Entrepreneurship Essentials
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Lecture – 35
Introduction to Financial Statements (Contd.)

Welcome back, so we have seen; we have identified the items of item those are revenue in nature and those are to be shown under profit loss account and those are not to be part of the profit loss account.

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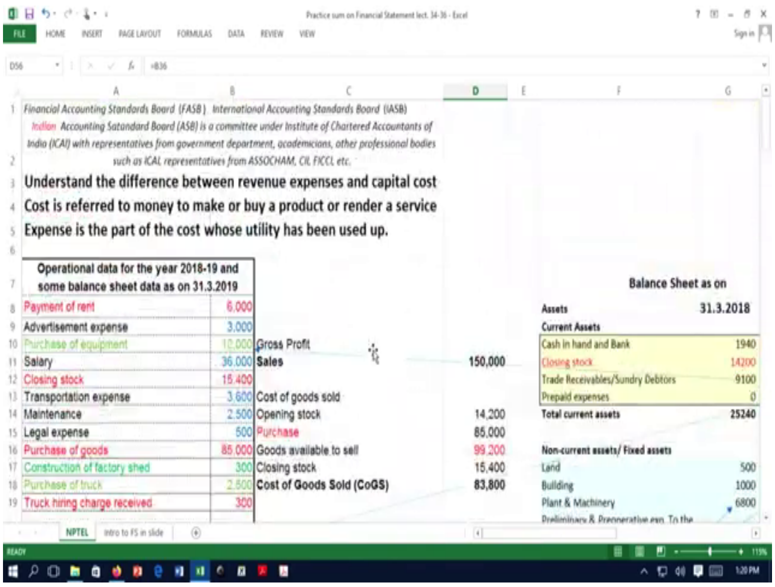

So, let us now estimate the gross profit and then operating profit and move forward.

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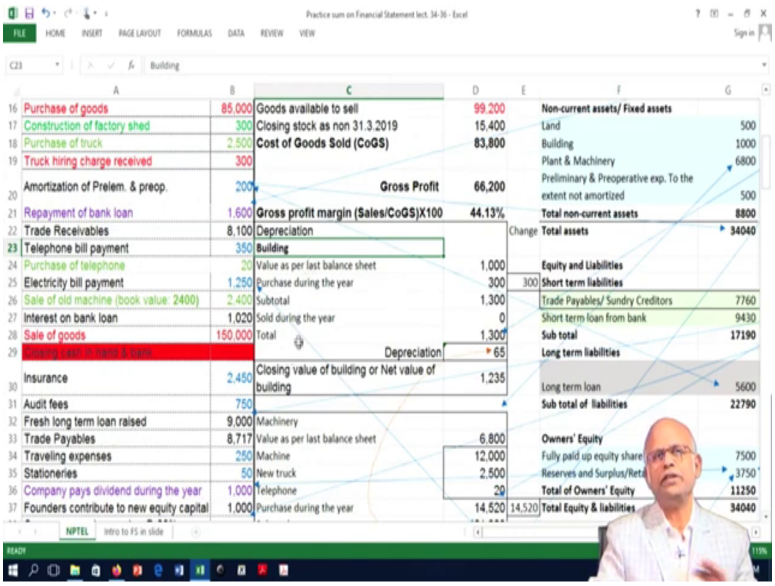

So, first thing that we do is we estimate gross profit and gross profit margin. What is gross profit? Gross profit is the profit sorry, sales minus cost of goods sold. We already know sales is 1.5 1,50,000 is here that is given and that you get from your sales ledger. There is a ledger and at the end of the year you make a sum of all the entries that you find.

In fact, you always make accumulation of the sales that you make at the end of the year you found sales is 1,50,000 rupees so, that is your sales. Now, what you have to estimate is the cost of goods that is sold meaning to sale 1,50,000 to make a sale of 1,50,000. Whichever goods you sold and the cost of those goods is the cost of goods sold. So, that goods that you sold to gain 1,50,000 rupees of sales is the cost of those goods is the cost of goods sold.

So, let us estimate how this is to be done. See for every year you buy some goods, and out of that only you sell some. We are we are assuming a trading company like you buy some goods and you sell out of them some are some remains unsold at the end of the year. So, suppose even from previous year some goods remain unsold. So, that will remain in your balance sheet as closing stock. Suppose, we are year we are in the year of say 2018-19 meaning the year that started on 1st of April 2018 and that ended on 31st of March 2019. We are sitting in the year 19-20, but then we are preparing the balance sheet profit loss account for the year gone by that is 18-19. So, during the year 18-19 we made many purchases of raw material; every now and then some stock or the other or got depleted and then we replenished with new purchases.

