases for the month of Jun 2011.

| Date | Units | Price p.u. |
|------|-------|------------|
| 5 | 5000 | 7 |
| 12 | 3000 | 9 |
| 20 | 6900 | 9 |



Now, let us say in a particular month this is the data, now the date of receipt is known to you these are various purchases the units purchased is known and the price is also known.


So, we have purchased 5 units on date 5th we have purchased 5000 units at 7, then 12th 3000 units at 9 and then on 20th 6900 units at 9.

(Refer Slide Time: 17:08)

FIRST IN FIRST OUT (FIFO)

| Date | Units | Price p.u. |
|------|-------|------------|
| 22 | 8000 | 11 |
| 27 | 2000 | 13 |

20000 units were issued during the month. Determine the value of closing stock at the end of month




After that on 22nd 8000 units at 11 and 27, 2000 units at 13 so, in a month totally there are five different purchases and we know the units and the prices

Now, 20,000 units were issued during the month and we have to determine the value of closing stock. Now you understand that since 20,000 units are issued in the month they can be from any of the lots, but for valuation purposes we must know or we must estimate or assume that from which lots they are issued.

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FIRST IN FIRST OUT (FIFO)
Example:
Following are the purchases for the month of Jun 2011.

| Date | Units | Price p.u. |
|------|-------|------------|
| 5 | 5000 | 7 |
| 12 | 3000 | 9 |
| 20 | 6900 | 9 |




Since there are five items, I would assume based on first in first out that the most old items or those which were received early date they would be issued first. So, we will first issue 5000, then 3000, then 6000, 9000 and so, on.

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FIRST IN FIRST OUT (FIFO)

| Date | Units | Price p.u. |
|------|-------|------------|
| 22 | 8000 | 11 |
| 27 | 2000 | 13 |

20000 units were issued during the month. Determine the value of closing stock at the end of month




Till 20,000 units are issued and then the remaining items that is a newer items they would remain in the stock.

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FIRST IN FIRST OUT (FIFO)

The closing stock is 4900 units and would consist of:-
2000 units purchased on 27th and
2900 units purchased on 22nd as per FIFO method



Now, let us have a look now the closing stock is 4900. So, what we have done is, we have taken total purchases which is 5 plus 3 plus 6900 plus 8 and plus 2 from which 20000 are issued.


So, total 24900 items are available and 20 are issued. So, 4900 is in the stock the older ones, that is those which were received on 5th 12th and 20th they have been issued

completely the newer ones will remain in the stock. So, which are the most latest items? 27 2000 13 is a latest item and since we have a stock of 2009 4900 of which 2000 is a purchased on 27 the remaining 2900 is purchased on 22nd ok. So, are you getting? So, 2000 units at 27th and 2900 purchased on 22nd.

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FIRST IN FIRST OUT (FIFO)

| | |
|------------------------|--------------|
| 2000 X 13= | 26000 |
| 2900 X 11= | 31900 |
| Value of Closing Stock | 57900 |



Now, we will go for valuation 2000 into 13 and 2900 at 11 this is the value of closing stock are you getting? Now if we would have been using LIFO what would have happened? In LIFO method the third method last in first out.



So, in LIFO method what is assumed is the last items are issued first. So, we would have assumed that all the earlier items or all the later items are issued and the oldest purchase that is on 5th at 5000 is what is there in stock. So, 5000 rupee units were purchased at 7 rupees.

So, I would have valued my stock as 5000; 4900 into 7 instead of 57900 the cost would have been much lesser. So, the value of stock changes by the use of methods either FIFO or LIFO are you getting.

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LAST IN FIRST OUT (LIFO)

Under this method good issued are valued at price paid for the latest lot of the goods. In other words stock of goods on hand will be valued at a price paid for earlier lot. LIFO method is based on an irrational assumption that





Now, we will just it have a look at the LIFO method. So, as I have just explained you in LIFO method the assumption is the latest goods are issued out first.

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LAST IN FIRST OUT (LIFO)

Example:
Following are the purchases for the month of Jul 2011.

| Date | Units | Price p.u. |
|------|-------|------------|
| 2 | 3000 | 16 |
| 10 | 6000 | 20 |
| 18 | 2500 | 15 |





Now, example now the various dates are given and again the units of units and prices are known to you.

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LAST IN FIRST OUT (LIFO)

| Date | Units | Price p.u. |
|------|-------|------------|
| 25 | 7000 | 14 |
| 30 | 9000 | 19 |

22000 units were issued during the month. Determine the value of closing stock at the end of month as per LIFO.





Now, 22000 units are issued during the month.

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LAST IN FIRST OUT (LIFO)

The closing stock is 5500 units and would consist of:-
3000 units purchased on 2nd and
2500 units purchased on 10th as per LIFO method



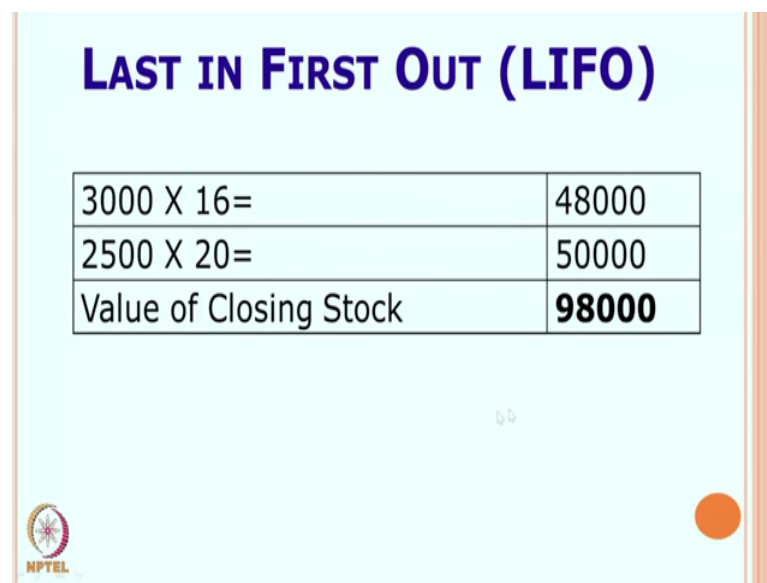
So, what we will do is, first we will have a look at the total purchases from that deduct 22000. So, we come to know that 5500 units are available in the stock; are you getting?
So, orally tried to take total 3 plus 6 plus 2500 plus 7000 plus 9000 these are the total purchases from which 22000 units have been issued ok.

So, total purchases were 27500 minus 22. So, I am having a stock of 5500 units. Now question is stock consists of which items the older items or newer items? In FIFO

method we had assumed that the older items are issued out and the newer item is in stock where as in LIFO it is assumed that the latest items have already been issued and the oldest items are in stock.

Since our stock is now 5500 we assume that these four purchases are already issued, but the oldest item which is purchased on 2nd at 3000 at 16 is still in stock and there are another 2500 from 10th purchase at 20 that is also in stock. So, now, you can have a look. So, 3000 units purchased on 2nd and 2500 units purchased on 10th.

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The slide features a light blue background with the title "LAST IN FIRST OUT (LIFO)" in bold purple text at the top. Below the title is a table with three rows and two columns. The first row shows "3000 X 16=" and "48000". The second row shows "2500 X 20=" and "50000". The third row shows "Value of Closing Stock" and "98000". In the bottom left corner, there is a small circular logo with the text "NPTEL" below it. In the bottom right corner, there is a solid orange circle.

| LAST IN FIRST OUT (LIFO) | |
|--------------------------|--------------|
| 3000 X 16= | 48000 |
| 2500 X 20= | 50000 |
| Value of Closing Stock | 98000 |

So, the stock is now 3000 into 16 and 2500 into 20. So, value of closing stock is 98000 are you getting? So, now if you have understood LIFO and FIFO method which method will give you more value of closing stock? Generally since the prices are rising; you can have a look here the prices are slowly rising in most cases as you can see here, in FIFO what happens is the older items are issued out and the newer items remain in stocks. So, normally the stock value will be slightly on higher side and this stock value is closer to the market value that is why FIFO method is normally preferred over LIFO.

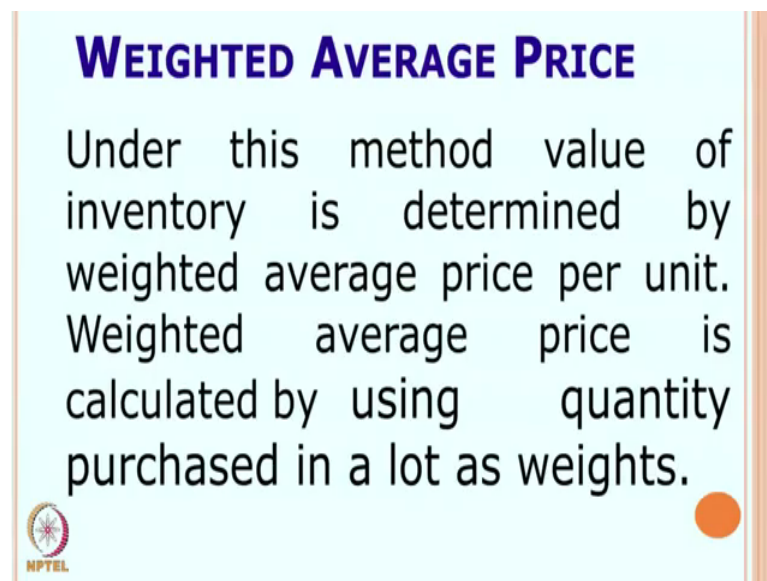
In LIFO method it will be assumed that the latest units are already issued and older units will be there in the stock. Now between LIFO and FIFO which method will give you more profit? In the scenario of rising prices which normal is a case, in FIFO the stock value is high. So, assets value will be high the profits will also be higher, in LIFO asset

value will be lower and profit will be lower. Now most of the cases companies have to pay tax on profits. So, they want to show lesser profit. So, they would prefer LIFO.

However income tax authorities are equally smart income tax authorities do not allow the use of LIFO method normally FIFO method only is allowed by most of the regulatory authorities ok; but it is interesting to understand and compare the two methods. Now I have taken two different cases one for FIFO and one for LIFO, I will request you to calculate now the stock as per LIFO and FIFO for both the examples, then you can get comparative figure of stock under LIFO and under FIFO are you getting me? Ok.



Now, LIFO is one extreme FIFO is another extreme. In FIFO the value of stock is normally higher in LIFO it is lesser there is one more method which acts as a via media its a midway.

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WEIGHTED AVERAGE PRICE

Under this method value of inventory is determined by weighted average price per unit. Weighted average price is calculated by using quantity purchased in a lot as weights.


 

In that method what is done is, here we go for a weighted average. Instead of only using older or newer prices we go on calculating the weighted average. So, under this method the value of inventory slowly changes.

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WEIGHTED AVERAGE PRICE

| | |
|---------------------------------|---|
| Weighted Average price per unit | $\frac{\text{Total cost of goods available for sale during the period}}{\text{Total number of units available for sale during period}}$ |
|---------------------------------|---|




So, the weighted average you can see the formula the total cost of goods available for sale upon the units.

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WEIGHTED AVERAGE PRICE

Example:
Compute value of closing stock as per weighted average method

| Quantity | Price p.u. | Amount |
|----------|------------|--------|
| 900 | 10 | 9000 |
| 400 | 14 | 5600 |
| 600 | 18 | 10800 |





So, we will get the average price. So, you can just have a look at the example we know the quantity, price and the amount.

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WEIGHTED AVERAGE PRICE

| Quantity | Price p.u. | Amount |
|----------|------------|--------|
| 500 | 16 | 8000 |
| 800 | 12 | 9600 |
| 3200 | Total | 43000 |

3000 units were issued during the period.





And we are given that 3200 units are issued in the period.

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WEIGHTED AVERAGE PRICE

| | |
|----------------------------------|-------------------------------|
| Weighted Average= price per unit | $\frac{43000}{3200}$ 13.44 |
|----------------------------------|-------------------------------|

Hence value of closing stock is
 $200 \times 13.44 = \text{Rs. } 2688$



So, what we do is since total quantities 3200 the total cost is 43, we can calculate 43 upon 32. So, 13.44 is a weighted average price and the stock is 200. So, 200 into 13.44 you get 2688 as a weighted average price I hope you have got it.

The issue price weighted average is better because once you calculate the issue price, you can show it as a issue price and you can also take that value. So, you can just have a look here, the old cost was ten and at the end it was 12 and there were fluctuations in

between, but we have calculated a weighted average 13.44 and that is taken as a issue price and it is also taken as a closing stock. So, the stock price is changed here, but does not change suddenly that is the advantage of weighted average most of the regulatory authorities either used allow use of FIFO or use weighted average ok.

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ADJUSTED SELLING PRICE

- This method is also called retail inventory method.
- This method is used where inventory comprises of items, the individual costs of which are not readily ascertainable.
- The cost of stock is determined

Now, let us go to the next method that is adjusted selling price. Now what happens is in many cases there are no much records available, there are hundreds of items which are traded or which are sold if you think of a kirana shop there are so, many types of items 100 or 500 items are kept and lot of items are purchased and sold every time. So, the stock keeper or the shopkeeper does not know exact price and the date.

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WEIGHTED AVERAGE PRICE

Example:

Compute value of closing stock as per weighted average method

| Quantity | Price p.u. | Amount |
|----------|------------|--------|
| 900 | 10 | 9000 |
| 400 | 14 | 5600 |
| 600 | 18 | 10800 |

So, here we were looking at the quantity and prices such information may not be available, but at the end of the period let us say on 31st March they can calculate the actual items which are available. So, we will know the number of units, but we will not know the cost. However, they will know the selling price you know that most of the retail items the selling price is required to be written on the package. So, it is very easy to know the selling price.

So, what is done is, first the selling price of the stock is calculated, but we know that the stock cannot be shown at a selling prices. So, we reduce the profit margin on it, there will be estimates of profit margin on different types of products. So, they will calculate the value of stock list the margin you will get the cost of stock, it is an estimate it is not a exact value, but it will be close to the correct value ok. So, let us have a look.

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ADJUSTED SELLING PRICE

Example:

Compute value of closing stock for the month ended 30th Jun 2011.

| Particulars | Amount |
|---------------------|--------|
| Goods purchased | 25000 |
| Transportation cost | 5000 |
| Storage cost | 2000 |

So, here date wise information is not known, but during a particular month they know the goods purchased, transport cost and storage cost.

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ADJUSTED SELLING PRICE

| Particulars | Amount |
|--------------------------------|--------|
| Sales during period | 50000 |
| Selling price of closing stock | 10000 |

Now, they also know the sales and selling price of closing stock because they do not know exact cost of closing stock.

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ADJUSTED SELLING PRICE

Solution

| Particulars | Amount |
|--------------------------------|--------------|
| Sales during period | 50000 |
| Selling price of closing stock | 10000 |
| Total | 60000 |

Now, what is first one is you will add sales and the selling price of stock. So, the total value is 60,000.

(Refer Slide Time: 29:01)

ADJUSTED SELLING PRICE

Solution

| Particulars | Amount |
|---------------------------|--------------|
| Less: Goods purchased | 25000 |
| Less :Transportation cost | 5000 |
| Less: Storage cost | 2000 |
| Gross Profit | 28000 |

Then we will deduct various types of expenses. So, less purchase cost, transport cost and storage cost; that means, there is a gross profit of 28000

(Refer Slide Time: 29:11)

ADJUSTED SELLING PRICE
Gross Profit Margin: $28000/60000$
 $=46.67\%$

| Particulars | Amount |
|--------------------------------|-------------|
| Selling price of closing stock | 10000 |
| Less: Gross profit margin | 4667 |
| Value of inventory | 5333 |

Now, 28000 is on a total of 60. So, 28 upon 60 the gross margin is 46.67 percent. So, for each type of product line a gross margin is calculated which is 46.67 percent. So, the selling price of closing stock is 10000 minus 46.67 percent that is 4667 you get the value of inventory as 5333 are you getting? This is the cost estimated cost of the inventory they do not know the exact value.

Suppose the profit margin is negative; that means, the cost is more than the selling price then we will simply show it as the selling price. But here since the cost estimated cost is 5333 and selling price is 10000 the stock will now be valued at 5333.

Now, the last method that is adjusted selling price is not very suitable method, but if the records are not available in such cases this method is used. So, with this we complete this topic on inventory valuation of course, we are going in a hurry those who want to learn more I would request you to discuss more on discussion forum, create different cases and try to understand in different scenarios what are the evaluations of FIFO under LIFO under weighted average and under adjusted selling price.

So, that we realise as to what method is suitable another important thing you should do is, go to your own annual report and check which method the company is using. They would write a note on the inventory and we will also give the method which they are using for inventory valuation and that will give you more insights into valuation of inventory, I hope you have all like the sessions. Namaste.

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Lecture – 14
Cash Flow Statement 1

Dear students, Namaste, today we are going to start one very exciting and new topic that is titled as Cash Flow Statement. If you remember there are three important statements in an annual report which are mandatory for all the companies and in fact, they are required for almost all the undertakings. Do you remember what are the three statements? The first one going by how we have learnt it is balance sheet, then profit and loss account and the third one is cash flow statement. In the first session, we had seen the purposes of each of these statements. So, can you tell what does the balance sheet tell you?

Balance sheet is a statement of financial position. So, it lists the assets and liabilities as on a particular date. A profit or loss account is a statement showing incomes and expenses, the net result is profit or loss for a particular period. Traditionally, these two statements were considered as the final statements showing the results of any entity. Entity can be of any type it may be profit making or non-profit making or it can be a partnership firm or say proprietary concern or a corporate; almost every undertaking had to prepared these two statements.

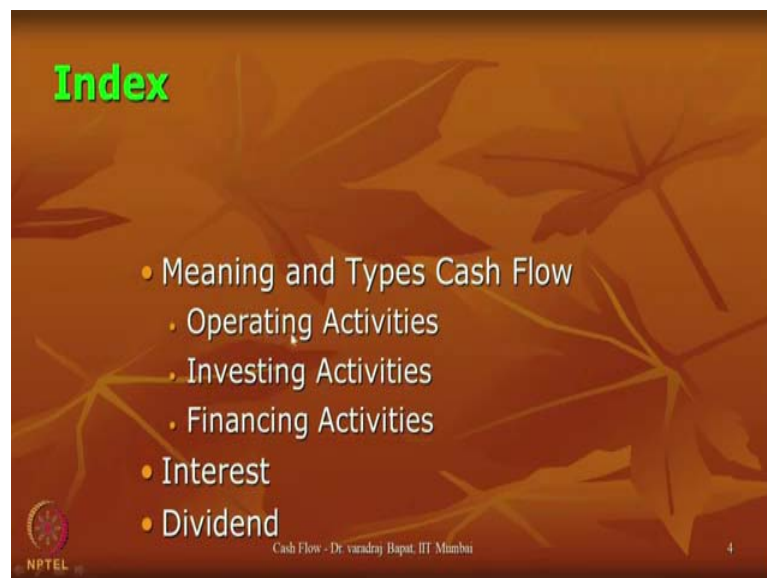
Gradually, it was realized that these two statements though are very important; they do not give all the information which is required by the stakeholders because stakeholders are equally interested in knowing about the movement of cash in the entity. So, a third statement was made mandatory in 90's and that is known as cash flow statement. So, today we are going to discuss the cash flow statement and we will also take a look at a few cases involving cash flow statement ok.

So, these are the contents.

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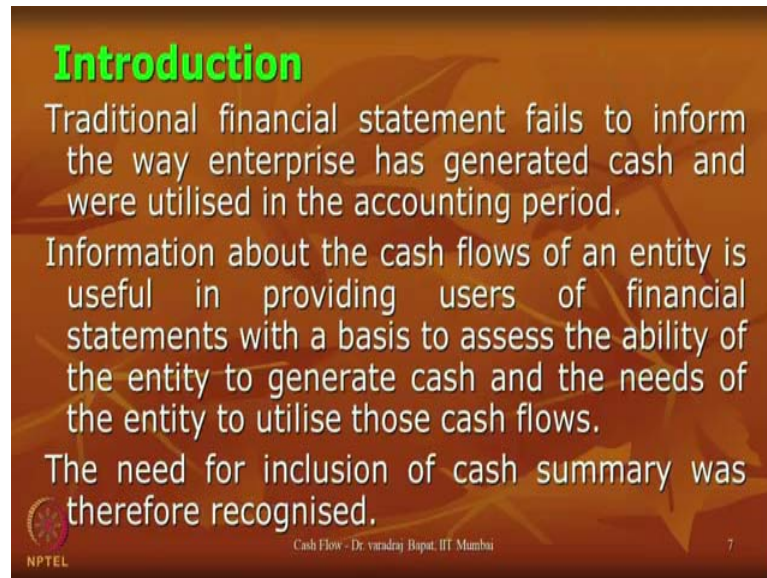


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And we are going to discuss various topics as are listed in the index.

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Introduction

Traditional financial statement fails to inform the way enterprise has generated cash and were utilised in the accounting period.

Information about the cash flows of an entity is useful in providing users of financial statements with a basis to assess the ability of the entity to generate cash and the needs of the entity to utilise those cash flows.

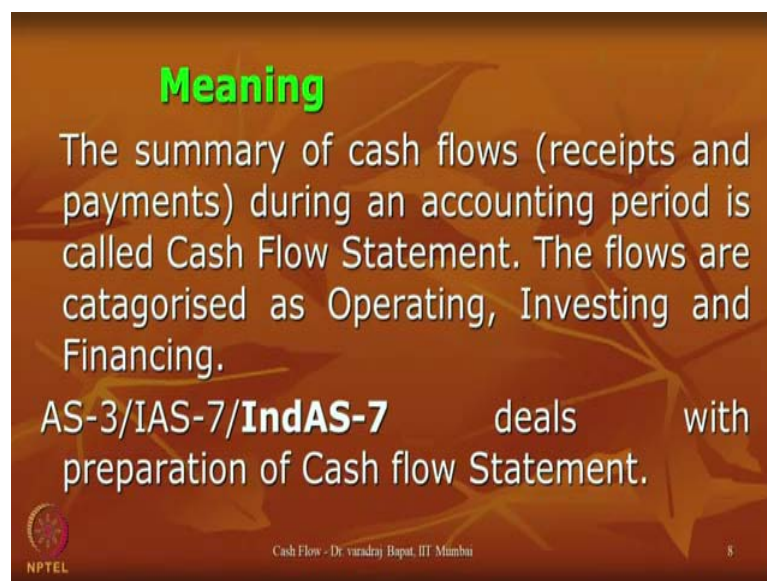
The need for inclusion of cash summary was therefore recognised.

NPTEL Cash Flow - Dr. Vinodraj Bapat, IIT Mumbai 7

I have just inform you that the traditional financial statements, they fail to give information about generation and utilization of cash, and users of the statement usually want to know what are the ways an enterprise is able to generate the cash and they also want to know how that cash is utilized in a particular period.

So, there is a need to give a summary of movement of cash in a period and there comes the importance of cash flow statement.

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Meaning

The summary of cash flows (receipts and payments) during an accounting period is called Cash Flow Statement. The flows are catagorised as Operating, Investing and Financing.

AS-3/IAS-7/IndAS-7 deals with preparation of Cash flow Statement.

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Now, the meaning of cash flow statement is it is a summary of cash flows both receipts as well as payments during an accounting period. Further it categorizes the flows under the three heads that is operating, investing and financing. If you want to read more details, these are the accounting standards on the basis of which cash flows are made. The current one which normally companies are using is called as IndAS-7, it is similar to international accounting standard that is IAS-7 and the old set of standard for this is AS-7; AS-3 which deals with preparation of cash flow statement.

Now, you already know balance sheet you also know P and L account. Now can you think cash flow statement is similar to which of these two statements? Is anyone of you able to think now based on whatever we are discussed now? I think some of you are able to guess it. This is somewhat similar to P and L because P and L is also for a particular accounting period; cash flow statement is also for a particular accounting period unlike a balance sheet. Balance sheet is not for a period, it is prepared at the end of the period, but it is a cumulative statement.

So, if the balance sheet is for 31st March 2020, it will give the assets and liabilities which are purchased or which are acquired in all the earlier years, not just this year; right from the starting of the business till 31st March 2020, if any asset is purchased and not yet sold it will be shown in the balance sheet.

But if you consider a profit and loss account for year ended March 2020, it will only show profits or sales or expenses from first April 19 to 31st March 2020. Are you getting so, it is a period statement; profit and loss is a period statement, similarly cash flow is also a period statement. Now the balance sheet gives you all assets and liabilities. This is not the case with cash flow; cash flow is giving you summary of receipts and summary of expenses. In that sense, some of the items would be similar to profit and loss account, but mind well there are several items in the balance sheet which do not come in P and L, but which are directly reflected in cash flow statement.

Can you think of any such example that a particular item is in balance sheet and because it is in balance sheet, it will come in cash flow without coming in P and L? Just think a bit. Suppose, company purchases machinery and pays cash for it; will it go in cash flow statement? Answer is yes, because company has paid cash for it; will it go in P and L? Answer is no, because it is neither income nor expense. Will it go in balance sheet? Yes

because it is an asset so, machinery is a new asset which is purchased. So, it is reflected in balance sheet and because it comes in balance sheet and there is a payment of cash involved, it will also come in cash flow.

So, mind well though I am saying it is somewhat similar to P and L, it is not that it is giving same information as in P and L because there are several items which would be coming from balance sheet to cash flow statement. Any item where cash movement is involved will be shown in the cash flow. We will just have a look at the categorization now because that is very important every flow has to be categorized into three heads as we can see here which are operating, investing and financing.

Now to begin with what do you mean first of all by cash? Because we are saying that it is a cash flow statement. Always keep in mind that when we say cash it refers to cash and cash equivalents. Now, what is cash is cash in hand.

(Refer Slide Time: 08:05)

Cash and Cash Equivalents

Cash:-
Cash in hand and demand deposits
(normally with any bank)

Cash Equivalents:-
Short term, highly liquid investments,
that are readily convertible into known
amounts of cash and are subject to
insignificant risk/change in value

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But of course, cash which you keep in your pocket; in the form of currency notes is not the only cash; it is cash in hands and demand deposits. Now, demand deposits are normally kept with bank. So, in financial statements many times we call it as bank balance so, cash balance plus bank balance both are considered. Bank balance in which type of accounts, if it is in a savings account, yes; if it is in current account, yes; if it is in fixed deposit, no. Because as per our definition, it should be a demand deposit; that means, it should be possible for the company or an enterprise to withdraw it or use it

whenever it wants. That is why bank balance in saving and current accounts will be considered not in the FD account; are you getting? Ok.

Now, other term here used is cash and cash equivalent. Now, what is a cash equivalent? Cash equivalent refers to short term highly liquid investments, we are saying it is cash equivalent. So, it is just like cash; anytime you want you should be able to convert it into cash that is why, those which are ultra short term something which is convertible in less than 48 hours is considered as cash equivalent. There is one more condition attached that it should not be subject to changes in the value. So, can you think of any examples of cash equivalent now? Suppose there is a fixed deposit in bank, will you consider it as a cash equivalent? If the time period is short and there are no conditions attached for its conversion into cash, then you can consider it as a cash equivalent.

What other items? You can sell shares easily in the stock market; can you consider shares balance as the cash equivalent? The answer is no because though you can sell it, it is highly liquid investment, but the second condition is not fulfilled because it is not subject to a significant risk of change. There is a sizeable chance of change in the value so, you know all know that stock prices keep on changing, not only every day, every minute; so, stocks are not considered as cash equivalent. What else can be considered as cash equivalence? There are debt instruments like debentures; will you consider them as cash equivalent? Even then, the answer is no because debenture prices do not change as frequently as share prices, but never the less they can also change that is why debentures are also not considered as cash equivalent.

Any other marketable security like one which is bonds corporate bonds will not be considered; however, if there are government securities or treasury securities which you can sell without a loss in the price, without a loss of or change of price; then, such investments can be considered as cash equivalence. Normally, banks accept deposits which are called as deposits which are for extremely short period like money at call or money at short notice, they are considered as correct example of cash equivalent ok. So, whenever in cash flow statement, hence forth we will use the term cash, it includes balances of cash plus cash equivalence; are you getting me?

Now, let us go ahead. Now what do you understand by cash flow? Now it is a common sense, any cash flows in the form of inflow that is receipt of cash or bank out flows that is payments of cash and cash equivalent, these are all included in cash flow.

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Meaning of Cash Flow

- Cash flows are inflows (i.e. receipts) and outflows (i.e. payments) of cash and cash equivalents.
- Movement in cash and cash equivalents are not cash flows.

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Nevertheless, movement inside the cash and cash equivalent is not considered as cash flow. Now what is a movement in cash and cash equivalent; can you give any example. Suppose, we are having 3 lakh rupees in bank balance and we withdraw it and we received cash from bank, will you consider it as a cash flow? The answer is no, because though you are receiving cash, you are just converting bank balance into cash. So, bank balance is any way an example of cash or if you sell your short term security and converted it into bank balance, there again it is a movement between cash equivalent to cash.

So, we will not consider such movements as a part of cash; got it. So, these are not considered as movement in cash and hence, they are not considered as cash flows. Now, let us go to the types of cash flow.

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Types of Cash Flow

The cash flows generated through various activities are classified as

- Operating cash flow
- Investing cash flow
- Financing cash flow

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Now the cash flows which are generated through various activities are actually required to be classified, we have already discussed it. There are three heads operating investing and financing. I think these heads are very much self explanatory, but there are some specific meanings attached, but right now at the outset, what do you feel would be considered as an operating cash flow. Just think of what items should be included; are you able to make any judgment?

As the name suggest something which is to do with operations; operation means our day to day business activities. We generate several items of cash coming in and going out. Now they are all considered as operating; this is also a residuary head. So, whatever cannot be considered as investing or financing will also be included in operating and now think of the examples of operating flows, but I would just show it here for your clarity.

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So, now, in the form of figure your all the cash flow activities are divided into operating, investing, financing. Operating means something related to day today activities, I have deliberately not given any example because you can easily think of 30-40 examples related to day to day activities.

Next are investing; now what example you can think of? Obviously, on the screen you can see that very easy example is purchase of land. So, when you purchase land, you pay cash, you receive land. Land is a fixed asset or a property, plant and equipment kind of item; that is why it is an investing activity. Financing, example is loan taken. So, we have obtained loan from bank so, we receive; our bank balance increases and a new liability in the form of bank loan is created. This is an example of financing activity. So, are you getting all the three activities?

Now, let us look at operating activities little more in detail.

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Operating Activities

- These are principal revenue producing activities of the enterprise and other activities that are not investing or financing activities.
- Examples:
 - Cash receipts from sale of goods or rendering services

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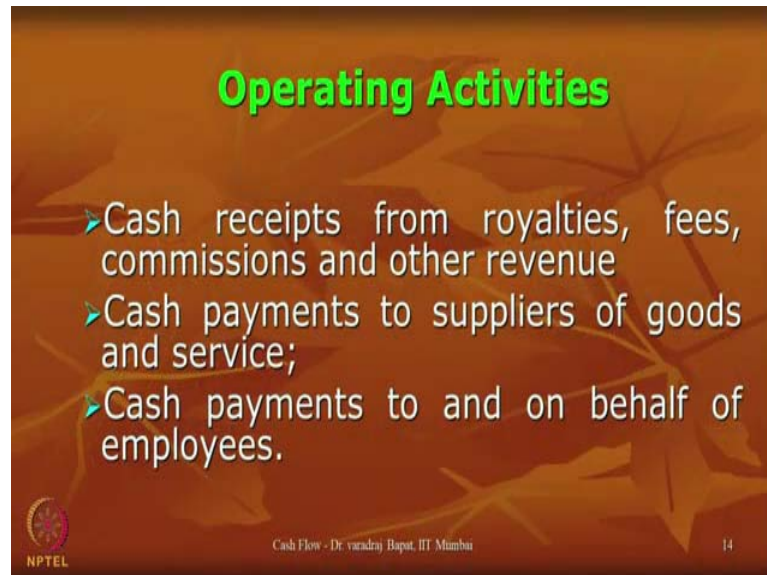
So, these are defined as principal revenue generating activities of the enterprise ok. So, this is the technical term for normal activities or day-to-day activities and any other activity which cannot be defined as of investing and financing will also fall in it. Now, I have given very easy example that obviously, the most important activity for generating cash will be cash received from customers, against either sale of goods or provision of services.

So, suppose you are a taxi operating agency and you provide taxi customers pay you either cash or through credit card or through bank then, you are generating revenue. In which statement will you show the revenue? Obviously, you will show it in P and L account, but you will also show in cash flow statement. Because you are also generating or you are receiving cash in the process. So, this is a very clear cut and very simple example of cash in flow from operating activities.

Now, think of another 5-6 examples. These are very easy as I said you can even list 30 examples. Can you think of some more examples? Suppose you go to some restaurant to have say some lunch so, what will happen? You will have lunch make payment, Now make payment means cash outflow will happen, either in the form of cash or through credit card or by cheque or by some means, means of payment, but in any case since the cash is moving out, we will consider it as a operating cash flow because it is a day-to-day activity it is not an investing or financing activity.

Any other example, lot of expenses I think you might be thinking of like salaries, like a rent paid, they all will fall in the operating activities.

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So, these are the examples, I am listing. You can receive some money apart from sales in the form of royalties, fees, commissions, their cash equivalents, cash paid to suppliers or cash which is paid to employees as salaries, allowances, (Refer Time: 18:43) for their expenses all these examples of operating activities. Now, let us go to next one; next is which a head, that is investing activities. Now how will you define investing activities and what are the examples?

Just think of investing activities, now here you are making investment as the name suggest. So, if you are purchasing shares of some entity, it will be an investing activity. If you are putting a deposit in a bank, it will be an investing activity. If you are withdrawing the money from bank deposit and converting it into cash, it is an investing activity. If you are selling your shares or debentures converting into cash, again it is a investing activity. If you are purchasing any fixed asset as say land or building, again it is an investing activity. So, these are variety of examples of investing activity.

Now before going to investing activities, we also would like to understand how are the operating activities reported. Now, there are two methods of reporting of operating activities; one is a direct method, other is a indirect method.

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Reporting of Cashflow from operating activities

- It can be derived either from direct method or indirect method
- Direct method:
 - In this method, gross receipts and gross payments of cash are disclosed

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In the direct method, gross sales and gross payments of cash are reported.

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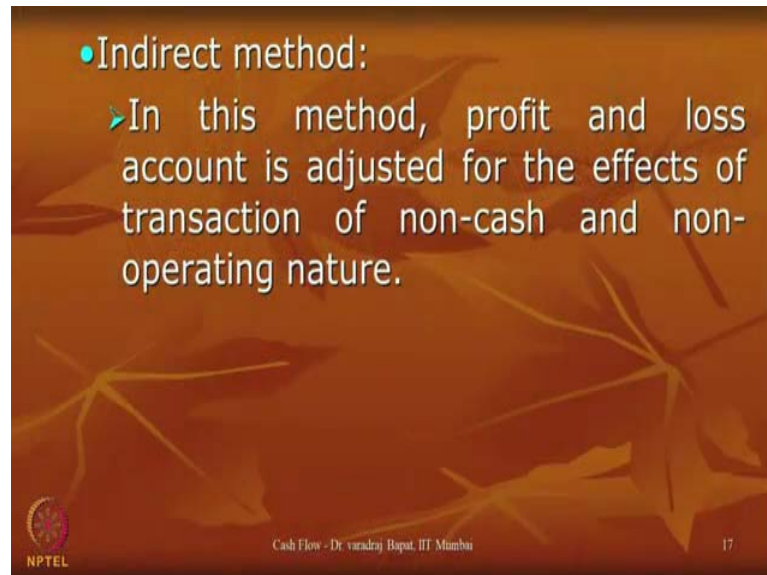
| Direct Method | |
|---|-----------|
| Cash receipts from customers | XX |
| Cash paid to suppliers | XX |
| Cash paid to employees | XX |
| Cash paid for other operating expenses | XX |
| Cash generated from operation | XX |
| Income tax paid | XX |
| Net cash from operating activities | XX |

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Now, this is a format of direct method, I hope just by observing it will be clear to you that cash received from customers or cash paid to suppliers, to employees etcetera all are shown as a total amount of cash which is either received or paid. The net amount is considered as cash generated from operations before taxes minus income tax paid, you will get the net cash from operating activities. Are you getting; this is a direct method

because the total amount of cash received and paid is shown. There is another method which is known as indirect method.

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In indirect method, what happens is you start with profit as a starting point from P and L account and then, you make certain adjustments to calculate the cash which is generated from operating activities. In the beginning of the session, we had discussed that cash flow as lot of similarities with P and L.

Actually, this part of cash flow that is operating activities part is very much similar to P and L. So, we assume that whatever is cash generated is in the form of profit; it is not true, but just start with whatever is your profit is assumed to be cash from operating activities and those items which are differing.

So, in P and L account there are some non-cash items they would be adjusted, there would be a few non-operating items they would also be adjusted. That is why from your profit, you work back to calculate the cash generated from operating. Just have a look at the format, I think that would make many things clear to you.

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| | |
|-------------------------------------|----|
| Retained Earning | XX |
| Add: Dividend paid | XX |
| Income Tax | XX |
| Net Profit Before Tax | XX |
| Add: Depreciation | XX |
| Loss on sale of Asset/Investment | XX |
| Interest Paid | XX |
| Provision for Bad debts | XX |
| Less: Interest/ Dividend Received | XX |
| Profit on sale of Asset/ Investment | XX |

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So, you can start with retained earnings, these are the reserves which are accumulated in the year add the dividend paid because dividend is going out for financing reasons. We will look at it later on, then you also add the income taxes paid. So, you get net profit before tax; then you add depreciation. Why do you add depreciation? Can somebody think of because we have already discussed depreciation in last two sessions. We will add depreciation because if you remember it is a non cash expense, it is debited to P and L or it is charged to P and L, but no cash out flow was involved.

So, we will add depreciation, we will add a few non-operating items like loss on sale of assets or interest paid, provisions for bad debts. So, we will deduct again non-operating items like interest dividend or profit on sale of assets and after making all adjustments related to P and L account. Keep in mind these adjustments are under two heads; one is if you find any item which is non-profit in nature sorry non-cash in nature, we are going to account for it. If there is any item which is non-operating in nature, but it is in P and L. So, we will adjust for it.

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| | |
|--|-----------|
| Funds from operations | XX |
| Add: Decrease in Current Asset | XX |
| Add: Increase in Current Liabilities | XX |
| Less: Increase in Current Asset | XX |
| Less: Decrease in Current Liabilities | XX |
| Cash generated from operation | XX |
| Income Tax Paid | XX |
| Net Cash flow from operating activities | XX |

 Cash Flow - Dr. varadraj Bapat, IIT Mumbai 19

Now, after making both types of adjustments, we get fund from operations. Now, front fund from operations, funds here refers to working capital. So, it is not just cash it includes the current assets and liabilities. So, we will remove the effect of current assets and liabilities. So, from funds from operations we add and reduce all decreases and increases of current assets and liabilities. Here we get cash generated from operations, but before tax. From that we will reduce income tax paid to finally get net cash flow from operating activities.

Are you getting it, I know it is bit complicated because this is a indirect method, this is a reverse method. I will just show the last slide again. So, if you remember once again, I am just making you remember the P and L account. Please have a look at your P and L once again and if you have not understood P and L I think, first you will have to study P and L topic properly before coming to this.

But in P and L account there was a list of incomes list all the expenses giving you net profit. Now here what we are doing is we are starting with net profit, adding all those items which are non-cash or non-operating, they were deducted for calculating the profit for example, depreciation. So, we add depreciation, we add income tax provided, we add loss on sale of asset etcetera; then, we deduct those items which are non-operating, but are added for calculating a profits like profit from sale of asset etcetera. And after making this adjustment you use to get funds from operations.

There we make adjustment for current assets and liabilities. Now, why do we make that adjustment? Because every time you are made profit does not mean you have made cash. Suppose, you are there are credit sales; credit sales will give you profit, but it will not generate any cash for you because the cash is still locked up in debtors, cash may be locked up in stock or your you have not yet received profit, but you have already got money from creditors. All such scenarios need to be adjusted because here our focus is for calculating the cash from operations. Are you getting me?

So, we will stop here. What we have covered today is we have started with cash flow statement, the importance of cash flow statement, the three categories operating, investing and financing. Particularly today, we have discussed operating activities. If it is bit difficult for you to understand, do not worry in next session we are going to revise operating and also look at investing and financing which will make the operating activities once again more clear. Namaste.

Financial Accounting
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Lecture – 15
Cash Flow Statement 2

Namaste to all of you, we have started with a new statement that is Cash Flow Statement. I hope you all liked it and you are excited about it. So, can you tell: now what is a cash flow statement? It is a statement which lists the cash inflows and outflows. Now naturally with the question comes is why do you need this statement. Now why is it required, what are your two other important statements? The first statement was balance sheet the second statement was P and L account.

Balance sheet gives you what? It gives you the financial position of the enterprise; P and L gives you the income and expenditure. But both these statements are not able to tell you how much is cash generated or spent that is why third important statement was introduced around in 1995 that is known as cash flow statement. It gives you inflows and outflows of cash not only that, it gives you those flows under the three heads what are the three heads? One is operating, next is investing, third is financing.

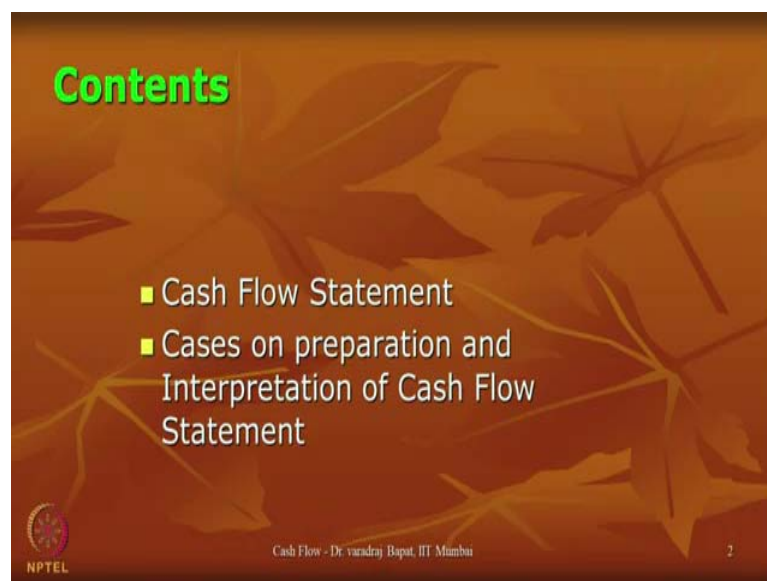
In our last session we have discussed what is operating, today we will go into investing and financing. Now before that what do you mean by cash that is a first question, because we are talking about cash flow. So, what is a cash? So, cash includes cash plus cash equivalent, particularly in cash you are having cash and bank balances in cash equivalent what do you cover in cash equivalent? You include extremely short term investments which are highly liquid and are not exposed to loss of value because of market forces.

So, something like money at call with banks or money in certain securities, but no change of value is expected there only few restricted securities can be included in cash equivalent. Now any movement of cash is considered as a cash flow, but there is an exception if there is a movement within cash and cash equivalent items do not consider them as cash flow. So, what is such example? So, if you deposit money in bank, you withdraw money from bank this is a change within the cash and cash equivalent; one

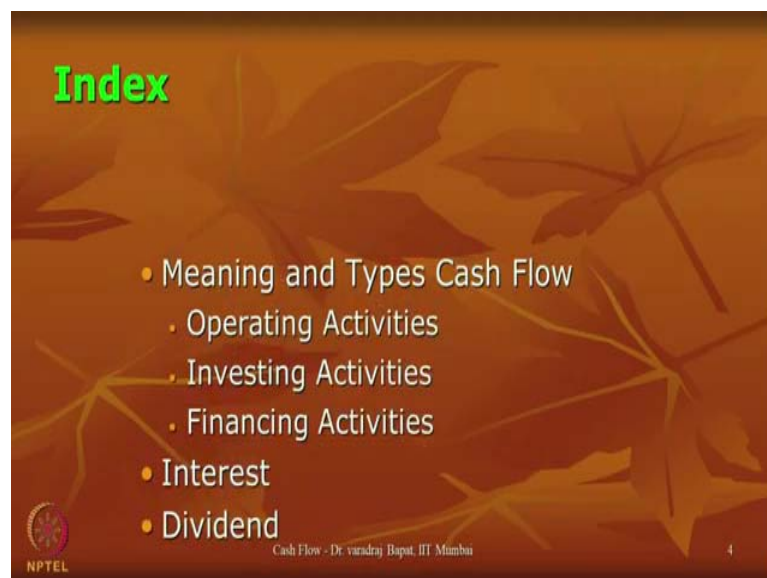
cash item is coming down other cash item is increasing. So, we will not consider as a cash flow and we will not show it in cash flow statement.

So, here you are got cash and cash equivalent items taken together and there are several other items. If because of any transaction cash and cash equivalent either reduces or increases we will call it as a cash flow and we will be shown in the cash flow statement this much is what we had discuss and how will hope it is clear to you, but you can just glands to the slides once again.

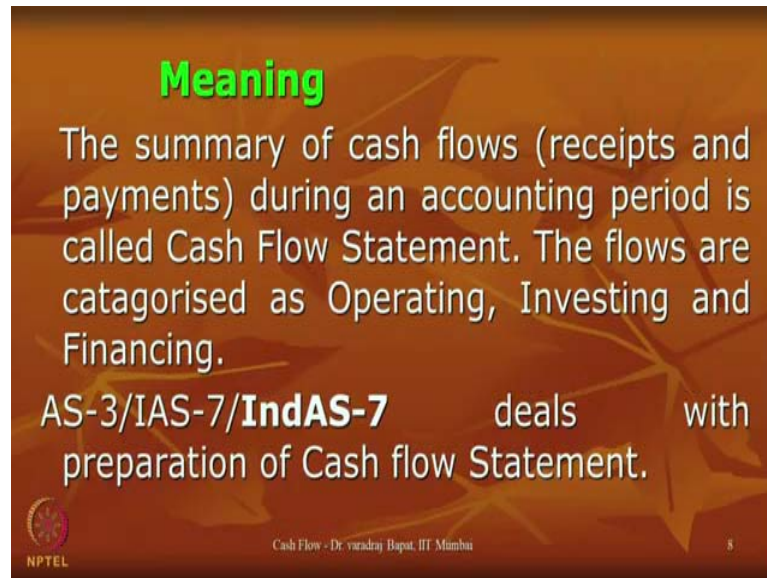
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Meaning

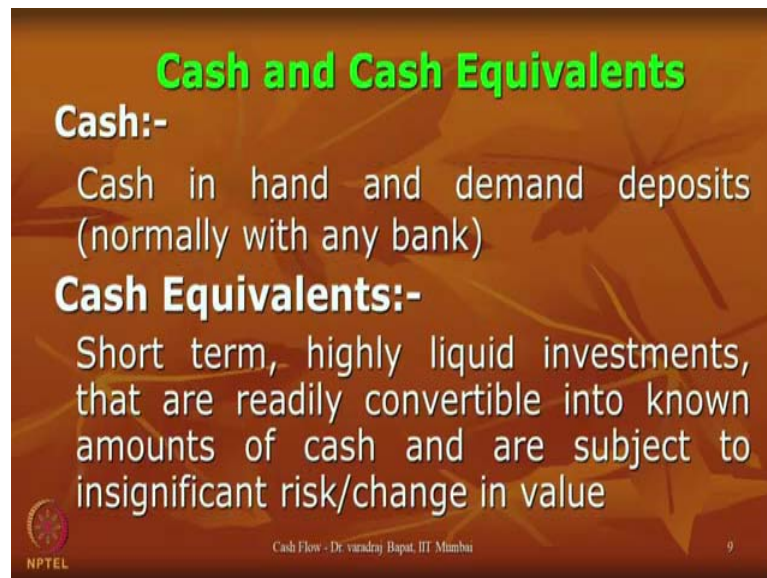
The summary of cash flows (receipts and payments) during an accounting period is called Cash Flow Statement. The flows are categorised as Operating, Investing and Financing.