So, whatever we knew whatever we bought we made a we made that entry in the purchase ledger and that is how we got this purchase of 85,000 rupees here. So, purchase made during the year is here purchase of goods that is goods that are being sold. Now you bought this 85,000 worth rupees at the end of the year these entire goods were not sold. So, whatever you could not sold you could not consume.

So, the among the goods that remained unsold does not represent these sales that you might sales. Whatever goods you sold you need to understand the cost of those goods to estimate that you start from previous year's stock. The stock that you could not sold in sale in the last year that you carried forward in the current year. So, that remained in the balance sheet as closing stock.

So, you have to look into the balance sheet of the previous year to understand what is the stock that you could not sell in the last year and that stock is available in the current year. So, you have to move to the balance sheet.

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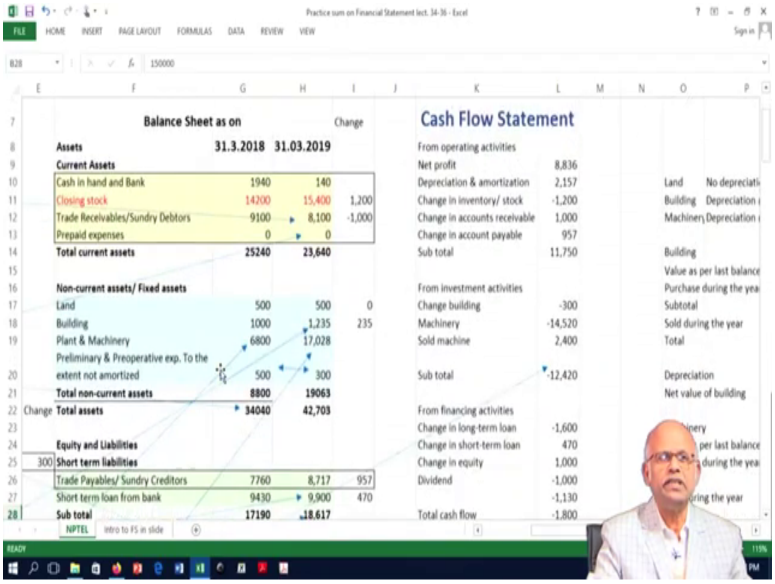

So, balance sheet is right here say it started on 31st March 2018 and you have to see whatever, is the closing inventory that you could not sell.

So, that will remain in the current asset this is current asset cash in hand closing stock. So, closing stock as on 31 3 2018 was 14,200 this should come as opening a stock of the current year opening a stock of the current year. So, for when you are estimating the goods that you consume during the current year, you have started your business with some opening a stock.

Previous year closing a stock is this year's opening a stock with the opening a stock you have added new purchases every week or every day or every month some stock you bought. They that became the whole stock that was that were available to sell out of that you made some sales.

What did you sell? You sold 150000 worth of goods what are those goods those goods are first of all opening the stock that was there, then you bought something, but then these are the available stock which you could not sell in entirety something remained as closing stock of the current year; that means, something remain unsold on 31 3 2019 that remains as closing stock that is to be deducted from available stock.

Let us see that and then estimate whatever is this stock that we consumed. So, opening stock is the closing stock of the previous year. So, that is 14,200 then you made some purchase how much is 85,000 rupees worth of purchases you made during the current year. So, 14.200 plus 85,000 total is 99,200 worth of a stock where stocks were available for you to sell.

But then you could not sell 15,400 worth of stock which remains as a closing stock as on 31 3 2019 as on 31 3 2019. You could not sell this a stock. So, that remains a as closing stock; that means, this is to be deducted from available stock to estimate how much of the stock that was sold. So, 99,200 minus 15,400 83,800 worth of stock you sold. You sold this stock at what value or at what sales that is 1,50,000.

So, you sold 1,50,000 rupees that is your sales and how much cost you incur to make this sales that was 83,800. So, what is your gross profit gross profit is this that is the total cost of goods that you sold divided by total sales that you made. So, 83,000 divided by 83,800 divided by 1,50,000.

So, minus sorry 83 1,50,000 minus 83,800 is a gross profit what is the gross profit margin? Gross profit margin is 66,200 that is the gross profit divided by sales. Earlier I mentioned that any margin that you estimate is based on sales. So, gross profit divided by sales is in multiplied by hundred is the gross profit margin.

So, in our case gross profit margin is 44.13 percent. Now we have to estimate operating profit; first gross profit then operating profit. What is the operating profit here? Operating profit is gross profit minus operating expenses or operational expenses. Now what are operational expenses?

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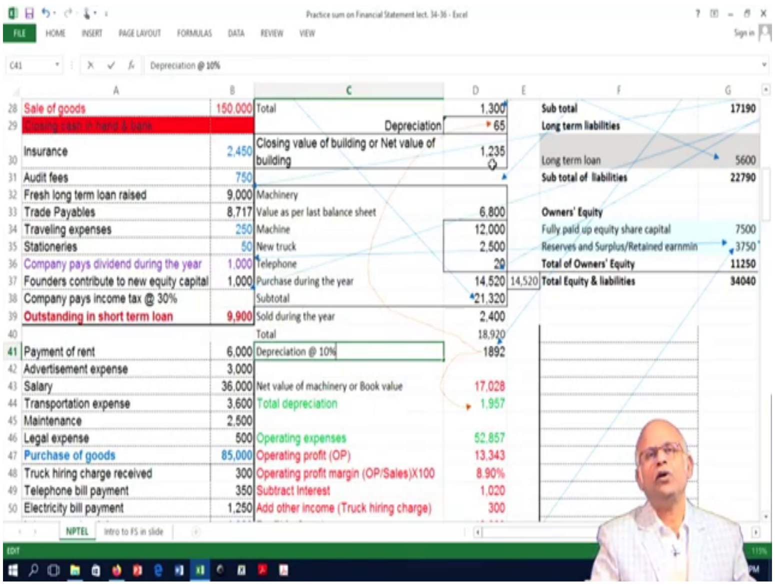

Remember in the previous session we mentioned that these are all part of revenue expenses, but then all are not operational expenses like say payment of rent is operational experience advertisement, salary, transportation, maintenance, legal these are all operational expense.

Purchase of goods has already been considered because we have had to estimate goods consumed to achieve the sale of 1,50,000 rupees. So, this has already been accounted for now it is not relevant. Truck hiring charges received is another income that you have incurred you have made. So, we will we will add that that with total income after a while because this is not part of operating income this is not your regular income. So, we will add that as other income later on truck hiring charge received gone.

Then telephone bill payment is a operational expense, electricity bill operational expense interest on bank loan is not then insurance is yes operating expense audit fees traveling expense stationeries all are operating expenses. So, you add them up to get operating expense another very important item is part of operating expense which is depreciation. Depreciation and amortization depreciation and amortization is part of operating expense.

So, we this data is not given amortization is given, but depreciation is not given you will not get this in your balance in your ledger you have to estimate it separately. Even if you are if you are building a accounting software you have to build that separate as a separate module. So, let us see how depreciation is calculated. First thing is there may be different assets with different rates of depreciation. In fact, if you are following the reducing balance method and depreciation then you have to estimate depreciation on every asset separately.

Because you have the previous year's book value then you have to depreciate it as per. In fact, for even if you are using declining method of depreciation then you need terminal value of each asset we will we will show that. I want a separate model maybe I immediately after this session I will try to show.

So, building has usually traditionally five percent rate of depreciation whereas, machines usually have ten percent depreciation of course, machine has different classification and based on government policies some assets are allowed higher depreciation so that your tax liability reduces.

Like for example, if you are using some pollution control equipment government very well allow 100 percent depreciation. So, if you bought say one pollution control equipment for 5 crore rupees. So, in a year you can allow 5 crore rupees as depreciation against that particular asset. So, your income your profit will be reduced by 5 crore rupees because you are allowing that as an expense.

So, your profit will come down you do not have to pay income tax on that amount. So, even though you are showing that as an expense it is not an expense it is just a book entry. From cash flow statement you will realize that this money never went anywhere, but it remains with you that 1 crore rupees that will show as depreciation. So, let us start with building we are showing building separately because building has a lower rate of depreciation compared to other machinery. So, building now how much to depreciate what is the value that is to be depreciated.

Normally depreciation is to be done on book value of an asset or the book value of the total asset. Suppose, we combine all the buildings as one single assets all the machineries as all single asset on single asset for our convenience.

Then we go like this; so we identify all the building assets whatever was there in the balance sheet in the previous year; because every year you have to start with the value that was shown in the previous year's balance sheet. Whatever is shown in the previous year's balance sheet is the book value or accounting value of the of the of the particular asset.

So, that is shown after allowing depreciation during that particular year. So, that is that is what that is so very important that you know what is the book value or the carrying value of an asset. So, let us let us go to this balance sheet as to whether we really had building asset in the previous year. So, that that should be shown in long term asset or non-current assets see the building was there in the previous year building value was 1000 rupees.