AS-3/IAS-7/**IndAS-7** deals with preparation of Cash flow Statement.

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So, this is a index we are slowly going to next items today. IndAS 7 is a new set of standard which we are following for this calculation.

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Cash and Cash Equivalents

Cash:-
Cash in hand and demand deposits (normally with any bank)

Cash Equivalents:-
Short term, highly liquid investments, that are readily convertible into known amounts of cash and are subject to insignificant risk/change in value

NPTEL Cash Flow - Dr. varadraj Bapat, IIT Mumbai 9

This is the definition of cash and cash equivalent, the meaning of cash, then the types of cash flows.

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Meaning of Cash Flow

- Cash flows are inflows (i.e. receipts) and outflows (i.e. payments) of cash and cash equivalents.
- Movement in cash and cash equivalents are not cash flows.

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Now, particularly we were discussing what is operating cash flow. So, operating as this name suggest means day to day activities or principal revenue generating activities of the enterprise.

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Operating Activities

- These are principal revenue producing activities of the enterprise and other activities that are not investing or financing activities.
- Examples:
 - Cash receipts from sale of goods or rendering services

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So, any item which is related to either generation of cash or expenditure of cash on day to day business, which is considered as operating activity. Any activity which cannot fall in financing or investing, but there is a cash movement is also included because it is a residuary head known as operating activity. We have seen a few examples in the last

session, but today going by the nature of business can you tell what will be the operating activity?

For example suppose you are a web developer, you develop websites for various companies what will be the operating activity for you? What are the incomes for you? Probably are charging some fees to your clients for generating new web content, you may be charging fees for hosting their websites; all these would be incomes for you which will go in P and L, they would also be cash generated for you. Whenever the customer pays you, you are generating cash and that cash is from operating activity. So, it falls in the first example, that is cash received from sale of goods or rendering services.

If you are Tata motors; in the last session we had taken example of Tata motors. For Tata motors what is a principal revenue generating activity, I think most of you know the company they sale cars. So, selling cars, trucks, vehicles is there business. So, money with they generate in cash by sale of car or by sale of a truck will be there principal revenue generating activity. And what are the expenses? I think their common company rent, taxes, salaries, travelling expenses all of them are considered as for running of business. So, there your operating activity related outflows ok.

Suppose you are a web developer company you purchase a car, will it be an operating activity outflow? Answer is no because car is a fixed asset for you, it is not your day to day activity I do not think you will buy car and sell cars everyday who will buy and sell cars regularly? For a car dealer car is a stock item. So, purchase and sale of cars is a day to day activity it will be a operating activity, but for most other enterprises car is a part of fixed asset.

So, for them purchase of car will fall in will go in fixed assets in the balance sheet; in cash flow statement where will it go? It will go in investing activity not in the operating activity; are you getting me? Some more examples are already listed here I think we have seen it in the last session.

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Reporting of Cashflow from operating activities

- It can be derived either from direct method or indirect method
- Direct method:
 - In this method, gross receipts and gross payments of cash are disclosed

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Now, there are two methods of preparing cash flow of which the first method is very simple it is known as direct method.

(Refer Slide Time: 08:13)

| Direct Method | |
|---|-----------|
| Cash receipts from customers | XX |
| Cash paid to suppliers | XX |
| Cash paid to employees | XX |
| Cash paid for other operating expenses | XX |
| Cash generated from operation | XX |
| Income tax paid | XX |
| Net cash from operating activities | XX |

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So, please have a look at the format I think it does not need any much of explanation it is very similar to P and L actual. In P and L you start with sales reduce all the expenses you get profit. Same way only exception is there we show actual payments plus outstanding expenses here you are only concentrating on actual receipts and payments.

So, receipts from customers plus cash sales, that is your cash receipt minus payments to employees, payments of rent, payments of payments to creditors not a purchases keep in mind P and L account we show purchases whether you pay or not it is considered as a expense, here only that much amount which you have paid to creditors. In case of cash purchase the amount will be same, but for credit purchase your purchasing now paying later whenever you are paying it will go in cash flow statement ok. So, but this is relatively simple only one thing you have to keep in mind is almost like a P and L, but it should be on cash basis are you getting me. So, you are listing all cash receipts minus all cash payments from operating activities, they would be net cash from operating activities.

Now, the second method is slightly complex because here we are going from P and L to calculating cash from operating activities. So, in P and L account we get profit or loss for the period. We start from back or we start from transfer to reserve sometimes then we add back of few items to begin with we assume that profit is very close to cash from operations only those items which require adjustment. Suppose there are 40 items in P and L all of them will not need adjustment, few of them which are of two types they would need adjustments, only those two types of items we will either add or reduced. So, what are these two types of items? One is if it is non-cash I will just show you the format.

(Refer Slide Time: 10:34)

| | |
|-------------------------------------|----|
| Retained Earning | XX |
| Add: Dividend paid | XX |
| Income Tax | XX |
| Net Profit Before Tax | XX |
| Add: Depreciation | XX |
| Loss on sale of Asset/Investment | XX |
| Interest Paid | XX |
| Provision for Bad debts | XX |
| Less: Interest/ Dividend Received | XX |
| Profit on sale of Asset/ Investment | XX |

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So, we are starting with retained earnings plus dividend plus taxes, that is net profit before tax then we add noncash items; best example of it is depreciation because we are already discuss depreciation earlier, that it is not a cash expense it is charged to P and L, but does not involve cash so, be added back. Similarly if there are any non operating items. So, what are the non operating items? Keep in mind most of the items in P and L are operating, but a few items like sale of machinery and there is some loss on sale of that machinery that loss, but we will be shown in P and L.

But, we do not want to have it here in cash flow that is why we add it back. So, add loss on sale of some something like a machinery. Similarly, if there is a profit on sale of land that is already shown in P and L so, we reduce it from there because its not operating item, we make a adjustment for it and after adjusting these items we get funds from operations.

(Refer Slide Time: 11:47)

| | |
|--|-----------|
| Funds from operations | XX |
| Add: Decrease in Current Asset | XX |
| Add: Increase in Current Liabilities | XX |
| Less: Increase in Current Asset | XX |
| Less: Decrease in Current Liabilities | XX |
| Cash generated from operation | XX |
| Income Tax Paid | XX |
| Net Cash flow from operating activities | XX |

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After this also there is a third adjustment that is related to your current assets and current liabilities. So, what happens is, from your current assets if there is a increasing current asset, it leads to less cash in the hands of company. So, suppose there are receivables. So, you have sent sold a goods, but you do not get cash your data. So, receivables are increasing your cash is falling.

So, any increasing current asset there is a fall in cash keep in mind there is a competition between current assets and cash; cash is also one of the current asset. So, other than cash

if any other current asset is increasing, it leads to decrease in cash. You can have a look here there is a less increase of current asset similarly if current asset decreases like you have credit you have debtors, debtors pay more cash to you their balance will go down and you have more cash that is my add decrease in current assets.

So, from the balance sheet we will get balances of current assets and liabilities, we would have a look at increase and decrease make the adjustments in the funds from operations that will give you cash generated from operations are you getting me? So, fund is a amount of profit generated, but it is not cash. So, we are making adjustment and calculating cash generated from operation, we will have to deduct the income taxes which are paid that gives you cash flow from operating activities is it clear? This much we are discuss last time, but since it is little more complex we have just revised it again we are now going to next two heads, the next head is investing activities.

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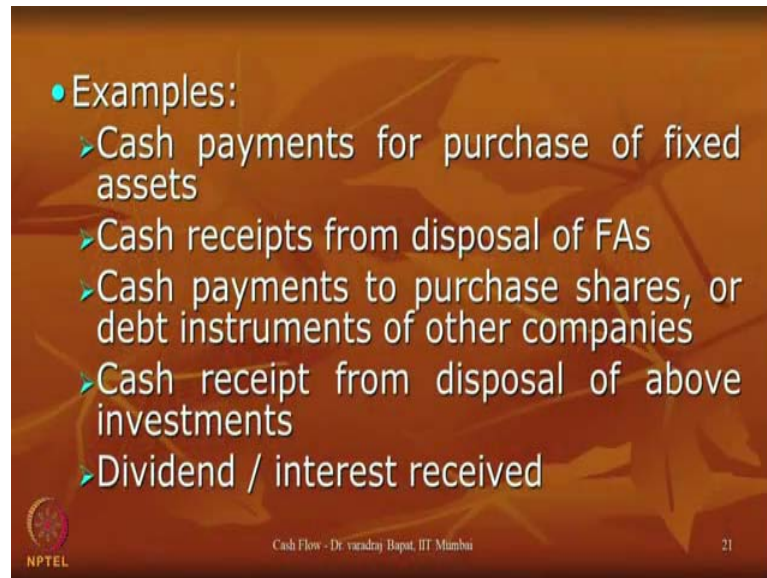
Investing Activities

- The activities of acquisition and disposal of long term assets and other investments not included in cash equivalent are investing activities.
- It includes acquiring and disposal of fixed assets, and investments like debt and equity instruments

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These also bit of we have discuss last time so, all those activities which are related to long term assets like fixed assets or investments, they would be included here in investment investing activities. So, what are the examples? Either purchase or sale of fixed asset; so, purchase of land sale of land, purchase of machinery, sale of machinery these are all investing activities or related to investments like keeping FD or withdrawing FD with bank, purchasing some shares or selling some shares all this is included as investing activities.

(Refer Slide Time: 14:42)



• Examples:

- Cash payments for purchase of fixed assets
- Cash receipts from disposal of FAs
- Cash payments to purchase shares, or debt instruments of other companies
- Cash receipt from disposal of above investments
- Dividend / interest received

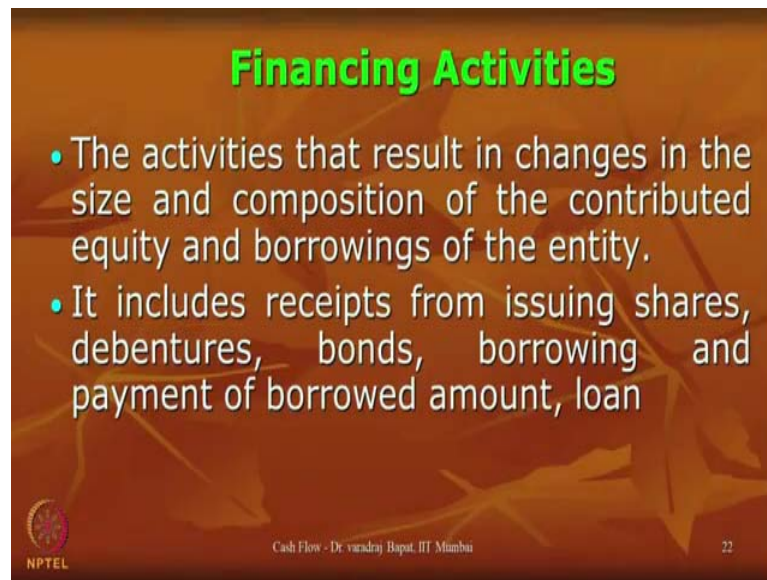
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So, these are few of the examples just have a look at them. If you put FD in bank you will receive interest there on, that interest is also and investing related flow. If you purchase shares you will received dividend there on, that dividend is received because of your investment that is why it is considered as a investing activity that is also an example of investing activity are you getting?

So, in operating activities there were two methods what were the two methods? Direct and indirect; luckily there are no two methods in investing activity you have to directly show whatever is you have received or paid that is why calculation of investing activities very simple there is nothing to be afraid, whatever is a amount which is paid either on fixed assets or investments or received because of them that will be directly show. Keep in mind we are not talking of profit or loss on sale of machinery that is for P and L. In fact, now we are only concerned with the total amount which is either received or paid for fixed assets getting it.

Now, the third type of activity is known as financing activity. Now here in the first session if you remember we had seen that business needs resources, those resources are assets now these assets are financed by somebody. So, somebody makes you payment you get some money from that money you have purchased the assets. Now from where you have raised the money or from where you have generated those finances they are categorized as financing activities.

(Refer Slide Time: 16:45)



Financing Activities

- The activities that result in changes in the size and composition of the contributed equity and borrowings of the entity.
- It includes receipts from issuing shares, debentures, bonds, borrowing and payment of borrowed amount, loan

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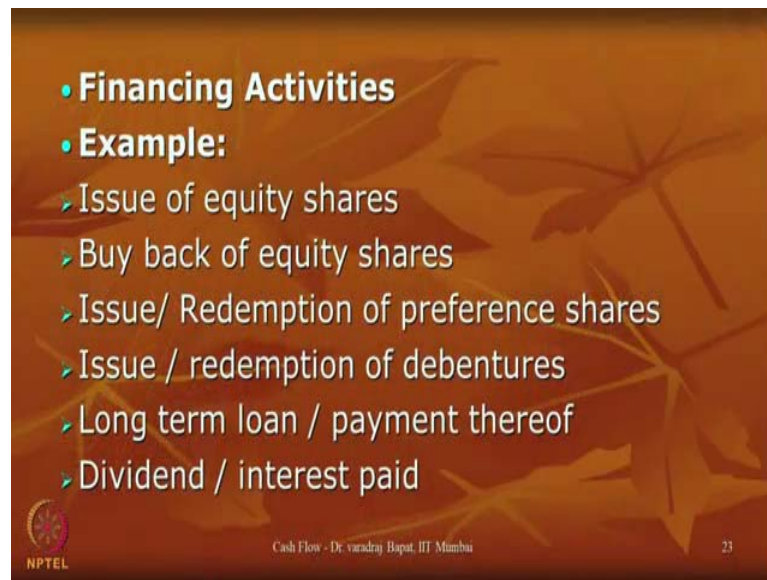
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There are two important types in it one is known as equity, the other is known as borrowings. Do you remember, when we discuss balance sheet we had discussed is I would request you to go back and have a look at balance sheet format. So, what does it fall what does falls under equity? These are the owners funds these are the moneys of the shareholders like share capital or preference share capital that will be shown and what are the borrowings? Borrowings are various types of loans taken by you. So, either loan taken or loan prepaid or interest paid on that loan they are all falling under financing activities.

So, here some examples are given like issue of shares or debentures borrowings and so, on what do you mean by debenture do you remember? So, debenture is also like a loan company obtains a loan and gives a certificate to the lender in the form of debenture certificate, that is called as a debenture. But, it is just like a loan for the company so, that is also a financing activity.

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So, here there are some specific examples when you issue shares exactly reverse of it is called as buyback of shares; that means, company takes back the shares from shareholder and gives them money that is called as buyback of shares so, that also a financing. Same way issue or redemption of preference shares or debentures; in issue what happens? Company receives money gives preference shares. Buyback or redemption is exactly opposite company takes back shares give them cash both the cases the cash is involved and it is related to financing of the business. So, it will fall in the financing category of cash flows are you getting?

Now, whenever you raise funds, you have to compensate your investors in the form of interest or dividend. If you take loan you will pay interest that is also financing activity if you raise money by way of shares you will pay them dividend that is also a financing activity; are you getting all the examples? Now, let us consider some specific items in the cash flow of which the first one is interest. We have just discussed it already, but this will be reinforcing in your mind interest can be received or paid.

(Refer Slide Time: 19:20)

Interest

Interest Received

- Received on investment – it is investing inflow
- Received from short term investment classified, as cash equivalents be considered as cash inflows from operating activities
- Received on trade advances and operating receivables should be in operating inflows
- For financial enterprises – in operating inflow

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Now, to begin with how do you account for interest received? We have already discussed this that you receive interest mainly because you are made investment. So, if you are made investment in bank like FD or if you are made investment in debenture of some other company, you will receive interest from them that will be categorized as investing flow, but there are some exceptions to it which have noted please keep in mind.

Suppose the investment is in cash equivalent for example, investment is in ultra short term deposit which you have categorized as cash equivalent, then it is not an investment. As far as cash flow is concerned it is not an investment that is why interest received on cash equivalent type of investment will be considered not as an investing activity, we will categorize it as an operating activity because it is a day to day item similarly sometimes we receive interest from trade advances getting me?

So, suppose we have put some money as an advance to our suppliers and they give us interest on that amount it is rare it does not happen every now and then, but suppose it is there we have received some interest from it or suppose there is a bill receivable and on bill receivable we have received interest then it is not related to any investment it is not a long term activity. Because typically it is for one month two months three months four months like less than one year, that is why those investments and interest there on would be categorized as operating activities.

And the third example which is for specific type of undertakings or company is known as finance enterprises. What are the examples of finance enterprises? For example, of bank a non banking finance companies for them finance is there business. So, giving loan is their business. So, they are bound to receive interest from their customers, that is there day to day business activity or principal revenue generating activity. So, we will categorize it as operating flows for all finance related companies are you getting. So, this is about interest received.

Now, about interest paid. Now interest paid as you all know by default we will treated as a financing activity, but there are a few exceptions.

(Refer Slide Time: 22:26)

Interest Paid

- On loans/debts is financing activities
- On working capital loan or loan taken to finance operating activities are included in operating inflows
- For financial enterprises - in operating outflow

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Suppose the loan is obtained as a working capital loan, I hope you know what is working capital. Working capital means current assets minus current liabilities this is a capital which is used for day to day activities or if you remember our session 1 and 2 we had seen a business cycle. Now whatever is money blocked up in business cycle you can get some loan from bank for specifically for working capital.

Now, if you pay interest on a working capital loan, it should be categorized as an operating flow not as a financing flow. And the third example or a second exception you can say is for a finance enterprise. Now, naturally for a finance enterprise paying of interest is a part of their day to day activity they receive interest they pay interest so, far them interest paid is categorized as a operating flow are you getting. So, this was about

interest; now based on these can you imagine what will happen for dividend? Because dividend also you get both the categories like dividend interest and dividend received and dividend paid.

Now, if it is dividend paid what will happen? Whom do you pay dividend? We raise money by way of shares. So, share holders pay us as a company their money to compensate them we give them part of share of our profit that is known as dividend. So, it should fall in which category? Is it operating is it investing or is it financing? I think most of you are guessing it correct this is related to raising of funds.

So, it is a financing activity, we have raised funds by way of shares we give dividend to shareholders. So, it will be considered as a financing outflow are there any exceptions like for interest? Now this is a peculiar item there are no exceptions even if it is a finance company, even if it is a operating item or whatever you will never consider it has operating or investing dividend paid is always considered as a financing item.

What about dividend received? Where will dividend received go? Dividend received is very similar to interest received actually by default it will be considered as an investing flow.

(Refer Slide Time: 25:22)



Dividend

- **Dividend Received**
 - For non-financial enterprises- investing inflow
 - For financial enterprises - operating inflow
- **Dividend Paid**
 - Always classified as financing inflow

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You will just go to that slide. So, dividend received what happens is for a non financial enterprises, we will always categorize it as a investing flow because we have made

investment in shares we get dividend. But for a finance company or for a bank we will categorize it as a operating flow because for them it is a day to day activity and dividend paid we have already discuss is always categories as a financing.

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Foreign currency transactions

- The effect of change in exchange rate in cash and cash equivalents held in foreign currency should be reported as separate part of the reconciliation of cash and cash equivalents.
- Unrealized gain and losses arising from changes in foreign exchanges rates are not cash flows.

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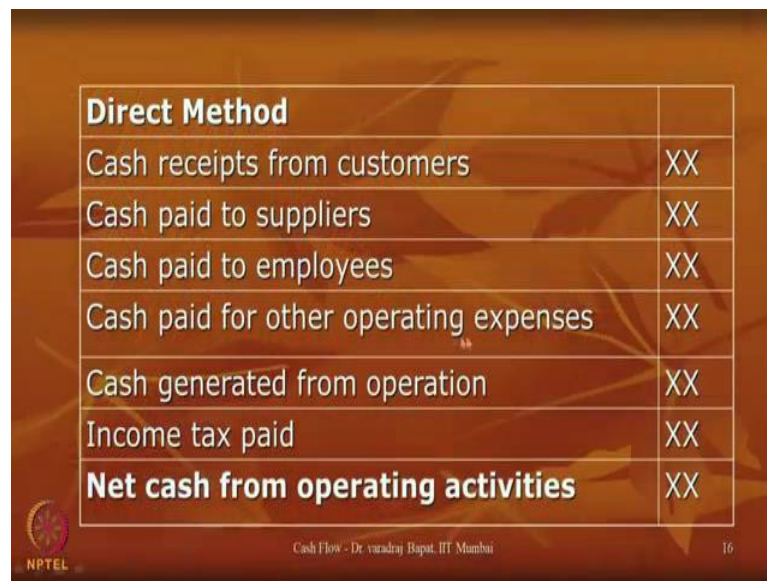
So, you are getting me. So, we have discuss now today few peculiar items, first we discuss the investing operating, then investing, financing and two peculiar item that is interest and dividend. In the next session we will take a few more items and then we will start looking at the problems, Namaste.

Financial Accounting
Prof. Varadraj Bapat
School of Management
Indian Institute of Technology, Bombay

Lecture – 16
Cash Flow Statement 3

Namaste. In last two sessions we have been discussing one of the very important statements that is in the form of Cash Flow Statement. We already revised it last time but I will just give a brief revision, so cash flow statement had three categories, operating, investing and financing. Now, what do you mean by operating do you remember? So, these were principal revenue generating activities; now the challenge in operating activities was it can be by direct method.

(Refer Slide Time: 00:59)



| Direct Method | |
|---|-----------|
| Cash receipts from customers | XX |
| Cash paid to suppliers | XX |
| Cash paid to employees | XX |
| Cash paid for other operating expenses | XX |
| Cash generated from operation | XX |
| Income tax paid | XX |
| Net cash from operating activities | XX |

(Refer Slide Time: 01:03)

| | |
|-------------------------------------|----|
| Retained Earning | XX |
| Add: Dividend paid | XX |
| Income Tax | XX |
| Net Profit Before Tax | XX |
| Add: Depreciation | XX |
| Loss on sale of Asset/Investment | XX |
| Interest Paid | XX |
| Provision for Bad debts | XX |
| Less: Interest/ Dividend Received | XX |
| Profit on sale of Asset/ Investment | XX |

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So, have a look at this format or it can be also calculated by indirect method that is starting from P and L, we have to list out certain activities which are non-operating or non-cash.

(Refer Slide Time: 01:17)

| | |
|--|-----------|
| Funds from operations | XX |
| Add: Decrease in Current Asset | XX |
| Add: Increase in Current Liabilities | XX |
| Less: Increase in Current Asset | XX |
| Less: Decrease in Current Liabilities | XX |
| Cash generated from operation | XX |
| Income Tax Paid | XX |
| Net Cash flow from operating activities | XX |

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And then we also list out working capital items to get cash flow from operating activities.

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Investing Activities

- The activities of acquisition and disposal of long term assets and other investments not included in cash equivalent are investing activities.
- It includes acquiring and disposal of fixed assets, and investments like debt and equity instruments

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(Refer Slide Time: 01:35)

Examples:

- Cash payments for purchase of fixed assets
- Cash receipts from disposal of FAs
- Cash payments to purchase shares, or debt instruments of other companies
- Cash receipt from disposal of above investments
- Dividend / interest received

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Then we discussed the second head which is investing activity, any moment because of fixed assets or investments either buying or selling which was all categorized as investing activities.