So, we have to start from there for estimating depreciation on building. So, so depreciation building value as per last balance sheet is 1000 it comes from there. I have taken with a linking a formula. So, value of building as per last year account. Now if you procure any asset during the year either you buy a building or if I or construct a building they are part of the total building assets and they also ought to be depreciated. As per new rule if you procure or build construct a new asset in the first half of the year you depreciate completely.

If you procure in the second of the year you depreciate only at the rate of 50 percent of the asset suppose you procure an asset with for 100 rupees in the first half of the year and you depreciate at 5 percent then 5 rupees will be the depreciation that is 5 percent of 100 rupees. Suppose, you buy that or construct that asset at the end of September or after September. September happens to be the end of first half of the year.

Say for a financial year from April to March suppose you procure that asset on 1st of October to say anytime before 31st of March then only 50 percent of the depreciation will be allowed; that means, if the depreciation rate is 5 percent annual depreciation becomes 100 multiplied by 5 percent is 5 rupees, but you are allowing only 50 percent of that so depreciation will be 2.5 rupees against that asset.

So, said that now you let us estimate value of as per last year balance sheet is 100 1,000 rupees then purchased during the year should be available in one of your ledger where you write all these assets building assets. So, there is a ledger and the ledger shows the book value of those asset. Purchases of equipment I have I have put them into green color all fixed asset equipment is not the point that your construction of factory shade is relevant because that is building asset how much is that 300.

So, we are taking that to at to the previous year's value that was there in the balance sheet. So, 1000 rupees into 300 we have we do not have any other building assets here neither buying nor constructing nor selling if you sell that is to be deducted. So, total becomes 13,000 rupees this is the total value of fixed asset now which is to be depreciated and as I said depreciation rate is 5 percent.

So, 13,000 rupees is to be depreciated at 5 percent and we are assuming that we have procured this asset in the first half of the year. We are not going into this part depreciation philosophy whatever was there we are taking it as if it is bought in the procured in the first half. So, 5 percent of 13,000 is 65 rupees. So, depreciation on building is 65 rupees. Now let us go move forward to estimate depreciation on the machinery asset.

So, machinery asset value as per balance sheet that you can see here fixed asset then machinery value as per the last year last year balance sheet is 6,800. So, we take that value here value as per previous year balance sheet that is the book value. So, it becomes 6,800 rupees. Now let us see whether we have procured any new fixed asset few new machinery at the same time whether we have sold any new machinery.

So, we have I have put that in green color this is equipment we bought it for 12,000. So, we have to add with the previous year's balance. So, previous year our balance was 6,800 rupees now we are adding a new machine that is bought for 12,000 rupees; then we have to see if there any other machine kind of asset a truck also is a machine, a telephone will be regarded as asset, even a wall clock will be regarded as a as a machine. We cannot have separate items that will make that will clutter the balance sheet profit loss account.

So, construction of factory shed factory shed this is building assets. So, we have already considered purchase of truck is a machinery item, purchase of telephone that is for 20 rupees is a machinery item is there any other there is nothing. So, you can add them together. So, purchases of machine was 12,000 rupees, new truck we bought for 2,500 then we bought a telephone for 20 rupees.

So, everything together from 6,800, 12,000, 2,500 total comes to 14,520 rupees this is what is depreciable items and appreciable value of machines, but then this becomes a subtotal of 21,320, but let us remember or let us keep in mind that if you sell any fixed asset during the year if you sell it in the first half of the year you have to deduct that in entirety that is that should not be depreciated at all.

If you sell it in the second half of the year; that means, the asset was with you for the first half full first half. So, you have to depreciate you have to depreciate 50 percent of the allow 50 percent of the depreciation for that year. Let us not go into that pro rata depreciation philosophy rather let us do just assume that we have sold it in the first half. So, complete we can avoid complete depreciation. So, that so, therefore, our subtotal is 21,300 that is the total depreciable asset. We have to deduct now whatever asset we have sold how much of the assets that we have sold that was sold machinery that was 2,400.

And its book value also is 2,400; that means, that we have neither incur any capital loss nor we have made any capital profit because whatever was there in the balance sheet we have sold it at that value. I kept it that way just for simplicity otherwise it will come make more complexity let us remain simple.

Remember that accounting is very simple it is not at all difficult thing to do, but then there are too many items too many things to understand and remember understanding is simple, but remembering is difficult that is why I have not kept this complex thing and particularly we have I have not kept any capital gains or capital loss.