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Financing Activities

- The activities that result in changes in the size and composition of the contributed equity and borrowings of the entity.
- It includes receipts from issuing shares, debentures, bonds, borrowing and payment of borrowed amount, loan

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We have also discussed financing activity.

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Financing Activities

- **Example:**
 - Issue of equity shares
 - Buy back of equity shares
 - Issue/ Redemption of preference shares
 - Issue / redemption of debentures
 - Long term loan / payment thereof
 - Dividend / interest paid

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So, these are the examples of financing activities, now these are the movements in equity or in borrowings. Any issue of shares, or purchase of shares, or any issue of debentures, or purchase of debentures, or taking of loan, or repayment of loan paying installment of loan is all considered as financing.

(Refer Slide Time: 02:06)

Interest

Interest Received

- Received on investment – it is investing inflow
- Received from short term investment classified, as cash equivalents be considered as cash inflows from operating activities
- Received on trade advances and operating receivables should be in operating inflows
- For financial enterprises – in operating inflow

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There are two unique items in it which were also discussed that is interest, by default I think you all know that any interest received will be generally considered as an investing flow. Because, you make investment you get interest, but there are exceptions which are equally important. So, keep in mind three exceptions if the investment is of cash equivalent nature, or the interest is received on trade advances, or operating receivables the interest will be an operating inflow. And, if all the interest received is for a finance enterprise like a bank then it is a operating flow.

(Refer Slide Time: 02:48)

Interest Paid

- On loans/debts is financing activities
- On working capital loan or loan taken to finance operating activities are included in operating inflows
- For financial enterprises – in operating outflow

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Then interest paid normally it is a financing activity, but interest on a working capital loan will be a operating activity, and for a finance enterprise we will categorize this as a operating flow.

(Refer Slide Time: 03:06)

Dividend

- **Dividend Received**
 - For non-financial enterprises- investing inflow
 - For financial enterprises - operating inflow
- **Dividend Paid**
 - Always classified as financing inflow

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As far as the dividend is concerned mostly dividend received is an investing flow, but for a finance company it is a operating flow. And for dividend paid it is very simple for any type of enterprise without exception we will categorize it as a financing is it clear are there any queries. As I have told earlier also I remind you about two things all your queries and questions please discuss them on the discussion forum. So, ask to TA's, ask to me or ask to all other colleagues who are also studying with you.

Second important thing is download your annual report and read the statement which we are discussing for your own company. So, for last two sessions we have discussed cash flow, I hope you have seen you have start reading the cash flow of your own company. If you observe any special things, you can of course discuss in the discussion forum are you clear, we will look at some more peculiar items now that is foreign currency transactions.

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Foreign currency transactions

- The effect of change in exchange rate in cash and cash equivalents held in foreign currency should be reported as separate part of the reconciliation of cash and cash equivalents.
- Unrealized gain and losses arising from changes in foreign exchange rates are not cash flows.

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Now, all the transactions may not be in the domestic currency, if it is a foreign currency item then it needs that is also shown in the same cash flow, but it is reported as a separate part of reconciliation of cash and cash equivalent. Because, suppose we are an Indian company we hold some balances in dollars, the value of rupee to dollar will change in the beginning as well as in the end though changes in the value are not as such any cash flow. So, they would be shown as a reconciliation in the cash and cash equivalent.

Now, suppose there are any unrealized gains in the foreign due to foreign exchange rate changes like, we are holding dollars the value of dollar increases, but we are not yet sold those dollars then it is a unrealized gain. So, these are not known as cash flows they would be reconciled in cash and cash equivalent. Now there is, so this is about foreign currency items the second is above the next one is about extraordinary items, I hope you remember the extraordinary items which we had discussed.

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Extraordinary items

The cash flows associated with extraordinary items should be classified as arising from Operating, Investing or Financing activities as appropriate and separately disclosed.

Ex. loss by Fire

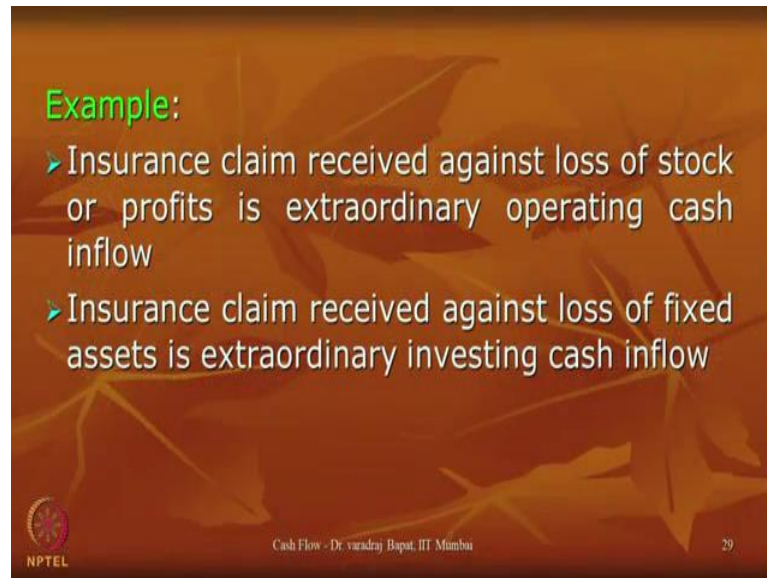
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Now, if the cash flows are associated with extraordinary items they should be shown under the respective heads, but to be separately disclose. So, for example, if there is a loss by fire you know extraordinary means some major loss it is a mega loss by fire. Then under what head will you categorize as a operating or as investing or as finance. What do you feel?

Now here we have to look at what we have lost, suppose stock is lost by fire, then that loss will you show it in cash flow and if yes under which head. First of all this being a non cash item it will not flow in coming cash flow, but if you receive insurance claim for loss of stock where will you show? That insurance claim will be treated since, it is a loss of stock which is a operating item, insurance claim received because of loss of stock or because of loss of profit policy it will be considered as a operating item.

Will it go as investing item anytime? In some cases suppose, it is a claim for loss of machinery because of fire stock and machinery both might be lost. Whatever is a portion related to loss of machinery that will be considered as a cash inflow due to investing activity that is what is known by as whatever is a associated item it will be late ok, so are you getting now I am showing it on screen.

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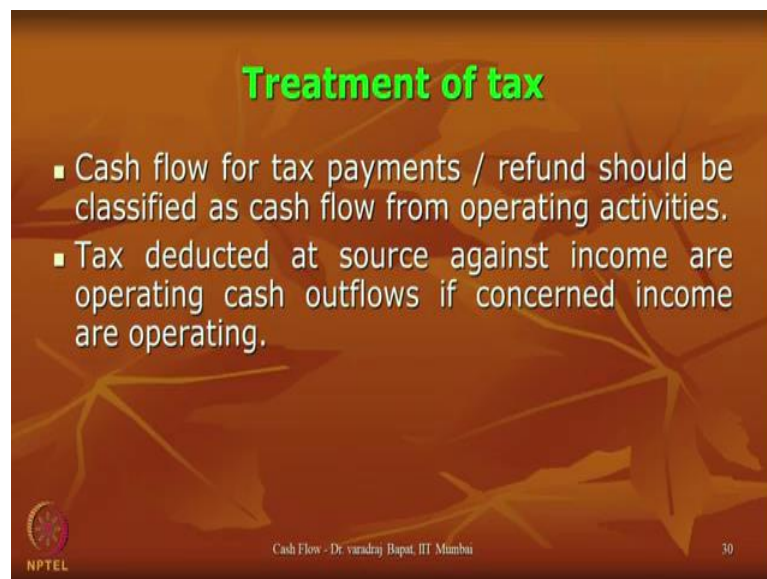
Example:

- Insurance claim received against loss of stock or profits is extraordinary operating cash inflow
- Insurance claim received against loss of fixed assets is extraordinary investing cash inflow

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So, whatever is a relevant item normally it is either operating or investing.

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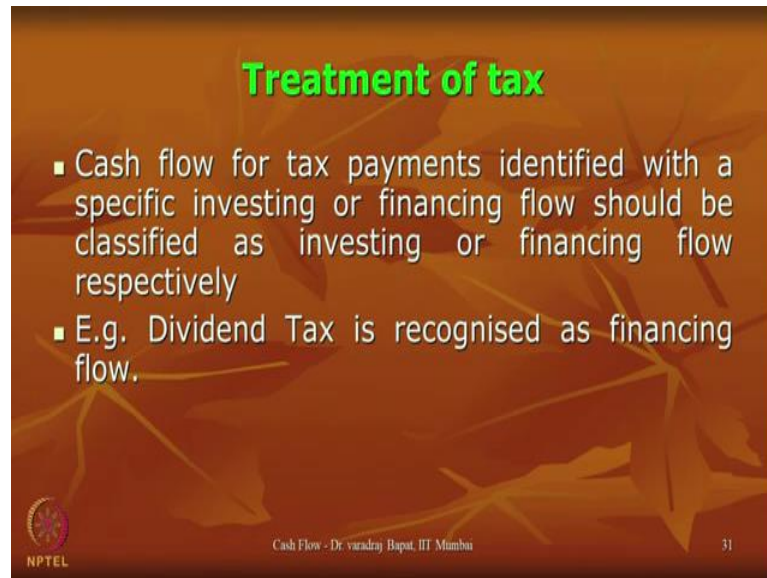
Treatment of tax

- Cash flow for tax payments / refund should be classified as cash flow from operating activities.
- Tax deducted at source against income are operating cash outflows if concerned income are operating.

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Now, next is about treatment of taxes, normally taxes are an operating item; so whatever is a tax paid we will show it as a operating expense.

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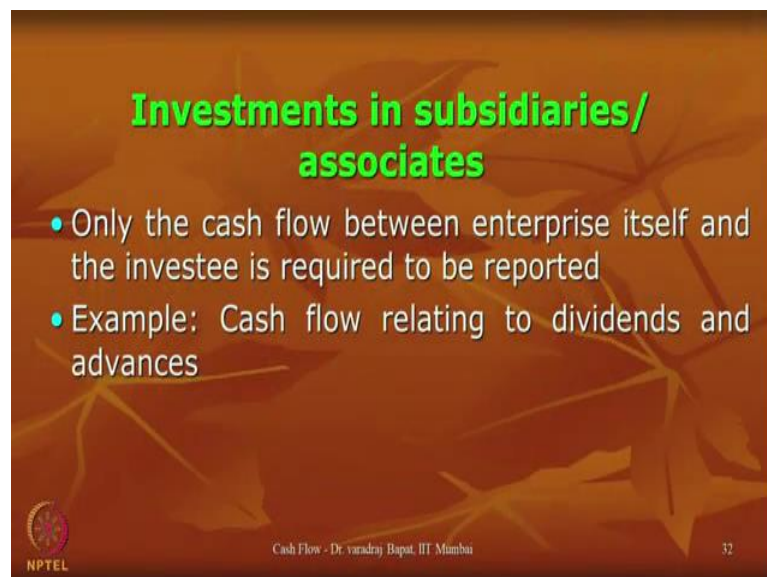
Treatment of tax

- Cash flow for tax payments identified with a specific investing or financing flow should be classified as investing or financing flow respectively
- E.g. Dividend Tax is recognised as financing flow.

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If there are some specific taxes on investing or financing related items we will show it under the respective head. So, example is dividend tax whenever we pay dividend we have to pay tax on that dividend, so taxes on dividend will be categorized as a financing flow. I hope you remember that dividend first of all is financing, so tax there on is also financing. Now, next one is about cash flow related to subsidiaries.

(Refer Slide Time: 08:42)



**Investments in subsidiaries/
associates**

- Only the cash flow between enterprise itself and the investee is required to be reported
- Example: Cash flow relating to dividends and advances

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Now, for subsidiary companies or associate companies since this is a cash flow statement only the cash flow related to enterprise and the investee would be reported, so cash flow related to dividend and advances will be shown.

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Acquisitions and disposals of subsidiaries/other businesses

Cash flow on acquisition and disposal of subsidiaries and other business units should be :

- Presented separately, Classified as investing activities
- Total purchase and disposal should be disclosed separately
- The position of the purchase / disposal consideration discharged by means of cash and cash equivalents should be disclosed separately

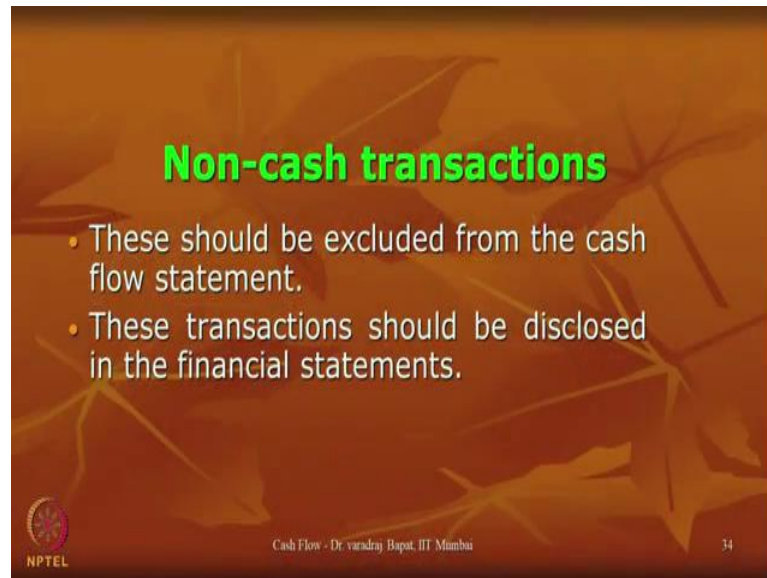
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Now, the next one is a case about acquisition and disposal of various businesses. Now, suppose we acquire another company and make payment there off then it is considered as an investing activity. But, within investing activity it will be separately shown as a investing activity and total amount which is purchased or dispose will be separately shown under the respective activity. Now, if the payment is made by means of cash and cash equivalent, that should be separately shown ok.

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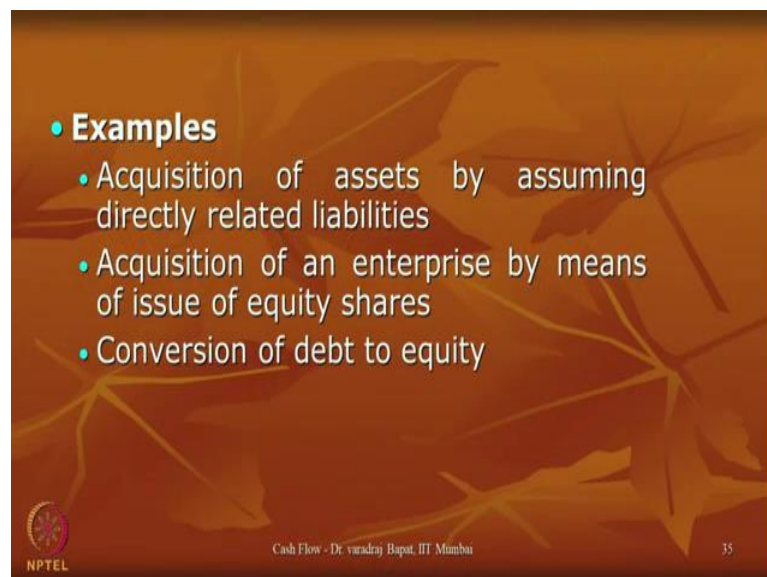
Non-cash transactions

- These should be excluded from the cash flow statement.
- These transactions should be disclosed in the financial statements.

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Now, the next is about non-cash transactions, there are certain transactions which are to be excluded from cash flow and they should not be shown because, it is non-cash in nature. Can you think of any examples of such items that there is a transaction, but it is non cash in nature, so should not come in cash flow. Do you think of any such examples? I think some of you are guessing it correctly.

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Examples

- Acquisition of assets by assuming directly related liabilities
- Acquisition of an enterprise by means of issue of equity shares
- Conversion of debt to equity

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Suppose, you purchase new assets normally we purchase fixed asset and pay for it, so it will come as a investing outflow. But, suppose new assets are purchased, but we do not

pay cash instead of paying cash we are assuming liability against the asset, so we are taking over asset and also taking over liability in exchange. So, no cash payment or receipt is involved, so it will not be shown in the cash flow.

Similarly, sometimes we purchase another company, but do not pay cash make the payment in the form of shares; so we get that business of the enterprise in lieu of that we issue our shares. So, our assets increase, liabilities increase and our share capital increases, no movement of cash then again it is a non cash transaction, another example is conversion of debt into equity.

Now, there are certain types of debentures which are known as convertible debentures. So, those debentures are debt they are converted into equity shares no cash payment or there is a loan taken from bank and we are unable to make repayment. So, bank emphasizes or forces us to convert it into equity, again no cash is involved, so it is also an example of non cash transaction. So, keep in mind that in most cases any movement or asset of liability will lead to cash flow, but we also have to be careful in the notes to see whether there are any non cash flow items then they should not be considered in the cash flow.

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Disclosures of cash and cash equivalents

- The components of cash and cash equivalents should be disclosed
- Reconciliation of the amount in the cash flow statement with the equivalent items reported in the balance sheet

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Now, in the end you are required to make disclosure of cash and cash equivalent, so you should show the total cash, cash equivalent in the beginning and in the end and a reconciliation. Because, in the cash flow statement you have listed all inflows and

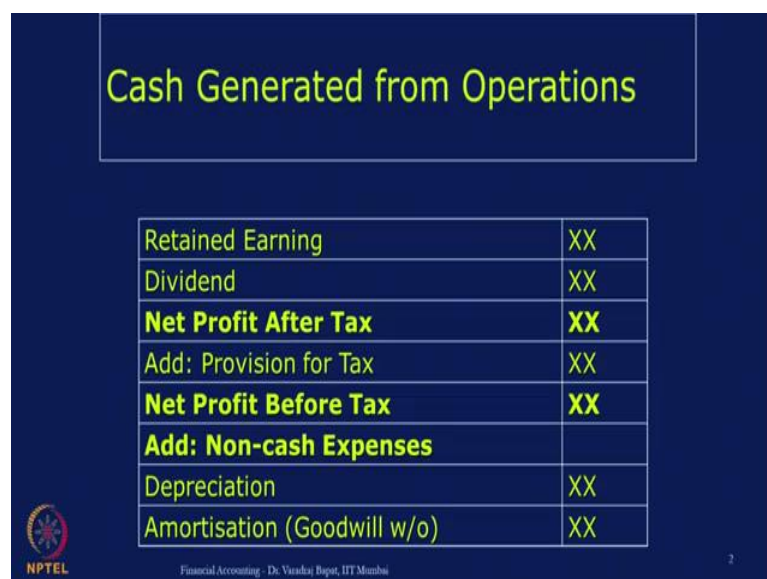
outflows, the net total of that should match with the movement of cash and cash equivalent and it should match with your balance sheet ok. There are also some more disclosures which are mandated by the accounting standards, one is that enterprise has cash and cash equivalent, but that much of balance is not available for use, then it needs to be separately disclosed.

Now when such case will arise can you think of any such item, suppose we are having a branch in Afghanistan we have some cash there, but lot of terrorist activities are on, so we are unable to use it, we will have to separately disclose it. So, any such cash or bank balances not available for business will be separately disclosed, there are also some undrawn borrowing facilities I hope you know about bank overdraft.

So, by bank overdraft bank has sanctioned us loan anytime we can withdraw it, it is almost equivalent to cash for us, but right now we have not withdrawn it, then such these are like balances available. So, they should also be shown by way of note, but if there are any restrictions on use of them they should also be discussed. Are you getting this?

Now, after this we will move to we will have a look at certain formats and then we will move to the actual cases of calculation for cash flow. First let us look at certain formats, now whenever we discuss the operating, investing, and financing items we have looked at examples, but let us look at the actual format how it will be disclose in the cash flow item.

(Refer Slide Time: 14:26)




The slide displays a table with the following content:

| Cash Generated from Operations | |
|--------------------------------|-----------|
| Retained Earning | XX |
| Dividend | XX |
| Net Profit After Tax | XX |
| Add: Provision for Tax | XX |
| Net Profit Before Tax | XX |
| Add: Non-cash Expenses | |
| Depreciation | XX |
| Amortisation (Goodwill w/o) | XX |

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So, this is a format for cash generated from operations I think you have already seen it, but this is more detail. So, have a look at it, it starts with retained earnings, add dividend you get net profit after tax; keep in mind normally in P and L account your incomes minus expenses the last item is profit. Here we start with profit and go to cash from operations, add the tax expenses for the year you get net profit before tax then add non-cash items.

(Refer Slide Time: 15:07)




| | |
|--|-----------|
| Adjust: Non-operating items | XX |
| Loss on sale of Asset/Investment | XX |
| Interest expenses | XX |
| Interest/ Dividend Income | (XX) |
| Profit on sale of Asset/ Investment | (XX) |
| Funds from Operations | XX |

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So, depreciation or amortization like goodwill written off, then adjust for non operating items. So, loss on sale of assets or interest expenses are added interest dividend income or profit is reduced that is why you can see it is in bracket.

(Refer Slide Time: 15:23)



| | |
|--|-----------|
| Adjust: Working Capital Items | XX |
| Decrease in Current Asset | XX |
| Increase in Current Liabilities | XX |
| Increase in Current Asset | (XX) |
| Decrease in Current Liabilities | (XX) |
| Cash generated from operation | XX |
| Income Tax Paid | (XX) |
| Cash flow from operating activities | XX |

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You get fund from operations then adjust for working capital items, so any decrease in current asset or increase in current liabilities added and reverse that is increase in current assets. See cash is also a current assets, so it is in competition with other current asset, if other current assets goes up the cash falls; that is why increase in current asset is reduced, if there is a decrease in current liability then the cash falls.

So, cash and current liabilities go together any increase in current liability you can see here is leading to increase in cash decrease in current liability reduces our cash. Now, these items will be adjusted and you get cash generated from operations of course, you will have to now reduce the income tax. So, you get cash flow from operating activities this is the end of the first part of cash flow statement then.

(Refer Slide Time: 16:28)




| Cash Flow from Investing Activities | |
|---|-----------|
| Purchase of Assets / Investment | (XX) |
| Sale of Assets / Investment | XX |
| Interest / Dividend received | XX |
| Investment in joint venture | (XX) |
| Cash flows from investing activities | XX |

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The second and third are very simple, now cash from investing activity you have to just list the items.

(Refer Slide Time: 16:37)



| Cash Flow from Financing Activities | |
|--|-----------|
| Issue of shares/ debentures for cash | XX |
| Redemption of Preference shares/ debentures | (XX) |
| Interest / Dividend paid | (XX) |
| Proceeds from borrowings | XX |
| Repayment of loan | (XX) |
| Cash flows from financing activities | XX |

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Next is cash from financing activity.

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| Cash Flow from Investing Activities | |
|---|-----------|
| Purchase of Assets / Investment | (XX) |
| Sale of Assets / Investment | XX |
| Interest / Dividend received | XX |
| Investment in joint venture | (XX) |
| Cash flows from investing activities | XX |


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I think you know the examples, so though there is no direct or indirect directly those items you can add in the cash flow statement.

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Cash Flow Statement

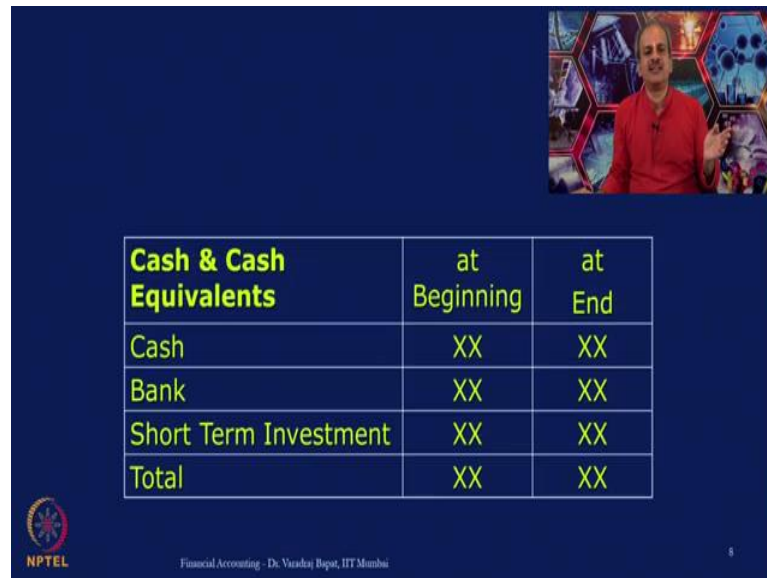
| | |
|---|----|
| 1. Cash Flow from Operating Activities | XX |
| 2. Cash Flow from Investing Activities | XX |
| 3. Cash Flow from Financing Activities | XX |
| Net Increase / decrease in cash (1+2+3) | XX |
| Cash & Cash Equivalents at the beginning | XX |
| Cash & Cash Equivalents at the end | XX |



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So, at this stage you have got first second and third type of activities, so you get net increase or decrease of cash which is a total of 1 plus 2 plus 3. Then you add cash and cash equivalents at the beginning, so you get cash and cash equivalent at the end ok. Now, here it should match the total increase plus beginning should be what is there in the end.

(Refer Slide Time: 17:21)



| Cash & Cash Equivalents | at Beginning | at End |
|------------------------------------|---------------------|---------------|
| Cash | XX | XX |
| Bank | XX | XX |
| Short Term Investment | XX | XX |
| Total | XX | XX |

Now, apart from this you have to also show reconciliation of the balances, so in the balance sheet you will have the value or the balances of cash and cash equivalent they are restated in the cash flow statement both at the beginning and the end. So, the closing cash flow statement will show balances in the beginning as well as end of cash, bank, and short term investments which you are treating as cash equivalent are you getting.


So, with this we have discussed the format, now we will go into actual case the cases will be available to you on the Google link, but right now I am showing them here I would request you to read it carefully and we will also try to solve those that is the solution of them.

(Refer Slide Time: 18:15)

Exercise 1.
Prepare cash flow statement from the following details of the Narendra Ltd.

Profit and Loss A/c for the year ending 31 March 2010¹ is as follows

| | |
|----------|--------|
| Sales | 200000 |
| Interest | 15000 |

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So, have a look at the case we are given a profit and loss account.

(Refer Slide Time: 18:18)

| | |
|----------------------|---------------|
| Total Income | 215000 |
| Purchase | 70000 |
| Wages | 28000 |
| Interest | 14000 |
| Depreciation | 9000 |
| Office Exp | 30000 |
| Goodwill written off | 11000 |
| Tax | 37000 |
| Dividend | 3000 |
| Net profit | 13000 |

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So, sales and interests are given that is a total income of 215000, then various expenses are given like purchases, wages, interest, depreciation, office expense, goodwill, tax, dividend, so you get net profit.

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Balance Sheet of the Narendra Ltd

| | 2009 | 2010 |
|---------------------|---------------|---------------|
| Liabilities | | |
| Share Capital | 160000 | 190000 |
| General Reserve | 50000 | 50000 |
| Profit and Loss A/c | 9000 | 22000 |
| Debentures | 80000 | 51000 |
| Creditors | 20000 | 40000 |
| Proposed Dividend | 2000 | 3000 |
| | 321000 | 356000 |

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Then opening and closing balance sheet is given ok, so, liability side is given to you, then the asset side is given to you.

(Refer Slide Time: 19:02)

| | 2009 | 2010 |
|----------------|---------------|---------------|
| Assets | | |
| Land | 75000 | 75000 |
| Fixed Assets | 140000 | 131000 |
| Investment | 59000 | 111000 |
| Sundry Debtors | 12000 | 17000 |
| Bank | 5000 | 3000 |
| Goodwill | 30000 | 19000 |
| | 321000 | 356000 |

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So, you have got P and L at the end of year, then opening balance sheet and closing balance sheet with this much information we have been asked to prepare cash flow statement. Now, how will you proceed, now as per as the operating cash flow is concerned, I am just going back this P and L statement is what is going to give you operating cash flow.

So, we will start with net profit make adjustments here add and less they will give you operating cash flow, balance sheet items are mostly related to investing or financing. So, any change in the balance sheet item you should note carefully that is going into investing and financing; of course, there will be few items in the balance sheet which will have impact on operating also, so be careful about them ok.

So, let us start with balance sheet one by one look at the change and take a notebook and note whether that particular change is investing or financing. Once you have done that rest of the job is very simple it just clerical work you have to note it in the format as a cash flow statement are you getting me. So, please try to solve with me, now the first item share capital, there is a increase from 160000 to 190000.

You do not have to write the full balance sheet, but just write ac or something in short form and note whether what type of item it is, so is it operating item or investing item or financing item. So, I recommend that you just write ac write o or i or f whatever you feel it is, so can you guess what type of flow it is? See there is a movement from 160 it has increased to 190.

So, it is some type of cash flow, is it an operating? I think answer is no, because share capital has nothing to do with day to day business, is it investing? Again the answer is no, because we are not making investments here. Some of the shareholders have made investment in our company and we have issued them shares, that is why our share capital balance has increased. So, it is not o not i it is a f type of item that is financing item, please note it as f, so share capital in front of this you write f, is it an inflow or outflow? Better we write as inflow or outflow what it is see the share capital balance has increased.

So, we have received money and we have given them shares it is a cash flow statement, so cash has coming or has gone out, cash as actually come in. So, for the sake of working note write it as f inflow; that means, finance inflow, like that we will categorize each item I think the rest of the work is very simple. The next is general reserve, which type of item it is actually there is no change, so there is nothing has happened just take it or say dash or something like that, next is P and L account. Now, this is not profit and loss account this is a balance of P and L account which as increase from 9000 to 2200.

So, it is which type of item, actually if you do 22 minus 9 there is an increase of 13000 you can see here net profit, actually this is not even net profit this is a profit which is transferred to balance sheet ok. So, 13000 is added to the balance of P and L in the balance sheet, so it is what type of item? This increases because of the profit generated, so it is an o type of item. So, right now you just mark it as o we will when we solve our operating we will take it into account, but right now let us mark it as o.

Next is debentures, debenture balance has reduced from 80000 to 51000, now you will categorize it as which type of item; see some movement has happened there is a decrease in the balance. So, we must have redeemed the debentures; that means, we have paid money and cancelled part of the debentures of how much amount, 29000 which is a difference. So, it is which type of item is it o or i or f, it is not o its not day to day item it is neither I it is not our investment it is f item we had raised money by way of debentures now we are repaying it. So, mark it as f is it inflow or outflow it is basically an outflow we are making payment, so mark it as f outflow.

Next one is creditors from 20 they have increased to 40, so it is what type of item? If you remember it is required for calculating our operating flows this is a working capital item. So, mark it as o if want you can also say its working capital w cap or something can write, but basically it is an o item, it is not a direct inflow or outflow. Next is proposed dividend, now this is a tricky item it has increased from 2 to 3 it is what type of item? Is it o? No, is it i? No, it is f, I think you remember we have discussed that payment of dividend is always f, how much amount? 2000 or 3000 or 1000.

Mostly the difference is the cash flow, but here it is not difference the whole of last year's amount would have been paid just have a look at P and L also, in profit and loss you can see dividend 3000. So, what has happened is at the end of the current year we have made a proposed dividend of 3 it is this amount, and last year's 2000 last year means on 31st march 2019 200 would have been provided they would have already paid it, and for this year new 3000 has been provided.

So, the entire amount of 2000 this is a special item please mark it carefully, so this 2000 is f outflow, it is a financing item it is an outflow, 3000 is not outflow it is basically a P and L item. So, you can write it as an o see dividend is a very special item it is going to

come two times this is f outflow and 3000 is o we will consider it when we look at P and L account.

Now, let us I hope you have understood the liability items we are going to see the answer also, but better you note it and we will solve it together. Now, we will go to assets in assets the first item is land, land there is no change so dash, fixed assets there is a fall in fixed asset from 140 to 190 1. So, what is happened there could be sale, but it can be wrong also because please look there is a depreciation ok.


So, depreciation of 9000 it matches here, so there is a reduction in the value of fixed asset no purchase or no sale, so probably it is dash. We will look at it once again, investment 59000 increasing to 1 1 1. So, what type of item it is, there is a increasing investment we have made payment and investment has increased, so it is a investing type of flow first time investing flow is coming, so mark it as I outflow are you getting.

Next is sundry debtors, 12 to 17 what type of item? It is a working capital item or o item, so mark it as o and we will adjust it in the operating flow. Next is bank, what type of item it is? Actually it is a tricky item is not an item it is a cash equivalent. So, write its c, c for cash; goodwill, goodwill you can see it has fallen from 30 to 19 normally goodwill falls because of amortization.

So, we will have to look in P and L account, you can see here goodwill written off 11000, so 30 to 19 the difference is because of goodwill return of right now you can mark it as a o item, so I hope you have understood all the markings of balance sheet. Now, as far as the P and L account is concerned I am once again taking you to P and L start with net profit and go back adjusting these items as per our format they can be plus or minus for few items which are non operating or non profit.

(Refer Slide Time: 30:16)

| Cash Flow statement | |
|--|--------------|
| Retained earnings | 13000 |
| Dividend | 3000 |
| Profit as per Profit & loss A/c | 16000 |
| Depreciation | 9000 |
| Goodwill written off | 11000 |
| Interest Expenses | 14000 |
| Income Tax | 37000 |
| Interest Income | (15000) |
| Funds from operations | 72000 |

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So, we will now go to the solution only the first part is be tricky, now here we are starting with operating flows. So, please have a look at P and L we are go in the reverse order we start with profit add dividend, add tax, add goodwill, like that we go on adding the items which are these two are added because their financing item this is a financing item tax is the tax which is provided goodwill is written off depreciation is written off they are non operate non-cash items I will just show you the solution.

So, retained earnings plus dividend give you profit as per P and L account which is 16000, add depreciation, add goodwill, add interest expense, add income tax, add and reduce interest income. See here in P and L we had a interest income of 15000 which was added for P and L now we will reduce it; I know it is bit complicated, but just keep in mind as per format we are going these gives us funds from operations.

(Refer Slide Time: 31:31)


| | |
|---|----------------|
| Add: Increase in creditors | 20000 |
| Less: Increase in Debtors | (5000) |
| Cash generated from operation | 87000 |
| Income Tax Paid | (37000) |
| Net Cash flow from operating activities | 50000 |
| Cash Flow from Investing Activities | |
| Purchase of Investment | (52000) |
| Interest Income | 15000 |
| Net cash flows from investing activities | (37000) |

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Now, in funds from operations we are going to adjust to working capital items, so add increasing debtors and less sorry add increase in creditors and less increase in debtors this gives me cash generated from operations, now income tax will come twice because here income tax provided was added.

(Refer Slide Time: 32:04)

| | |
|---|----------------|
| Cash Flow from Financing Activities | |
| Issue of shares | 30000 |
| Dividend | (2000) |
| Redemption of Debentures | (29000) |
| Interest paid | (14000) |
| Net cash flows from Financing activities | (15000) |
| Net decrease in cash | (2000) |
| Cash and Cash Equivalents at the beginning | 5000 |
| Cash and Cash Equivalents at the end | 3000 |

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Now, this one this amount 37000 same amount of tax is also paid that is why I will pay out the income tax income, tax paid I get net cash flow from operating activities are you getting operating is only bit complicated investing is very simple I think you already

noted two items, one is purchase of investment, so it is less and interest income is our income, so you add it getting it.

So, 37000 negative is a investing activity the next is financing activity say very simple again four items issue of share is a receipt, dividend, redemption and interest is a payment. So, financing activities negative 15000, now the total of three all the three items, so we had taken 50000 as a operating activities and minus 37 as a flow from investing and minus 15 as a flow from financing. If you add these 3 there is a net reduction of 2000, so net decrease in cash. Then go to balance sheet balance sheet has a opening bank balance of 5000 and closing bank balance of 3000. So, if you take minus 2 plus 5 you will get 3000, so here the cash flow statement tallies.

(Refer Slide Time: 33:45)

| Cash & Cash Equivalents | at Beginning | at End |
|--|-------------------------|---------------|
| Bank | 5000 | 3000 |
| Total | 5000 | 3000 |



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We will also make a reconciliation in the beginning and end there is only one item, so beginning is 5000 end is 3000. So, we already knew that there is a fall of 2000 from balance sheet in the bank balance, now we have explained it through cash flow statement. I hope you have understood it, once again have a look at both the problem and the solution this is a starting and a simple problem and it will give you proper insights into cash flow statement ok.

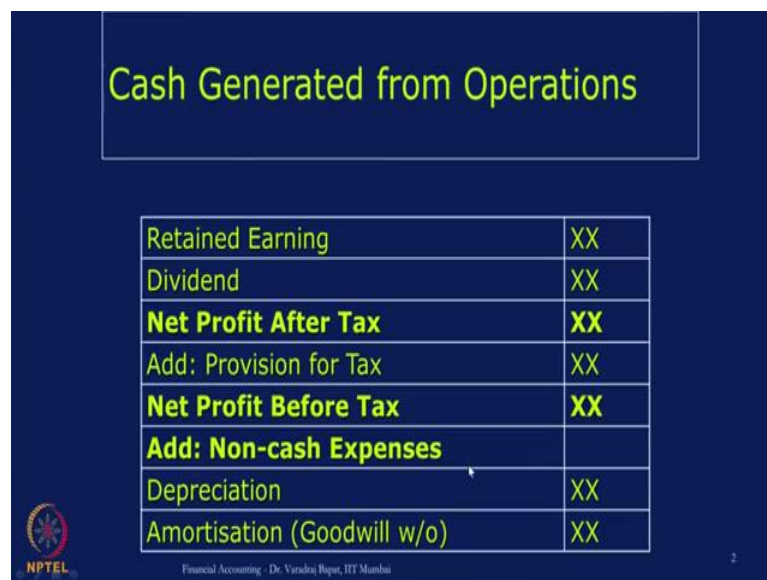
So with this we will stop Namaste.

Financial Accounting
Prof. Varadraj Bapat
School of Management
Indian Institute of Technology, Bombay

Lecture – 17
Cash Flow Statement 4

Namaste. Welcome everybody we have been discussing about Cash Flow Statement. I hope you have gone through the given notes and understood what is a cash flow statement; please also have a look at cash flow statement for your own company. Today we will do second case on cash flow statement which will cover various aspects related to preparation of the statement, a small revision before that.

(Refer Slide Time: 00:52)




Cash Generated from Operations

| | |
|-------------------------------|-----------|
| Retained Earning | XX |
| Dividend | XX |
| Net Profit After Tax | XX |
| Add: Provision for Tax | XX |
| Net Profit Before Tax | XX |
| Add: Non-cash Expenses | |
| Depreciation | XX |
| Amortisation (Goodwill w/o) | XX |

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If you remember in the cash flow statement there are three sections, one is cash from operations cash flows from operations, second is cash flows from investing activities and third is cash flows from financing activity. In the first part we calculate the cash generated from day to day activities of the business and normally it is done using indirect method. So, we start with profit, then add back noncash items or non operating items, we make adjustment for some of the items which need to be deducted.

(Refer Slide Time: 01:39)




| | |
|--|-----------|
| Adjust: Non-operating items | XX |
| Loss on sale of Asset/Investment | XX |
| Interest expenses | XX |
| Interest/ Dividend Income | (XX) |
| Profit on sale of Asset/ Investment | (XX) |
| Funds from Operations | XX |

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So, in short we can say that the depreciation should be added or items like loss or interest expenses are added, while items like interest income or profit on sale of investments are reduced.

(Refer Slide Time: 02:04)



| | |
|--|-----------|
| Adjust: Working Capital Items | XX |
| Decrease in Current Asset | XX |
| Increase in Current Liabilities | XX |
| Increase in Current Asset | (XX) |
| Decrease in Current Liabilities | (XX) |
| Cash generated from operation | XX |
| Income Tax Paid | (XX) |
| Cash flow from operating activities | XX |

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That gives you funds from operations, then we also have to make adjustment for working capital items, we need to make adjustment for income tax that gives you cash flow from operating activities.

(Refer Slide Time: 02:18)




| Cash Flow from Investing Activities | |
|---|-----------|
| Purchase of Assets / Investment | (XX) |
| Sale of Assets / Investment | XX |
| Interest / Dividend received | XX |
| Investment in joint venture | (XX) |
| Cash flows from investing activities | XX |

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Next one is pretty simple all those items which are related to investment both inflows and outflows like purchase or sale of assets or interest received, they are all shown under the head investing activities.

(Refer Slide Time: 02:34)



| Cash Flow from Financing Activities | |
|---|-----------|
| Issue of shares/ debentures for cash | XX |
| Redemption of Preference shares/ debentures | (XX) |
| Interest / Dividend paid | (XX) |
| Proceeds from borrowings | XX |
| Repayment of loan | (XX) |
| Cash flows from financing activities | XX |



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6

Third one is financing activities, where we show all those items related to raising of funds by the business like issue of shares or issue of debentures or taking loan and the reverse of this, that is redemption of share or redemption of debenture or repayment of loan interest or dividend paid there on.

(Refer Slide Time: 03:00)

Cash Flow Statement

| | |
|---|----|
| 1. Cash Flow from Operating Activities | XX |
| 2. Cash Flow from Investing Activities | XX |
| 3. Cash Flow from Financing Activities | XX |
| Net Increase / decrease in cash (1+2+3) | XX |
| Cash & Cash Equivalents at the beginning | XX |
| Cash & Cash Equivalents at the end | XX |

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So, these are the three headings, then we take the total of the three and that we match with the increase or decrease of cash during that particular period. We have already done one case now we will go for the second case.

(Refer Slide Time: 03:20)

Case 2.

Prepare cash flow statement from the following details of Keshav Ltd.

Profit and Loss A/c for the year ending 31 March 2020 is as follows

| | |
|------------------------------|--------------|
| Sales | 90000 |
| Profit on sale of investment | 2000 |
| Revenue from Services | 6000 |
| Total | 98000 |

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So, with this introduction now we prepare for the second case, it will be better if you take the printout of this particular case so, that you can actually solve as I am also solving it ok. Now look at the given data, we have been given profit and loss account for year 31st March 2020.

So, sales profit on sale of investment and revenue from services total is 98000.

(Refer Slide Time: 03:52)

| | |
|--------------------------------|--------------|
| Total | 98000 |
| Consumption of Materials | 40000 |
| Manufacturing Expenses | 17000 |
| Wages | 1400 |
| Depreciation | 5000 |
| General Expenses | 3000 |
| Discount on issue of debenture | 3000 |
| Tax | 6000 |
| Interim Dividend | 5000 |
| Profit Retained | 17600 |

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Now, from these there are deductions like consumption of material, manufacturing expenses, wages, depreciation, general expenses, discount on issue of debentures, tax, interim dividend and we have got profit retained which is 17600. We have also been given 2 years figures of balance sheet for March 19 and March 2020.

(Refer Slide Time: 04:23)

Balance Sheet of Keshav Ltd

| | 2019 | 2020 |
|------------------------|---------------|---------------|
| Liabilities | | |
| Share Capital | 50000 | 50000 |
| General Reserve | 10000 | 10000 |
| Profit and Loss A/c | 8000 | 25600 |
| Debentures | 10000 | 27000 |
| Creditors | 16000 | 10000 |
| Differed Tax Liability | 7000 | 12000 |
| | 101000 | 134600 |

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(Refer Slide Time: 04:29)

| | 2019 | 2020 |
|----------------------|---------------|---------------|
| Assets | | |
| Land | 40000 | 40000 |
| Equipment | 21000 | 55600 |
| Investment Long Term | 5000 | 3000 |
| Sundry Debtors | 15000 | 14300 |
| Bank | 5000 | 6700 |
| Goodwill | 15000 | 15000 |
| | 101000 | 134600 |



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So, again you can see certain items of liabilities and certain items of assets. Now using this information you are required to prepare cash flow statement ok. So, how shall we go about? You all know that if there is a change in the balance sheet between the 2 years that should be considered as most likely item of impact on cash. So, let us start with balance sheet, take every item of balance sheet and we will mark it as inflow or outflow and also as either as O, I or F if we feel that some moment has happened.

So, let us start with share capital share; capital you can see there is no moment, general reserve again no moment for profit and loss account we do see increased from 8000 to 25600. Now, this change is more slightly to have some impact on cash flow.

(Refer Slide Time: 05:46)

| Cash Flow statement | | | | |
|------------------------|--------|--------|--------|-------|
| | 2019 | 2020 | change | OIF |
| Liabilities | | | | |
| Share Capital | 50000 | 50000 | 0 | |
| General Reserve | 10000 | 15000 | 0 | |
| Profit and Loss A/c | 8000 | 20600 | 17600 | O |
| Debentures | 10000 | 27000 | 17000 | F |
| Creditors | 16000 | 10000 | -6000 | CA/CL |
| Differed Tax Liability | 7000 | 12000 | 5000 | O |
| | 101000 | 134600 | 33600 | |

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Now, it is what type of item? I will just take you to the solution. So, normally make five columns like this particular than 2 years figures change and OIF. Now, is there a change here in case of cash flow? Yes now we want to mark it as O,I or F. Now you all know that the change in the profit and loss account is due to the profit accumulated during the year and it is mainly the operating related item. So, we have marked it as O; now this is our working, this does not mean exact amount will go in cash flow statement, but to start with we are going to mark every change. We will also have a look at P and L items and then after considering both we will go for preparation of cash flow.

Now, the next one is debentures; you can see debentures there is a increase from 10000 to 27000. So, it is what type of item? You know that debenture is for raising of funds and from 10000 it has increased to 27. So, 17000 increase; that means, new debentures are issued. So, we will consider it as a what type of item? O or I or F, it is a F type of item that is financing item.

Next one is creditors. Creditors you can see 16 to 10. So, it is a fall of 6000. Now it is what type of item? Is it operating, investing or financing or none of the above? Actually only three categories so, none of the above does not exists, but it is not investment, it is not finance also and this is a item which is related to normal activities of the business. So, we will mark it as O particularly it is a working capital item ok. So, you can see here 16 to 10. So, minus 6 and this is I have marked it as CA or CL; that means, I know it is a

current liability, but I have marked it as CACL because it is something to do with current assets and liabilities; actually how to treat it we will go in the next step.

Next is differ tax liability it is gone up from 7 to 12. So, plus 5000 and taxation is a operating item. So, I have marked it as O. Are you clear? So, like this for every item in balance sheet assigned O, I or F or CACL; CACL is a part of O actually now this will help us for preparation of cash flow let us go to assets.

(Refer Slide Time: 08:44)

| Cash Flow statement | | | | |
|----------------------|--------|--------|--------|------|
| | 2019 | 2020 | Change | OIF |
| Assets | | | | |
| Land | 40000 | 40000 | 0 | |
| Equipments | 21000 | 55600 | 34600 | I |
| Investment Long Term | 5000 | 3000 | -2000 | I |
| Sundry Debtors | 15000 | 14300 | -700 | CACL |
| Bank | 5000 | 6700 | 1700 | C |
| Goodwill | 15000 | 15000 | 0 | |
| | 101000 | 134600 | 33600 | |

Now, in assets again there are changes. So, land there is no change equipment it has gone up from 21 to 55600. Now, it is what type of item? Is it F? Is it? I? I think the answer is yes we have made investment in the equipment new equipments have been purchased. So, write the change here and mark that change as I item ok 34600 I. Next is investment long term you can see investment has gone down from 5000 to 3000. So, minus 2000 it is investment so; obviously, it is a investing item; so, I category of item: sundry debtors. Sundry debtors you can see has gone down from 15000 to 14300.

So, it is minus 700, what type of item it is? You know it is a current asset. So, it is marked as CACL, next one is bank. Bank has gone up from 5000 to 6700. So, 1700 what type of item it is? O, I or F I think many would have marked it as O because it is a current asset or you can mark it as CACL, but in reality it is not be caution because bank balance is a part of your cash balance. So, we are making a cash flow statement any change in the cash balance is not to be shown in the cash flow.

We will take it in the last part of cash flow statement as a reconciliation ok. So, what I have done is for convenience, you can see here sundry debtors are marked as CACL and bank is marked as C; C means cash. So, it is cash and cash equivalent kind of item goodwill there is no change so 0. I hope you are getting, once again I am taking you to balance sheet liabilities, have a look at all the items you will realize that normally in the liability side there are F type of items or O type of items.

And normally in assets there will be I type of items because there will be investments like fixed assets or investments and there would be O type of items or CACL type of items are you getting? Now let us go back to P and L from profit or loss account have a look at those items which will have impact on cash flow. So, suppose sales is 90000 will it have impact on cash flow? So, we would have received 90000 is it O I or F type of received?

Again many of you would have marked it as O, but keep in mind that is a not the correct answer then what type of item it is? Is it I or f the answer is no because it is an normal day to day item and in the indirect method we do not show normal items related to operations I will just take you to the actual calculation.

(Refer Slide Time: 12:41)

Keshav Ltd. Profit and Loss A/c for the year ending 31 March 2020 Marking relevant items

| | | | |
|------------------------------|--------------|--------|----|
| Sales | 90000 | No adj | |
| Profit on sale of investment | 2000 | IO | +- |
| Revenue from Services | 6000 | No adj | |
| Total | 98000 | | |

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So, this is how I have made the format, first is sales very tricky item because many times peoples feel that sales means cash has come in keep in mind we do not follow a direct method. So, we are going to take profit and loss as a starting point and only we are going

to mark three category of items. Items like depreciation which are non-cash, items like profit on sale of investments which are related to not operation something else, that is non operating items and CACL type of items are you getting me? So, in the sales the first item sales I have written it has no adjustment.

The next is profit on sale of investments which is 2000. You all know that since this is a profit on sale of investment it is a investing flow. So, I have marked it as I it will have one impact on operating flow as well because we have already considered it in P and L account, we have already added it in profit. So, we will have to reduce it from profit that is why it is a marked as both I and O. Remember balance sheet items have only one impact P and L items are going to have two impacts because balance sheet is already balance P and L accounts are coming from outside in the cash flow statements.

So, they will have two impacts on cash flow. So, they have been marked as 2; either it will not have any impact no adjustment or it will have two impacts. So, I and O in I it is plus, plus means cash is coming in and in O it is minus. This is just a working note for our understanding, but it will ease our actual making of cash flow are you getting me? Next is revenue from services you know that any revenue earn is a day to day item it is just like sales is from sale of goods. They might have also provided some services, for which they have earned 6000 this is not a cash flow item so, I have marked it as no adjustment ok.

(Refer Slide Time: 15:10)

| | | | |
|--------------------------------|--------------|----------|----------|
| Total | 98000 | | |
| Consumption of Materials | 40000 | NA | |
| Manufacturing Expenses | 17000 | NA | |
| Wages | 1400 | NA | |
| Depreciation | 5000 | O | + |
| General Expenses | 8000 | NA | |
| Discount on issue of debenture | 3000 | OF | + |
| Tax | 6000 | OO | + - |
| Interim Dividend | 5000 | FO | - + |
| Profit Retained | 17600 | O | + |

Let us go to the next one. So now, consumption of material 40000: where we need go OIF? I will request you to mark all the items; manufacturing, wages, depreciation, general expenses and so, on are you able to make up your mind? Even if it goes wrong no problem mark it and then we will go to the next step just mark whatever you feel.

So, consumption of raw material materials will go as a O item. Maybe few of you have made mistake it is not a O item it is a no adjustment item. So, ignore it put a dash or write no adjustment; manufacturing expenses again same thing it is a normal day to day item. So, no adjustment; wages no adjustment: depreciation again no adjustment? No it has. Because it is a non-cash item though it is reduced from P and [laughter], it is not involving any cash outflow. So, we will mark it as O it will also have some impact on the equipment or the machinery account. So, in O that is in the operating flows it is going to be added.

So, I have marked it as plus and in I that is in the machinery we will mark it as minus. So, depreciation OI plus and minus getting? This will be true for all non cash items they will be added in the cash flow statement. General expenses no adjustment; discount on issue of debentures will it involve any cash flow? Indirectly yes because when we issue debentures we should have got cash, but to the extent of discount we will not receive cash its a F type of item, it will also have impact on operating flows because it is one of our expenses, but it does not involve any cash ok.

So, I have marked it as OF getting it? In operations its plus and in F it will have minus. Tax 6000 I think most of you are judged it correct it is a O type of item, but this 6000 does not mean it is cash tax paid, this much of tax has been charged for the year do you will have to look at the balance sheet item and then finally, decide how much tax is paid ok. So, right now I have marked it as O, O because it will come two times in the operating flows and marked it as plus and minus.

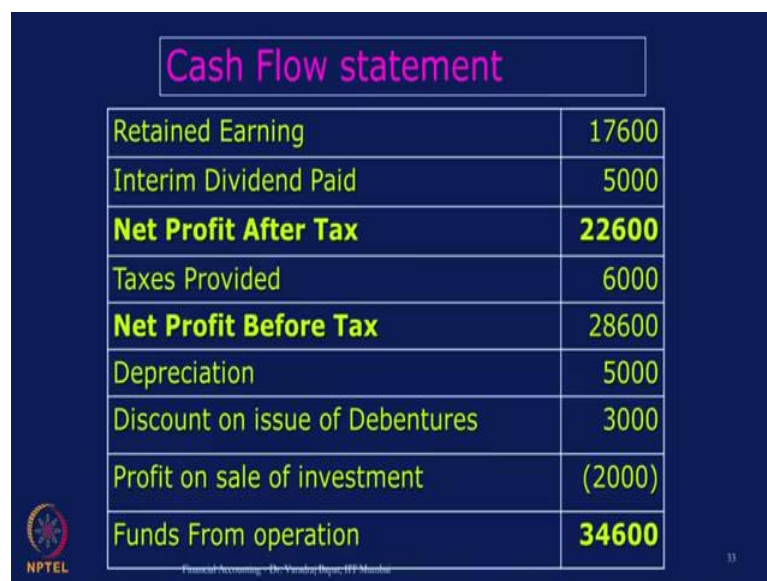
Because again it comes two times, exact amount we will determine later on. Interim dividend do you remember what is interim dividend? Dividend represents the share of profit which is paid to the shareholders. If it is paid during the year it is called as interim dividend. Now interim dividend is a F type of item it is a financing outflow, but it will

have an impact on O because it is rooted through P and L. So, I have marked it as FO minus and plus.

Minus because it is an outflow in financing we will add it in O. So, I have written it as plus last item profit retained again it is O, because it comes from day to day activities and we will mark it as plus. If you remember the second effect of profit written is there in the balance sheet. So, now, we have marked all items of P and L we have also marked all items of balance sheet. I hope you have understood it is very important for you to properly understand all these items.

Once this is clear making of cash flow statement is really very simple. Are you getting all the items? I will request you to practice a lot. Take 2 years balance sheet for any company, calculate the cash flow statement and check it with their actual cash flow statement ok. So, now, look at the answer now actual answer is very simple if you have really understood all these items, you can easily write down the final answer.

(Refer Slide Time: 20:12)



The image shows a slide titled "Cash Flow statement" with a table of financial data. The table has two columns: the first column lists various financial items, and the second column shows their corresponding values. The items and values are: Retained Earning (17600), Interim Dividend Paid (5000), Net Profit After Tax (22600), Taxes Provided (6000), Net Profit Before Tax (28600), Depreciation (5000), Discount on issue of Debentures (3000), Profit on sale of investment ((2000)), and Funds From operation (34600). The slide also features the NPTEL logo in the bottom left corner and the text "Financial Accounting - Dr. Vinayak Dnyaneshwar H.P. Mumbai" at the bottom center.

| Cash Flow statement | |
|---------------------------------|--------------|
| Retained Earning | 17600 |
| Interim Dividend Paid | 5000 |
| Net Profit After Tax | 22600 |
| Taxes Provided | 6000 |
| Net Profit Before Tax | 28600 |
| Depreciation | 5000 |
| Discount on issue of Debentures | 3000 |
| Profit on sale of investment | (2000) |
| Funds From operation | 34600 |

Now, this is in front of you in final short, but I request you to properly solve it yourself. Now, I will try to explain every item it start you know there is a particular format. So, we are starting with retained earnings 17600 from where we did you got this item? Actually it came from 2 sources: first it was given in P and L it also I had a some impact on balance sheet. Because balance sheet we had transferred the balance of P and L which is a increase of 17600 it is only one item, but it comes at two places ok. So, here retain

earnings it is a inflow see if it is a outflow you should write in bracket if it is a inflow; that means, a positive figure.

So, retained earnings 17600 to that add interim dividend paid. Now you know here we had written interim dividend 5000 as F and O. So, it is a financing item we are also going to add it for calculation of P and L. So, remember it is paid actually it is a outflow, but in P and L we add it because right now we are not showing it as a outflow, we are calculating it using it for calculation of profit. So, 17600 plus 5000 I get NPAT or Net Profit After Tax which is 22600 then tax provided.

See in P and L we had got 6000 OO of which the first effect is this the tax was reduced from profit and loss account we will add it back, we are going to take this item again, but we will look at it later on. Right now just add a back the tax we will get net profit before tax, which is 28600. Please try to solve with me so, that you also get the practice. Next is depreciation you know here in P and L we add a item of 5000 O plus. So, we are this is a non cash expense.

So, we will add back 5000 same way there was a item discount on issue of debenture in P and L we had marked it as OF in any case this 3000 is to be added in O. So, discount on issue of debenture is added. See this is only one effect the second effect we will see later on the effect related to operating activities we are looking right now. Next is profit on sale of investments. If you remember in P and L we had added these 2000 to calculate the profit now, we are going to reverse it.

So, we will reduce 2000 because it is a negative figure we will write in bracket are you getting? So, NPBT 28600 add 5000 add 3000 minus 2000. So, we are getting 34600 this is called as funds from operations. This is the money which we have generated from our operations or from our normal business that is why we have started with profit, we have removed non operating type of items now which items are yet to be shown in operating activities. Do you remember?

Items which we are related to CA or CL or related to working capital they are yet to be treated. So, we start with funds from operations, then make adjustment for debtor and creditor there are only two adjustments let us go to balance sheet to have a look at it. So, you know that in the liabilities there was a item creditors. From 16000 it has reduced to 10000 minus 6000. So, I hope you understand that we have paid 6000 getting it? That is

why the creditors balance have come down we are going to reduce it from the cash flow as minus 6000 getting it?

(Refer Slide Time: 24:54)



| | |
|--|--------------|
| Funds From operation | 34600 |
| Decrease in Sundry Debtors | 700 |
| Increase in Sundry Creditors | (6000) |
| Cash generated from operation BT | 29300 |
| Income Tax Paid (6-5) | (1000) |
| Net Cash flow from operating activities | 28300 |
| Cash Flow from Investing Activities | |
| Sale of Investment (2000+2000) | 4000 |
| Purchases of Equipment | (39600) |

But for debtors it is exactly opposite; in the assets the debtors have gone down now debtors are going down means, these are the balances with customers they have paid us we have got more money that is why their balance has gone down. So, this minus 7000 is going to be plus in the cash flow statement getting it? I know its slightly tricky keep in mind that it will be exactly opposite for debtors and creditors.

For creditor it is minus 6 for debtor there the figure was minus so, we converted into plus or you can also remember it this way that whatever is a direction of movement in a current liability same will be for cash ok. So, current liability went down. So, cash also went down, but for a debtor which is a current asset it competes with cash. So, debtors have gone down so, cash has gone up ok. So, it is a plus 700. So, at this stage we get cash generated from operations which is 29300.

So, we will stop here, we will continue the same assignment or the same case in the next session. Namaste.

Financial Accounting
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Lecture – 18
Cash Flow Statement 5

Namaste. In the last session, we were discussing case number 2 of Cash Flow Statement. Those of who have missed it, I will request you to see the session, also take the printout of the case which we were solving. We were half way through so, we will continue from there, but just we will look at the case once again.


(Refer Slide Time: 00:44)

Case 2.

Prepare cash flow statement from the following details of Keshav Ltd.

Profit and Loss A/c for the year ending 31 March 2020 is as follows

| | |
|------------------------------|--------------|
| Sales | 90000 |
| Profit on sale of investment | 2000 |
| Revenue from Services | 6000 |
| Total | 98000 |

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So, this is a we are asked to prepare cash flow statement for Keshav Limited. Now, profit or loss account for March 2020 was given ok.

(Refer Slide Time: 00:57)

| | |
|--------------------------------|--------------|
| Total | 98000 |
| Consumption of Materials | 40000 |
| Manufacturing Expenses | 17000 |
| Wages | 1400 |
| Depreciation | 5000 |
| General Expenses | 3000 |
| Discount on issue of debenture | 3000 |
| Tax | 6000 |
| Interim Dividend | 5000 |
| Profit Retained | 17600 |

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(Refer Slide Time: 01:03)

Balance Sheet of Keshav Ltd

| | 2019 | 2020 |
|------------------------|---------------|---------------|
| Liabilities | | |
| Share Capital | 50000 | 50000 |
| General Reserve | 10000 | 10000 |
| Profit and Loss A/c | 8000 | 25600 |
| Debentures | 10000 | 27000 |
| Creditors | 16000 | 10000 |
| Differed Tax Liability | 7000 | 12000 |
| | 101000 | 134600 |

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Then, the balance sheet was given for last year and this year or opening balances and closing balances ok. So, this is liabilities, assets.

(Refer Slide Time: 01:08)

| | 2019 | 2020 |
|----------------------|---------------|---------------|
| Assets | | |
| Land | 40000 | 40000 |
| Equipment | 21000 | 55600 |
| Investment Long Term | 5000 | 3000 |
| Sundry Debtors | 15000 | 14300 |
| Bank | 5000 | 6700 |
| Goodwill | 15000 | 15000 |
| | 101000 | 134600 |

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And, now based on this figure information we were asked to prepare cash flow statement. Now, as a process of preparing it as a working note what I had ask you to do was take every item of balance sheet then P and L mark the change and mark it as O, I or F.

Once that marking is done the rest of the work is very simple; actual preparation of cash flow. So, we have done marking last time just have a look once again.

(Refer Slide Time: 01:46)

| Cash Flow statement | | | | |
|----------------------------|--------|--------|--------|------|
| | 2019 | 2020 | change | OIF |
| Liabilities | | | | |
| Share Capital | 50000 | 50000 | 0 | |
| General Reserve | 10000 | 15000 | 0 | |
| Profit and Loss A/c | 8000 | 20600 | 17600 | O |
| Debentures | 10000 | 27000 | 17000 | F |
| Creditors | 16000 | 10000 | -6000 | CACL |
| Differed Tax Liability | 7000 | 12000 | 5000 | O |
| | 101000 | 134600 | 33600 | |

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So, we started with balance sheet liabilities, these were the markings. So, profit and loss account was marked as O, debenture being a financing item F, creditors CACL, differed tax liability O.

(Refer Slide Time: 02:05)

| Cash Flow statement | | | | |
|----------------------|--------|--------|--------|------|
| | 2019 | 2020 | Change | OIF |
| Assets | | | | |
| Land | 40000 | 40000 | 0 | |
| Equipments | 21000 | 55600 | 34600 | I |
| Investment Long Term | 5000 | 3000 | -2000 | I |
| Sundry Debtors | 15000 | 14300 | -700 | CACL |
| Bank | 5000 | 6700 | 1700 | C |
| Goodwill | 15000 | 15000 | 0 | |
| | 101000 | 134600 | 33600 | |

Assets, equipment and long term investments were I and sundry debtors CACL bank balance, this is a cash and cash equivalent item. So, it should be marked as C. It will not be shown as a flow in the cash flow statement.

(Refer Slide Time: 02:26)

Keshav Ltd. Profit and Loss A/c for the year ending 31 March 2020 Marking relevant items

| | | | |
|------------------------------|--------------|--------|----|
| Sales | 90000 | No adj | |
| Profit on sale of investment | 2000 | IO | +- |
| Revenue from Services | 6000 | No adj | |
| Total | 98000 | | |

Now, P and L; P and L items like sales or revenue from services are not to be shown in cash flow. So, I have written here as no adjustment or you can say no item of cash flow. For items like profit on sale of investment there will be two adjustments.

Now, this is related to investment so, it is I, profit is there so, money is coming in so, it is plus. But, it has a second effect in O, keep in mind. O because it is already added in P and L we want to remove it from P and L. It is not regular day to day activity. So, we will reduce it from O that is why I have marked it as I and O and plus and minus ok. This plus and minus etcetera is not to be written in cash flow, but it will help us in making the cash flow, getting it?

(Refer Slide Time: 03:26)


| | | | |
|--------------------------------|--------------|----------|----------|
| Total | 98000 | | |
| Consumption of Materials | 40000 | NA | |
| Manufacturing Expenses | 17000 | NA | |
| Wages | 1400 | NA | |
| Depreciation | 5000 | O | + |
| General Expenses | 8000 | NA | |
| Discount on issue of debenture | 3000 | OF | + |
| Tax | 6000 | OO | + - |
| Interim Dividend | 5000 | FO | - + |
| Profit Retained | 17600 | O | + |

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Now, all these are expense items in P and L. So, day-to-day items like consumption, manufacturing, wages, general expenses are NA, but depreciation it is a non cash expense, so, O plus. Discount on issue of debentures OF plus taxation OO, because it will come under operating items twice plus and minus interim dividend FO plus and minus. If you have still not understood it please read it two three times. It is very important; once that is done remaining job is simple.

(Refer Slide Time: 04:10)

| Cash Flow statement | |
|---------------------------------|--------------|
| Retained Earning | 17600 |
| Interim Dividend Paid | 5000 |
| Net Profit After Tax | 22600 |
| Taxes Provided | 6000 |
| Net Profit Before Tax | 28600 |
| Depreciation | 5000 |
| Discount on issue of Debentures | 3000 |
| Profit on sale of investment | (2000) |
| Funds From operation | 34600 |

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Now, based on this we went for preparation of cash flow statement. The first part is operating activities. There is a specific format. So, please go through the format two three times. We calculate net profit after tax, net profit before tax and then do adjustments for certain items. Now to calculate NPAT we started with retained earnings, add interim, dividend, add taxes provided, we got NPBT, then depreciation and discount and debentures was added. Keep in mind, these are non-cash items they do not bring in cash, but because we do not pay cash for it we are adding it because it is a indirect method, then profit on sale of investment is to be reduced.

(Refer Slide Time: 05:03)

| | |
|--|--------------|
| Funds From operation | 34600 |
| Decrease in Sundry Debtors | 700 |
| Increase in Sundry Creditors | (6000) |
| Cash generated from operation BT | 29300 |
| Income Tax Paid (6-5) | (1000) |
| Net Cash flow from operating activities | 28300 |
| Cash Flow from Investing Activities | |
| Sale of Investment (2000+2000) | 4000 |
| Purchases of Equipment | (39600) |

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So, we get fund from operations 34600, to these we will make adjustment for working capital items or CA and CL items. Now, sundry debtors had gone down reduction of sundry debtor means they have paid us money so, it is added. Creditors have also gone down. Now, to creditors for them to go down we pay them money. So, reduction in creditors is in bracket so, it is a outflow ok.

So, CA and CL is be tricky, keep track of it, I will once again just remind what I told you last time. For CL it is simple; addition to CL that is current liabilities also addition to cash reduction of CL is reduction of cash I think you keep that in mind ok. For even more simple you can remember that cash and CL have affection with each other, they will go together whereas, cash and CA are competing, they would go opposite just remember CL and its opposite movement is for current assets ok.

Now, after adjusting debtors and creditors we get cash generated from operations, but before tax. So, I am marked it as BT which is 29300. Now, the income tax paid is to be reduced that is 1000. Now, from where you got 1000? 1000 was not given anywhere, but we had two figures we will go to P and L. You can see here in P and L that taxes provided was 6000. Whether Actual payment has done or not, we do not know, but that much of tax were charged in P and L.

Of that we had to go to balance sheet now. If you see balance sheet in the liability there is a item called differed tax liability and it has increased from 7 to 12; that means, there is a increase of 5000 these are taxes provided, but not paid. Do you remember what is differed tax? As the name suggests differed means this is this times item, but to be paid later on any tax which is not to be paid in the current year if it is to be paid in current year it is called current tax. If it is not to be paid in current year, but can be paid after 2, 3, 4 years it is called as a differed tax.

Now, the differed tax liability has gone up by 5000 we have marked it has O. So, out of the total taxes of 6000 for the year as you can see from P and L, 5000 are differed; that means they would be paid later on. They are not to be paid now. So, 6 minus 5 remaining 1000 is paid in the current year. Are you getting me? Here I have shown in bracket 6 minus 5 or you can say 6000 minus 5000 so, it is 1000, getting it.

So, tax you have to keep in mind always it will come two times. First, tax provided will add on net profit after tax because this is charged in the year and what is actually paid is

to be deducted. That is why taxes are to be shown twice in the cash flow because what is provided is not paid it is to be added and what is actually paid is to be deducted because it represents outflow ok. And, government also wants to keep track on at provisions and actual payments; that is also one reason why in the format specifically these items are to be shown twice. You cannot show net effect, you have to add 6 and reduce 1. Getting it? So, this was the last item this gives us net cash flow from operating activities which is 28300 positive; that means, that much cash we have got from our normal business activities.

Now, this was bit complicated remaining is very simple. Next is cash flow from investing activities. Now, go to balance sheet, we had marked many items as I. So, just take those items I means investing and put them here. So, now we will go back to balance sheet. Balance sheet if you remember there was investment long term. It was marked as I minus 2000 minus means from 5000 it has gone down to 3000.

So, we have sold investment and we have received 2000, but we cannot directly write this 2000 in cash flow because there will be some profit or loss on sale of investment; getting it? So, these 2000 plus in P and L there was one item called as profit on sale of investment 2000; we had marketed it as I O plus minus. See, in I it is plus so, 2000 rupees is the cost of investment plus 2000 rupees of profit, total sale value is 4000. You were not given the sale value; we have to calculate the sale value. So, sale of investment 2000 plus 2000, 4000 is the inflow for the year. Getting it? Ok.

Next is purchase of equipment. If you go to balance sheet there was equipment 21000 increasing to 55600 so, 34600 of increase. We had marked it as I. This represents purchase; getting it? But, this may not be the actual amount of purchase. increased means there is which have been purchase but it is reducing because of depreciation. So, we have to consider both the effect of purchase and that is the addition and reduction due to depreciation and the net effect will be this 34600.

So, let us calculate the purchase amount, getting it? I have worked out 39600. How it is worked out, can you guess? See, the net effect is 34600 and if you go to P and L there was a depreciation of 5. So, 34 plus 5 you get 39600.

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| Cash & Cash Equivalents | at Beginning | at End |
|------------------------------------|---------------------|---------------|
| Bank | 5000 | 6700 |
| Total | 5000 | 6700 |

| Equipment A/c | | | |
|---------------------------|--------------|--------------|--------------|
| Balance B/d | 21000 | Depreciation | 5000 |
| Cash/Bank A/c (purchases) | 39600 | Balance C/d | 55600 |
| | 60600 | | 60600 |

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I have also shown equipment account here. Those of who are familiar with ledger accounts have a look at the account. The opening balance was 21, closing balance was 55, reduction due to depreciation is 5. We don't know how much is a purchase. We only know that there is a reduction overall increase of 34600 plus 5000; that means, there is a cash bank for purchase of 39600. So, either you make an account like I have made it here or you can make a working note, but arrive at this amount of 39600. It is in bracket because it is a minus, it is a reduction in cash flow; are you getting?

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| | |
|---|----------------|
| Net cash flows from Investing Activities | (35600) |
| Cash Flow from Financing Activities | |
| Issue of Debentures (17-3) | 14000 |
| Interim Dividend Paid | (5000) |
| Net cash flows from Financing Activities | 9000 |
| Net increase in cash | 1700 |
| Cash & Cash Equivalents at the beginning | 5000 |
| Cash & Cash Equivalents at the end | 6700 |

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So, two items in investing plus 4000 and minus 39600 net cash flow from investing activities 35600, are you getting? So, from operating there was an addition or positive figure of 28300 that is cash generated from operating activities. This is the cash invested in investing activities 35600 in minus.

Now, the third heading is financing activity. So, go to balance sheet look at F type of items ok. Balance sheet normally you have to go to liabilities because that is where you will get F items you can see there is only one item debenture 10000 was opening, 27 was closing, increase of 17 F. So, it represents what? A financing inflow, We issue debentures. So, we have got cash and we have given debentures; getting it? So, inflow is 17, but do not write 17 directly in cash flow because there could be some item in P and L.

If you remember in P and L there was one item called as discount on issue of debentures. We had marked it as OF plus, getting it? It is F because it is a financing item of 3000 it is related to issue of debenture; that means debentures of the face value of 17 are issued at discount. Company did not receive 17. Company received 17 minus 3 that is 14, that is your inflow of from debentures; getting it? So, I have written it here as issue of debentures 17 minus 3, 14000, got it?

So, only one item was there in the balance sheet, but there was one item in P and L, that is this interim dividend we had marked as FO minus plus. What is F? Because dividend is always a financing activity. We have issued shares and we are giving dividend to the shareholders during the same here it is given. So, it is called interim; that means, it is declared and paid. See the amount is 5000, that 5000 we added here in P operating and we will reduce it in financing, got it? So, in financing there are only two items issue of debentures and interim dividend paid plus 14 minus 5. So, net cash flow from financing activities 9.

So, you have got all the three headings now, 28300 plus minus 35600 plus 9000. So, net increase in cash this is a total of O plus I plus F that is 1700, are you getting it? Now, this can be cross checked with the balances in the balance sheet. So, to this we add cash and cash equivalents at the beginning which is 5000 cash and cash equivalents at the end are 6700. So, has it tallied?

Now, from where we got this 5 and 6700, we will go back to balance sheet. See there is a item in balance sheet, bank, which we had marked as C and we had discussed that this 1700 is not inflow or outflow. This is the change of balance; in fact, we are calculating whole cash flow statement to see whether our total matches with the changes in the cash flow statement in the cash and cash equivalent. So, all other changes together was 1700. It matches with the change in the bank; that means our statement is correct. It is tallying; are you getting? So, 1700 plus 5000 you get 6700.

Now, there is something more also. Now, go to cash and cash equivalent we have to make a reconciliation statement. Show the cash and cash equivalent at the beginning and at the end. Here we have only one. This problem only has one item, but sometime there can be two, three items of cash and cash equivalent. So, show them take the total; so, bank opening 5, closing 6700 the total is same 5 and 6700 and equipment was a working note.

So, for the whole cash flow statement as for the format start with operating item, show them here, then go for investing, go for financing, add opening, less closing and also show the reconciliation of cashless of cash and cash equivalent then our cash flow statement is over; is it clear?

Now, also we would discuss just a bit from the financing angle. What are your comments? Is it a good cash flow statement for the company? Does it represent sound and well running company? What do you feel from these three totals? Operating activities is a positive figure, is it a good sign? Of course, yes, we are getting cash, what is bad in it. We are able to generate 28300 from our normal business. You can see here. This is a very good sign. This shows the strength of business. Now, we have a negative cash flow in investing; is it a good sign? We are giving cash. cash is going out, is it a good sign? Some may fail it is not good sign our cash is going outside, but actually it is a positive sign because unless we make investment how will business grow.

So, you can see here company is generating cash 28300 and they are investing in purchase of new equipment. So, if you want a healthy growth of the company, company has to continuously make investments in new equipment, new software, new technology or at least in new investments. So, you can see here they have sold some of the old investments at profit which is also good sign and all that money they have put in the new

equipments that would give them coming years it will be good for generating more profits and more cash flows.

So, keep in mind negative cash flow of investing activities not bad. In fact, that should be negative if it is positive; that means, you are selling your existing asset which may not be good. It is good if new assets are getting created. So, negative cash flow in investing activities healthy. Next is financing. Financing is plus 9000, is it good? Should be Positive negative? Actually both is fine in financing because sometimes it will be negative because of payments of dividend like here they have paid 5000 shareholder should get some money. So, is it is a positive sign, but company has to grow.

So, you can see here they have raised some new money by the way of debentures. That 14000 is used to finance the purchase of investment partly. Partly it has come from the operating flows and partly from this. So, no problem this 9000 can be either or positive or negative it is a healthy sign, overall looking at the and also look at the cash and cash equivalents at the beginning and end it also shows a good sign. If you have too much of cash it is not good, if you have too little cash not even the money to pay regular activities that is also not sound. So, you can see here company has slightly increased their balances, but not too much of cash not too less of cash.

So, overall from the cash flow statement I am not looking at P and L and balance sheet. We will later on discuss the ratios and how to analyze the segments, but just by looking at the cash flow which we have made overall comments if you make we can say that it is a healthy sign. They have generated a positive cash flow from operations, they have invested during the year so, negative cash flow from investing and a small positive from financing. So, company as a healthy cash policy they are able to have a good cash flow from operations. So, I hope you have over all understood cash flow statement.

Now, we have already discussed balance sheet first, then we discussed P and L, today we have also discuss cash flow. I hope now the basic financial statements are clear to you. In coming sessions we will discuss some conceptual and theoretical aspects, like corporate governance, like ethical part of accounting or like how was the accounting evolved, how are the entries recorded. And, in last part of our course, in last 4-5 sessions we will again go back to financial statements wherein we will go for preparation of balance sheet, P and L and cash flow and we will also try to analyze them by way of ratios.

But, to do all that you need to do a lot of homework. Now, that you have understood all the three statements please read the statements of various companies, at least of your company and also try to prepare simple P and Ls and balance sheets and maybe after one or two weeks we will go for preparation of some more statements ok.

Thank you so much. Namaste.

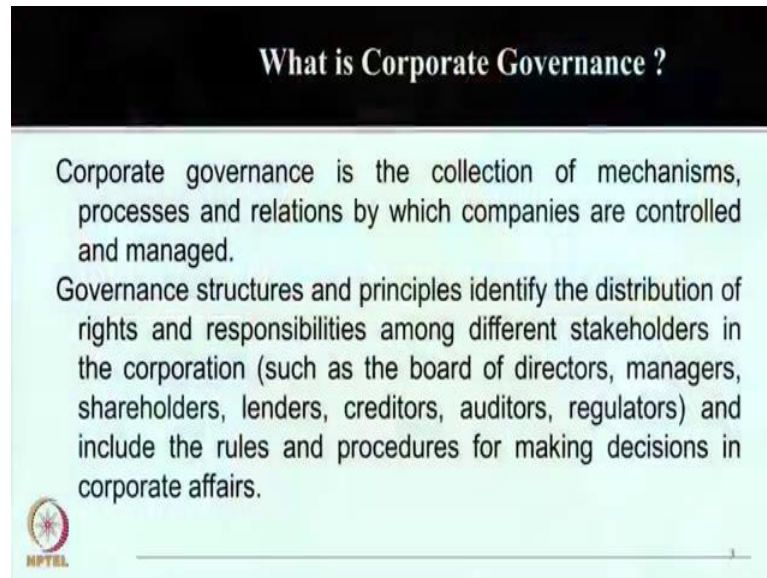
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Lecture - 19
Corporate Governance

Namaste. We have already discussed Financial Statements now. I hope you are practicing on the same on balance sheet, then P and L and in last two sessions or last 3, 4 sessions rather we have been discussing on cash flow statement. So, now, we are going to go for some conceptual and theoretical aspects. I am hoping that you will continue your practice on the financial statements while for a week we will discuss on certain conceptual aspects. Keep in mind this conceptual aspects are equally important so that you get overall idea of various aspects related to accounting and they are very much important for the corporate or business world.

Now, one of the hot topics or hot areas which are discussed is known as Corporate Governance. I hope most of you have heard this term. It is often in news often for non wrong reasons that lack of corporate governance has led to some fraud as has led to some problems. So, what is Corporate Governance? This will be discussed in the current ppt. Now what do you understand by it? Can somebody think of it what it is? As the name suggest there are two name parts of it; one is corporate the other is governance. Corporate refers to companies or the corporations; governance refers to the rules for managing the company or operating the company.


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What is Corporate Governance ?

Corporate governance is the collection of mechanisms, processes and relations by which companies are controlled and managed.

Governance structures and principles identify the distribution of rights and responsibilities among different stakeholders in the corporation (such as the board of directors, managers, shareholders, lenders, creditors, auditors, regulators) and include the rules and procedures for making decisions in corporate affairs.

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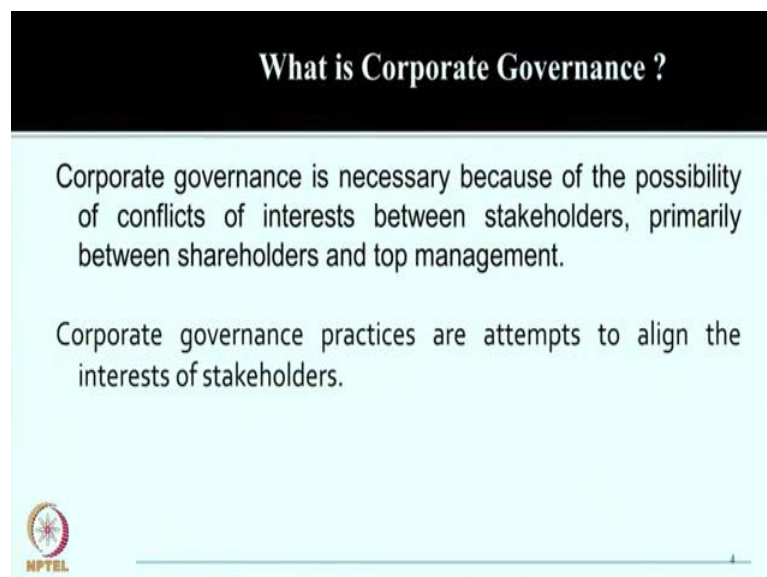
So, these are the norms for managing the company. These are some of the explanations as to what is Governance. Now Governance consists of various mechanisms, processes and relationships by which the company is controlled and managed. We want that company should be ruled properly, should be managed properly, should be operated properly. So, various processes are formed.

Now Governance structures and principles identify the distribution of rights and responsibilities because there are various stakeholders in the company. You all know that the owners of company are the shareholders, but shareholders are large in number, they are spread everywhere. They are not at one place. For a private company may be the number of shareholders are less 2, 3, 4, 5, 10; but for a public company there are lacks of share holders and they are located at different locations, in different cities for bigger companies; they are all over the globe.

So, they cannot manage day to day affairs. So, they appoint their representatives which are known as board of directors which are elected every year. So, we have got two parties now. We have got shareholders as the owners, then there are Board of Directors, there are other stakeholders as well. There are managers who are doing day to day management or regular functioning, who will be the employees of the company, there will and other employees as well.


Now company cannot operate without money. Shareholder is one source, but you know there are lenders in the form of bankers, in the form of institutions, in the form of debenture holders. They are also stakeholder. Apart from that there are creditors, government, auditors. All these stakeholder have different rights and responsibilities. Sometimes there are conflicts, they fight with each other. So, Corporate Governance seeks to form certain rules. We tell them that do not fight with each other, do your responsibility properly, get your rights and see that you do not encroach on other persons rights. That is covered in the governance structure which is integral part of Corporate Governance. Getting it?

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What is Corporate Governance ?

- Corporate governance is necessary because of the possibility of conflicts of interests between stakeholders, primarily between shareholders and top management.
- Corporate governance practices are attempts to align the interests of stakeholders.

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Now, why it is necessary? It is necessary because of the possibility of conflict between different stakeholders. There are natural conflicts of interest. I hope you know the different forms of business, like a proprietary concern, partnership and company. In proprietary concern what happens? There is only one person owner; mostly the same person is a manager. So, there is no conflict of interest. He is the owner and same person is manager. In company that is not the case. Shareholders are the owners, board of directors are their top management. So, there is a conflict. Shareholders want more profit, Board of Directors want more remuneration. So, it is necessary that to avoid their fights and have well defined rights and responsibilities, we need Corporate Governance.

So, what these do is Corporate Governance practices is an attempt to align the interest of each other to tell them that do not fight, have such a mechanism or arrangement or process where all the stakeholders benefit and naturally in the process the company keeps on growing healthily. Getting it?

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Now, these are the main principles of Corporate Governance. Transparency, Accountability, Trusteeship and Ethics. I think you understand all these terms.

Transparency because shareholders are far away, lenders at one place, customers are at other place, they all want to know about the company. So, company should run its affairs in such a way that necessary information is available to all. Board of director should not do partiality that they will have some information or their relatives will have some more information, while other stakeholders are keep kept in dark. That will give a wrong signal to the people. So, one of the essential principle is transparent operations or transparent governance system.

The second is accountability. Now those who are running the company either as board or as employees, they should be accountable. They are taking remuneration, they should be accountable for their decisions. So, accountability.

Next is trusteeship. It is very important that board and the managers consider themselves as trustees. That does not mean they should not take remuneration. They should take

remuneration in a legal way, but should not be fraud of the company, should not enter into such transactions which are against the interest of the company for their selfish motive. That is why trusteeship is a very important principle.

And the last, but perhaps the most important is ethics. There is a need for high moral values. We know its business, everybody wants to make money, but they should make it following the moral principles. So, if the board of directors try to cheat shareholders, or a managers try to cheat the technology give to someone else, or those who are in charge tell our strategies to our competitors. It is lack of ethics and that would bring loss to the company, it would also bring loss to the stakeholders. So, it is very important to emphasize and to make all stakeholders realize that they should make money, but in ethical manner. In Hindi, we can call it as a “SHUBH LABH” (GOOD-PROFIT). They should have SHUBH (GOOD), they should have profits, they should have remuneration they should have dividends, but in a ethical manner.

So, these are necessary principles of Corporate Governance.

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Now, we are already discussed it, but now you can just see it in a form of a figure. There is a large body known as share holders. I have put it in the red because they are at a risk. They have put in the money, but they do not have control and you have another body called as senior managers. I have put the general term it includes the board and also many other managers who have day to day control over the company. So, ownership and

control is separated. The relationship should not be ownership versus control that managers are trying to cheat the share holders. They should go hand in hand for the benefit of both.

So, senior managers always try to get more remuneration and they want more discretion that they should have all the freedom to take any decision they want. That is where the control is needed. They should get remuneration, but in a proper manner. They should have discretion, but the decisions which they are taking should have some control mechanism, that is why you have a Corporate Governance System.

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Separation of Ownership and Control

- Controlling owners have their own interest which might differ from other shareholders.
- The **controlling owner** is often a long term owner who has financial strength.
- Conflict of interest between controlling and small shareholders arises which leads to the so called *investor protection issues*.



Now, separation of ownership and control is the main reason for need of governance. Now, controlling owners have their own interest. What happens is in the earlier figure we have seen that there are two groups share holders and senior managers, but within share holders also there are many groups. You may have a promoter group or a controlling group. Now they have the controlling stake. They are able to take all the decisions. There are lacks of small shareholders who will be scattered and who do not have any control. So, it is not just a conflict between shareholder and mangers. Between the shareholders also there are many groups. Major group is a controlling owner. This is often a long term owner and they have got lot of financial strength.

Often we call about talk about business groups. You know for example, there is a Birla group, there is a Tata group; there is a Reliance group. Now this groups means they have

controlling stake in their companies and then there are lot of other shareholders who do not have controlling stake. Within other shareholders also sometime there are strategic shareholders who may have big chunks of shares like 5 percent, 10 percent, 15 percent like financial institutions or like foreign institutional investors. So, they are also having though not full control, but the partial control. Now often conflict of interest between controlling and small shareholders lead to certain investor protection issues.

Because regulators, government. In India, you know there is a regulator called SEBI Securities and Exchange Board of India. In US, there is a regulator called SEC S, E, C Securities and Exchange Commission. They try to intervene to ensure that small holders, shareholders are not cheated by the controlling shareholders or by managers. All these issues are very important for governance.

Now how is this executed?

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How is the Corporate control executed?

- Shareholders
 - Voting rights for major decisions
 - Appoint Board of Directors for managing the company
- Non-Executive directors
 - Independent and Non-Independent Directors
 - Independent view to strategy and standards of conduct
- Executive directors
 - Full-time managers
 - Business decision makers

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So, you know the owners are shareholders. What rights they have? The most important is they have got voting right. They have a voting right to appoint the Board of Directors for managing the company. So, in the annual general meeting, elections are held and board is appointed. That's their main right. Apart from that they have got voting right for doing several things like appointing Auditors, like taking major business decisions for mergers (Refer time: 13:19) or for making fresh issue, for coming out with right issue, or for

taking a very large quantum of loan. So, any matters need to go to general meeting for getting the shareholder approval where shareholders have voting right.

So, these are the main rights of shareholders. Of course, many times these are on paper because lacks of shareholders are there, but they don't have time and money to actually come and exercise their right. So, often the rights are in the hands of controlling shareholder groups, but in any case as a shareholder as a body they have these rights.

Next are Non-Executive directors. So, within directors there are two groups, Executive and Non-Executive. Executive are Full-time managers. They take day to day business decisions. They are at the helm of affairs of company. There are also other type of directors who do not come everyday, they are on the board. So, they attend board meetings, they are part of important decisions, but they are not in the process of execution of decisions. Executive directors are there in taking decisions and also executing them. Okay, so where share holder is one group second is Non-Executive and third is Executive Directors. Now within Non-Executive Directors also there are 2 types Independent and Non-Independent Directors. Now Non-Independent Directors belong to the promoter groups.

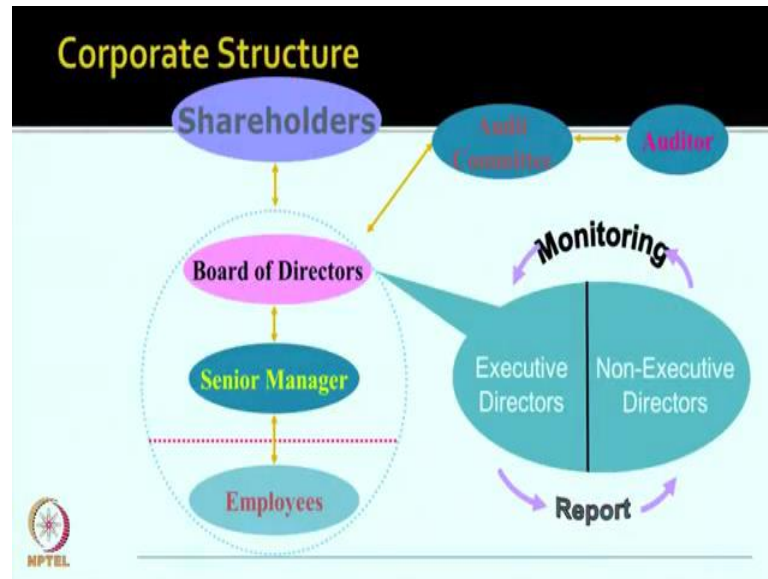
For example, I think most of you know Reliance industries. Now who are the promoter groups in Reliance? The promoter group is Mukesh Ambani group because Mukesh Ambani and family owns major stake in the company and Mukesh Ambani is Chairman and Managing Director. So, belongs to the Executive Director position. He is able to take the decision and he is also in charge of actual running of the company. Now in the Non-Executive Director we have go to wife of Mukesh Ambani, Neeta Ambani. She is not day to day manager or Executive Director, but she cannot be considered as Independent, but she belongs to Ambani family. That's why she is a Non-Independent, but Non-Executive Director. Getting it? Then there are Independent Directors.

So, these are professionals like Chartered Accountants or Cost Accountants or lawyers or professors who are many times invited on the board, they should not be from the owner family, but there is seat on board for giving a independent view of strategy. These people are called as Non-Executive Independent Directors. So, are you getting? So, these are the major groups. Independent directors are supposed to also maintain the standard of conduct. So, if something is wrong in the happening in the company, this seat on the

board they are attending Board of Directors meeting. So, they are able to take major decisions and they should have some check on how the company is functioning.

At least they should see that wrong things do not happen. This is expected from Independent Non-Executive Directors. Getting it? So, this is the major structure.

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Now, here in the graphical form. So, you can see here shareholders they appoint board. Board intern appoint Senior Managers for regular running of company. Senior Managers intern appoint employees of the company. So, this is as per as the operation is concerned now to keep check you know there are Auditors. Who are Auditors? Auditors are independent professionals who certify the financial statements of the company.

In India, Chartered Accountants are the Auditors. Now whom will Auditors report. Suppose there is a fraud in company. When they are doing audit they realize that there is some fraud. Now Board of Directors are engaging in fraud or Senior Managers engaged in fraud then whom will the report? Will they again go and tell the board because they cannot go and tell all the shareholders, shareholders are scattered. So, within the board, Audit Committee is formed and that Audit Committee should have majority of Non-Executive Directors. So, that Auditors are able to report their findings to Audit Committee.


So, Audit Committee though is a part of board is supposed to overlook the functioning of the board to whom the Auditors make interim reporting, this is interim reporting. The final reporting Auditors will make directly to the shareholders, but that's in the AGM. Are you getting? During the year as and when the things are happening, the Auditors will provide their reports to Audit Committee who are overlooking the functioning of the board. Now within the board as we have already discussed there are 2 types of directors Executive and Non-Executive. Non-Executive Directors are meant to do monitoring function on the Executive Directors who are running the company.

So, Executive Directors are supposed to report to Non-Executive Directors. This is the overall structure. Are you waiting it? Now my request is you have already downloaded the annual report of your company. Go to the Board of Directors section. They would have given the list of the board. In that list, there will be a category of Executive and Non-Executive Directors. So, go through that. Look at various types of directors.

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Structure of Corporate Governance

- The **board of directors** is the legal body that is accountable for the governance of the corporation. They are elected by the shareholders.
- The **CEO and team** are the implementing body of the corporation's strategic and operational decisions.
- The **Annual Shareholder Meeting** reviews the conduct of the Board and the management team.

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Now, further into the structure, we already know there is a board that some major body accountable for governance and that is a elected body by the shareholders. Then there is CEO and team which is an implementing body and there is Annual Shareholders Meeting. So, shareholders cannot meet every now and then, they meet only once a year and that is where they review the conduct of the board. Okay.

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Issues in Corporate Governance

- Board Diversity – Women directors
- Chairperson and CEO – separation ?
- Audit Committee - consisting of non-ex director and Financial Director (without voting rights)
- Role of CFO
- Independence of Auditors
- Rotation of Auditors



Now, a few more issues in Corporate Governance. One important issue is Board Diversity. Now if all the members of board belong to the same family, they would think in the same way that decision making of the company may not be that good. That's why on the board you need different type of people. So, over last many years these principles are getting evolved that you need more diverse board. That's why out of family or out of the promoter you need some Independent Directors. There is also now a requirement of having women directors. So, all boards for long where all male dominated.

Now, more and more women are being inducted into the board. There are also other ways to bring in diversity like employee representatives or representatives of some more groups. Now there are 2 important positions in the company Chairperson and CEO. Chairperson is the person who heads the shareholders body and also heads the Board of Directors and CEO or the Chief Executive Director Chief Executive Officer is in charge of regular day to day activities. Now same person may be Chairman and CEO. Like in case of Reliance, Mukesh Ambani is Chairman, he is also CEO of the company. Some of the groups have done a separation that have a separate person as Chairperson to overlook the activities, CEO for regular conduct of activities.

For example, most of the banks, Chairman is different, CEO is different. In Tata group you know Ratan Tata is Chairman of all Tata group companies, but he is not CEO of any company. There are professional CEOs. Nowadays for some of the companies like TCS

even the Chairman is not from Tata family, but there are 2 different persons acting as Chairman and CEO. There are some advantages of the separation, though it is not necessary these are some of the issues. Next is Audit Committee. I think we have already discussed that Audit Committee is here to monitor the activities. So, Audit Committee consists of Non- Executive Director and a Finance Director because Finance Director is suppose to help them in understanding the financial statements, but the Finance Director does not have any voting right in the Audit Committee.

The role of CFO is also becoming important. CFO is Chief Executive Officer because CFO is will be accountable for proper preparation of financial statements. CEO may not have time of course, CEO is overall in charge of everything, but CFO is has a particular importance for heading the finance team of the company. Then we have already seen there are independence of Director, but the independence of Auditors are also very important. So, here we have got Auditors which are appointed technically by shareholders, but if Auditors listen to everything of the board then the independence is lost. That's why some principles have been brought in like Auditor should not provide other services to the company. So, that Auditor is independent. Same Auditor if auditing for so many years they become too much familiar

So, you need rotation of Auditors. So, like this various principles, new principles are coming in the Corporate Governance. There is one more type of control known as Market Corporate Control.

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Market Corporate Control

- Market Corporate Control is the market for voting shares, which give ultimate control
- ⇒ Market Corporate Control should prevent managers from being lazy or pursuing unethical/ selfish objectives

Consists of active secondary market for stocks and M and A.

This is important and powerful mechanism



Now, if the company is not doing properly. Now there is a market for voting shares and that gives the ultimate control. So, what will happen is if company is not transfer run, if there are frauds, if there is improper governance that message goes to stock market and in the stock market the demand for company shares may drop. So, the price of the company may drop. That brings in some check on the directors. That is possible if you have got a active secondary market, there will be some check because that will prevent managers from becoming lazy or pursuing selfish or unethical practices. Getting it? Because, their share prices will drop, but that is not the only thing.

Further if share price is dropped too much, other groups will try to take over the company that is through mergers and amalgamation because now it will become a cheaper company from them for them to take over. So, if there is a active market for mergers it becomes further check on promoters because they have some fear factor that if they are not working properly other companies may take over and may remove them and put their own managers. Getting it? So, this is one important and powerful mechanism of Corporate Governance. So, we have tried to summarize somewhat is Corporate Governance, what are the important principles and what is a structure of Corporate Governance. So, I hope you have understood it we will stop here. Namaste.

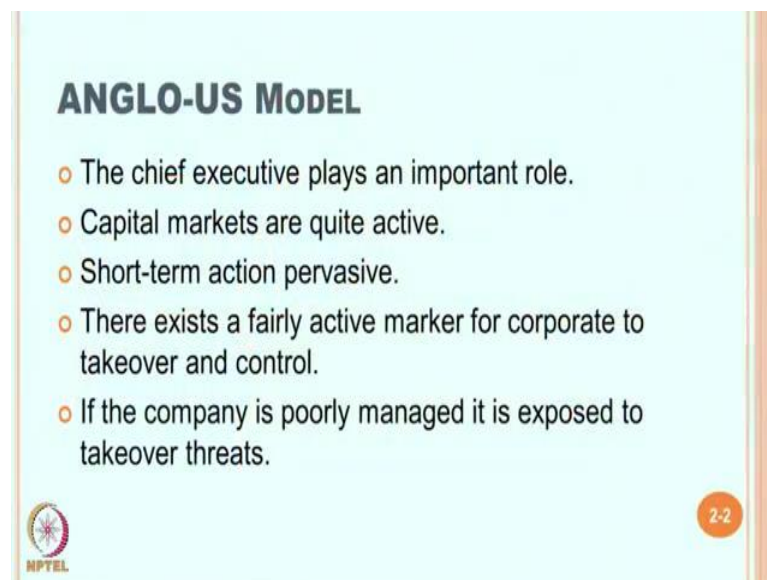
Financial Accounting
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Lecture - 20
Corporate Governance: Global Models

Namaste. In the last session we had discussed Corporate Governance, the structure, the need for governance and what will happen if there is a lack of governance. I hope you have understood remembered it, I had also asked you to check in your annual report who are the directors of your company; I hope you have done this also look at the AGM notice that is Annual General Meeting there will be some information about board meetings as well. So, that was about the basics of governance.


Today we look at the global models, although the corporate governance principles are global in nature different give things are given emphasis in different parts of world. So, today's discussion will be on that and as we have seen last time ethics is very important part of governance which is very much there in Indian culture. So, we will discuss about the same.

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ANGLO-US MODEL

- The chief executive plays an important role.
- Capital markets are quite active.
- Short-term action pervasive.
- There exists a fairly active market for corporate takeover and control.
- If the company is poorly managed it is exposed to takeover threats.

Now, by far the most popular model is Anglo-US model one which evolved in US or in UK mainly in English speaking countries, it has spread all over the world because major MNCs from there operate everywhere in the world and many of the regulator have

adopted this model. Now, here CEO plays pivotal role, so chief executive officer is one who is looking after the operations is also responsible for reporting to the board is also responsible for reporting to the shareholders. Now, the capital markets are very active in US especially, so if CEO performance declines it has a impact on the stock market performance of the company, the stock prices typically drop and that is a control mechanism on the CEO functioning.

Now, the short term actions are very important because the appointment of CEO itself is for 2 years, 3 years or sometimes even 1 year. So, the profit in that year many times in that quarter plays a very important role because you know stock markets are very sensitive. The profits or the performance will have immediate impact on the stock prices not even at the end of the quarter, it happens every minute.

So, the positive side or negative side in the short term becomes very important, it is very much necessary in the model that there should be active market for corporate takeovers. So, if the management team is not doing well the stock prices will fall that will bring in bad name to the company, but it does not have immediate effect on the controlling group. Because if they have reasonably high number of shares they can continue to be in charge of the company, but because of the falling prices the company becomes a prey for somebody wanting to takeover.

So, other groups may take over the company and the current management gets exposed because of takeover threat that is how the Anglo US model operates, that a negative performance is penalized by reduction in prices. And. if the negative performance continuous for a longer time the whole company will be taken over by somebody else.

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ANGLO-US MODEL AND AGENCY PROBLEM

- *Agency theory* is the study of how to align the interest between shareholders and management.

Solutions to agency problem:

- **A big pay cheque**, and other perks.
- **Stock options**

The market for takeover

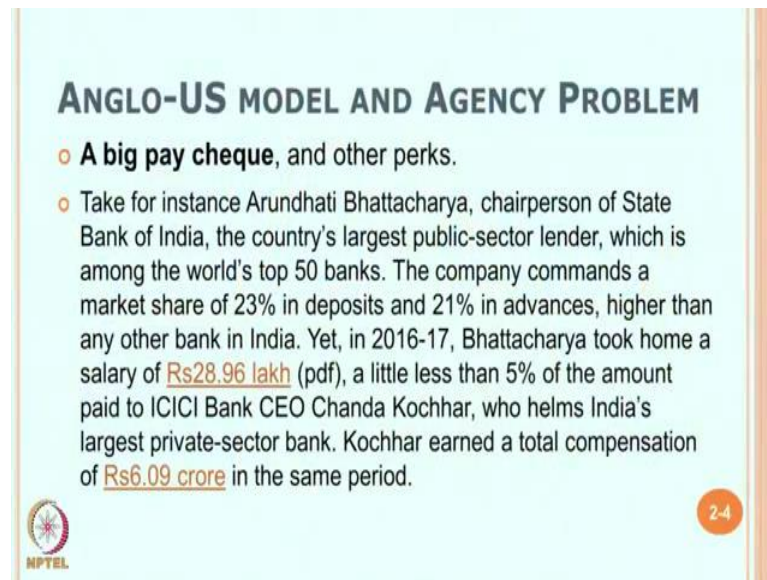
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Now, there is a agency theory which is very important for understand this model. This is a study of how to align the interest between shareholders and management these are considered to be the most important stakeholders and you can go in there is a lot of research which has happened in agency theory. Now, the major solutions given are in the form of big pay cheque.

So, CEO is given substantially high salary a very high salary and also lot of perks. Now, the idea is that keeps CEO on toe. If the performance falls the person will lose out on sizeable financial benefit that keeps person motivated, not only the CEO it is also true for senior management team they are also given other benefits in the form of stock options I hope you know stock options. So, they are issued lot of shares often free of cost or at a discounted price which are converted after some days. So, they have an incentive that if they are performing well the prices of the company will the stock of the company will be high. Since they are getting stock at a negligible price they would be able to make a lot of money.



And, the third is a market for takeover which we already seen that in case of bad performance fall in the prices company becoming a easy target for take over and of course, the new group will kick off the current team. So, that becomes a it is a carrot and threat of carrot of a big pay cheque threat because a poor performance will mean loss of job and loss of control on the company.

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ANGLO-US MODEL AND AGENCY PROBLEM

- **A big pay cheque**, and other perks.
- Take for instance Arundhati Bhattacharya, chairperson of State Bank of India, the country's largest public-sector lender, which is among the world's top 50 banks. The company commands a market share of 23% in deposits and 21% in advances, higher than any other bank in India. Yet, in 2016-17, Bhattacharya took home a salary of **Rs28.96 lakh** (pdf), a little less than 5% of the amount paid to ICICI Bank CEO Chanda Kochhar, who helms India's largest private-sector bank. Kochhar earned a total compensation of **Rs6.09 crore** in the same period.

Now, here is an example of how big the pay cheque is this was a recent news a may be one year old news item we know the largest bank in India is state bank of India at that time that is in year 16 -17 it was headed by Arundhati Bhattacharya. Now, Arundhati is managing a bank as big as SBI which has a market share of 23 percent in deposit and 21 percent in advance.


So, you can imagine how big the state bank is in if you look at the Indian banking industry, her salary was 28 lakhs per annum which is even less than 5 percent of salary of ICICI bank CEO at that time Chanda Kochhar was CEO of ICICI Bank her compensation was 6 crores versus compensation for Arundhati is only 28 lakhs. I am just trying to bring the difference is SBI is a PSU under the public sector the salary is 28 lakhs even for the chairman and MD and for CEO in private sector it is 6 crore. This is not including other perks which the CEO of private sector banks get, this is not only for ICICI I have shown you the salaries of other private sector banks.

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ANGLO-US MODEL AND AGENCY PROBLEM

o **A big pay cheque, and perks**

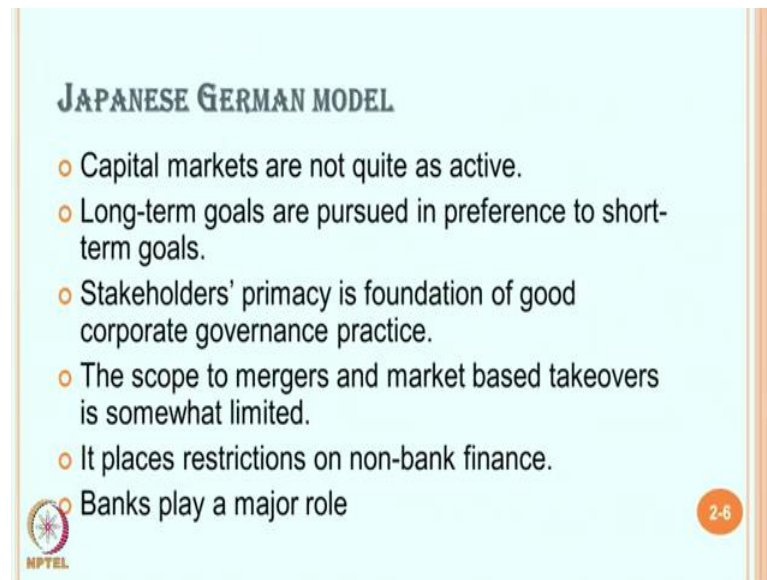
| Name | Bank | 2016 | 2017 | 2018 |
|----------------|----------------|---------------|------------|--------------|
| Aditya Puri | HDFC | Rs 9.73 crore | Rs10 crore | Rs9.64 crore |
| Chanda Kochhar | ICICI | 4.79 | 6.09 | – |
| Shikha Sharma | AXIS | 3.73 | 4.06 | 4.02 |
| Rana Kapoor | YES Bank | 5.67 | 6.87 | 5.52 |
| Uday Kotak | Kotak Mahindra | 2.70 | 2.63 | 2.92 |



So, Aditya Puri who is incharge of or CEO of HDFC Bank we can see the salary for 2016 was 9.3 then 10 crore now 9.67 crore. Remember this is excluding the perks, this is the cash salary for Chanda Kochhar it was 4.79, then 6 and now you know that she is held up in a fraud, so she has been removed. In Shikha Sharma who heads Axis bank it is 3.73 4 crore 4 crore for Rana Kapoor Yes Bank again something like 5 to 6 crore for Uday Kotak for Kotak Mahindra bank it is about 3 crore.

So, do you feel now wanting to join the bank as CEO that is true for CEOs of many private companies and this is mainly because of US model where the top management team gets a very high salary are you getting this was just as an example. Now, there is also Japanese and German model keep in mind that these are advanced countries, but the capital markets are not as active as in US.

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JAPANESE GERMAN MODEL

- Capital markets are not quite as active.
- Long-term goals are pursued in preference to short-term goals.
- Stakeholders' primacy is foundation of good corporate governance practice.
- The scope to mergers and market based takeovers is somewhat limited.
- It places restrictions on non-bank finance.
- Banks play a major role

NPTEL

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So, the market control as envisaged in a US model or Anglo US model is not very active. Now, here instead of short term goals long term goals are given more importance and shareholders have a more dominating roll, the chances of mergers and takeovers are relatively less because there is no active market and regulators have more control they do not encourage takeovers that easily.

There is a restriction on non banking finance, so banks play a very major role in Japanese and German companies even their corporate governance because banks are major stakeholders there would be a lot of control of banks or the important institutions on the functioning instead of market control its more of a bank dominated economy ok.

Now, we will go to Chinese model we know that for last ten fifteen years China is lot in news and china has acquired major market share in various types of commodities lot of production or manufacturing activity has shifted to China.

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CHINA MODEL

- In the case of China, the focus of industrial policy reform is deregulating the state owned enterprises.
- Partly privatised companies are trading in the stock market. And the standards of corporate governance have started emerging.
- In China, we have evidence of the practice of two-tier boards. It's truly an insider dominated system.
- Also primarily, it is the domination of the state and the partly be the enterprises. There is an issue of minority shareholders still being unprotected.

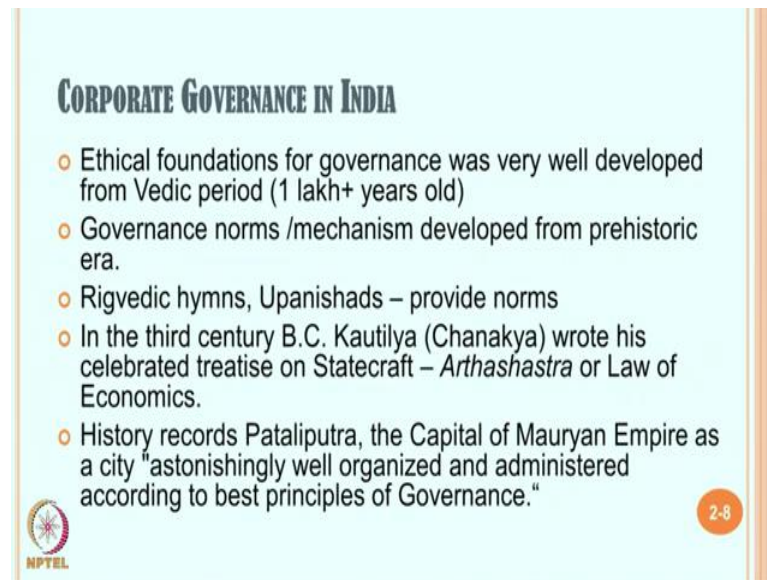
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Now, in china it is a dominance of government companies now the companies which are partly privatized they have got tradings stocks and there are also standards of governance, but in many cases there is a dual board and it's truly insider company insider dominated system.

So, for day to day operations there will be one board there will be one senior board consisting of government party leaders etcetera who have the final say in the decision making. So, it is a dominance of a state and the minority shareholders rights are not protected they do not have much rights and such that is a Chinese model.

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CORPORATE GOVERNANCE IN INDIA

- Ethical foundations for governance was very well developed from Vedic period (1 lakh+ years old)
- Governance norms /mechanism developed from prehistoric era.
- Rigvedic hymns, Upanishads – provide norms
- In the third century B.C. Kautilya (Chanakya) wrote his celebrated treatise on Statecraft – *Arthashastra* or Law of Economics.
- History records Pataliputra, the Capital of Mauryan Empire as a city "astonishingly well organized and administered according to best principles of Governance."

NPTEL 2-8

Now, we look at the corporate governance model in India, here by India in ancient India because the current model which is being practiced is mostly Anglo US model. But, from a very long time in the history we have got a model with a ethical foundation we know that Vedic period is perhaps more than 1 lakh years old and lot of ethical foundations or moral foundations have been laid down.

So, even in prehistoric times we do observe certain government related norms and mechanisms from various Rigvedic hymns or in Upanishads various norms for regulation are provided for more well documented norm if we go to Kautilya's *Arthshastra* a detailed treatise has been written about statecraft. So, though the name is *Arthshastra* actually it is about governance. So, lot of governance principle not only for government even for corporates or businesses have been laid down.

Now, if you look at the history records of Pataliputra which was the capital of Mauryan Empire we have very well administered city and there were properly laid down principles of governance.

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CORPORATE GOVERNANCE IN INDIA

Kautilya further elaborates on fourfold *dharmas* (duties) of a King/ Leader as:

1. *Raksha* – Protection
2. *Vriddhi* – Enhancement
3. *Palana* – Maintenance
4. *Yogakshema* – Safeguard

NPTEL 2-9

Now, four important principles which are known as fourfold duties or dharma's for the king or any other leader even for corporate leader. One is Raksha or protection, second is Vriddhi it is enhancement not just growth also enhancement, Palana having a maintenance and Yogakshema which is safeguard having controls.

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SALIENT IDEAS AND THOUGHTS ON PRINCIPALS OF GOVERNANCE AS REVEALED BY OUR ANCIENT SCRIPTURES

- **Atmano Mokshartham, Jagat hitaya cha:** All work is an opportunity for doing good to the world and thus gaining materially and spiritually in our lives
- **Atmana Vindyate Viryam:** Strength and inspiration for excelling in work comes from the Divine, God within, through prayer, spiritual readings and unselfish work.
- **Tesham sukham tesham shanti shaswati:** Infinite happiness and infinite peace come to them who see the Divine in all beings.
- **Yogah karmashu Kaushalam, Samatvam yoga uchyate:** He who works with calm and even mind achieves the most.
- **Yadishi bhavana yasya siddhi bhavati tadrishi:** As we think, so we succeed, so we become. Attention to means ensures the end.
- **Parasparam bhavayantah shreyah param bhavapsyathah:** By mutual cooperation, respect and fellow feeling, all of us enjoy the highest good both material and spiritual.

NPTEL 2-10

So, there were fourfold duties for the leaders there are various salient ideas or thoughts which are there in the ancient scriptures which are very much relevant to governance. So, I have tried to list a few of them.

The first one is Atmano Mokshartham, Jagat hitaya cha, so all work is an opportunity for doing good for the world Jagat hitaya cha for the good of the world and gaining both materially and spiritually. So, materially because you will get reward in this world you will also get reward in the form of Moksha or in other world that is a basic principle of life.

Then Atmana Vindyate Viryam, Atmana means self. So strength and inspiration for excellence in work comes from within, so divine or lord is within. So, it is not based on rewards from outside you will see in the western or in the Anglo US model its mostly the back pay cheque or some threat, but here from within Vindyate Viryam means from within you feel like doing good or doing selfish work that is the driving principle.

Tesham sukham tesham shanti shaswati I hope you understand sukham refers to happiness, shanti refers to peace, shaswati means infinite; infinite happiness and peace is possible from the taking care of others or all well beings because if we only try to get happiness keeping others unhappy that would not be a shaswati sukham because at some other point of time we get hit. So, here the message is that for shaswati sukham or for infinite happiness we have to take care of others also. Now, Yogah karmashu Kaushalam or Samatvam yoga uchyate these are two definitions of yoga that, he who works with calm and even mind achieves the most.

So, Kaushalya or the efficiency of karma depends on how much calm we are if we are able to work without getting distracted then we can perform very good our level of achieving will be very high Yadishi bhavana yasya siddhi bhavati tadrishi, bhavana means feelings whatever feelings you keep same way you get. So, if you have bad feelings for others you get bad things, but if you keep good feelings for others you get good feel good things back. So, for achieving better performance or for having a fair corporate governance people in charge need to have fair and good feelings not just outcome even the means are important.

Parasparam bhavayantah shreyah param bhavapsyathah, so here parasparam bhavayantah parasparam means mutual cooperation has been given very much of importance it is not just a feeling of competition western model mostly emphasizes on competition one who is the best will be made CEO. So, managers would essentially fight with each other

because they want to prove that they are better than others, but in Indian model lot of emphasizes has been given for mutual cooperation.

So, nowadays world is slowly moving towards team spirit that as a team we need to perform better because if company has to be good then as a team we need to be good. So, that particular thing comes from this principle like that we can have lot of principles have, but I have just tried to list a few of them. Now, these are basic values of Indian principles of governance.

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BASIC VALUES OF INDIAN PRINCIPALS OF GOVERNANCE

- Human being has immense potential, energy and talents for perfection.
- Holistic approach indicating unity between the individual self and the universe.
- Subtle, intangible subject and gross tangible objects are equally important. One must develop one's Third Eye, *Jnana Chakru*, the Eye of Wisdom, Vision, Insight and Foresight. Inner resources are much more powerful than outer resources. Divine virtues are inner resources. Capital, materials and plant & machinery are outer resources.
- Co-operation is a powerful instrument for team work and success in any enterprise involving collective work.

NPTEL 2-11

Human beings are given lot of importance because an individual has a immense potential, energy and talent for perfection there is no limitation for how well the human being can achieve. There is a holistic approach because unity of individual and universe is a starting point in the Indian concept. So, it is not a fight if we try to disturb others we also get disturbed that is a holistic approach this is useful within the team also and between the corporates and other entities or stakeholders as well.

Now, the subtle and intangible subjects are extremely important as much as tangible objects now if you look at the balance sheets of the companies all over the world say 100 years before that tangible assets where most important. Now a days the intangible assets are becoming more important because, of the knowledge society actually our ancient scriptures or Shasta's had emphasized it thousands of or perhaps lakhs of year before that one needs to develop third eye or gyaanachakshu one needs to develop wisdom the inner

resources are as much important perhaps more important like than outer resources. Outer resources are in the form of capital or land of plant and machinery, but to use them effectively you need inner resources if you have got inner talent the outer resources can be raised.

And the last point which we already discussed is about cooperation, that cooperation is a powerful instrument for teamwork and the success of any team or any enterprise very much depends on the collective work that does not mean individual achievement is not important. But, it should be supported by teamwork then one can perform consistently for a long period of time are you getting. So, these are the important principles we have tried to compare various global models, we have a US model or Anglo US model which emphasizes on CEOs role lot of perks and salary is to CEO.

The second is German or Japanese model which is more of a bank based, the third is Chinese model which is more straight driven, the fourth one which we discuss is a Indian model which is more of ethics and moral driven that it is not a regulator from outside, but it is from within you feel that you should perform in a fair manner. So, emphasis on self regulation nowadays the world is slowly coming to understand importance of these concepts like self regulation or team spirit or having the need of fairness within and so on.

So, with this will stop here. Namaste.