So, total we have to deduct this 2,400 from total machinery assets. So, the net machinery at assets not net it becomes total as per previous accounting balance then total that you have procured minus what we sold that has gone down meaning let us went off from the balance sheet. So, total became 18,920 and if we are allowing depreciation on machine at the rate of 10 percent. So, we can very well I should actually write depreciation at the rate of 10 percent.

So, our depreciation on 18,920 rupees is 1890 1892 rupees. So, what is the we have to estimate the net value of machine because net value of machine net value of building goes to the balance sheet of the next year or as on 31 3 2000 like 19. So, we are we are estimating like this is the balance sheet of previous year, we are estimating the balance sheet of the next year.

So, whatever is the closing value of the assets in the current year we will appear here this was the building net value, this is the building net value similarly plant machinery, this was the net value of the building or the book value of the building as on the previous end of previous year that is 31 3 2002 2018. Similarly for current year or as on 31 3 2019 the value of the machine that will come on the balance sheet is the net value post depreciation.

So, we have to estimate the depreciation and deduct that from the total value. So, that we keep their data ready as to what value of the plant and machinery will go to the balance sheet that is the net value of the machine and that becomes the book value. So, depreciation is 1892 deduct the depreciation from the total depreciation depreciable asset and you get this one 17,028 that is the net value of the machine that should go to the balance sheet.

So, total depreciation becomes. So, this 1,892 plus depreciation on building assets.

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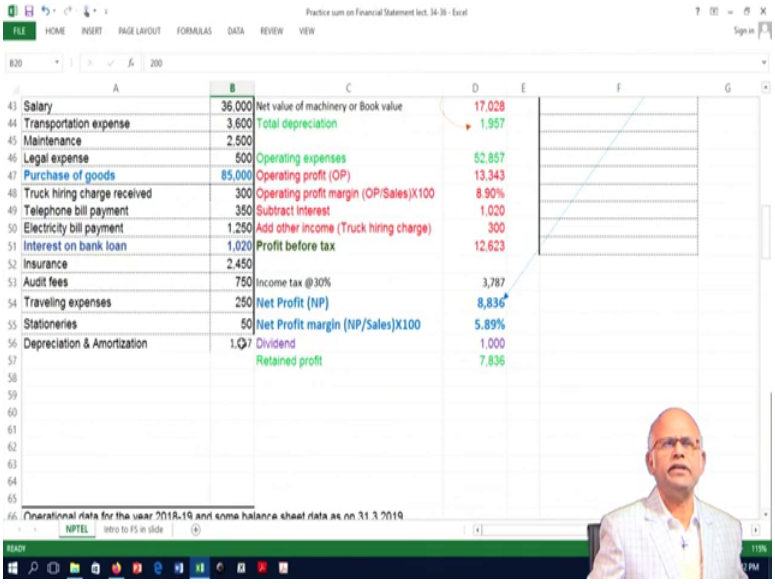

So, it makes 1957 is the total depreciation. So, this is the revenue expense you can now write it here what is the depreciation plus amortization. So, 19000 sorry 1957 is the depreciation and 1957 is the depreciation whereas, amortization is 200 amortization of is 200. So, you should actually write it like this 1957 is equal to 19 57 plus 200.

This becomes 2157 that is part of this operational expense. Now after having done that we can now estimate the operating expense. So, this is the total depreciation let us and 200 is the amortization. So, whatever is the operating expenses now we can estimate how much is that. So, we added them together B9 11 13 and all that whatever we have written here classified them in as operational expenses we have sum them up and we have got 52,000 857 rupees as operating expenses.

And as I said gross profit minus operating expense is operating profit. So, this is D 20 minus D 47 46 D 20 is the gross profit which is 66,200 minus operating expense which you have estimated 52,857. So, operating profit is equal to the gross profit minus operating expense it is 13,343. Now the moment you estimate operating profit immediately you should estimate operating profit margin. Which is nothing, but again I said operating profit divided by sales multiplied by hundred you remember that all profits are estimated based on sales.

Now what I have not shown here, but you should remember is estimation of EBITDA that I define earlier that EBITDA means E for earning which is equivalent to profit so, you might very well say profit before interest tax depreciation and amortization. So, instead of profit the Americans call it earning before interest tax depreciation and amortization is EBITDA. So, what is EBITDA? Earning means profit before interest. So, we have we have not yet considered interest then before tax we have not yet charged tax before depreciation amortization. Meaning that operating profit actually has been estimated after considering depreciation.

So, you add back depreciation to this depreciation and amortization you get EBITDA with operating profit you add back depreciation and amortization you get EBITDA earning before interest because interest we have not yet deducted before tax not yet deducted, but then depreciation amortization has been deducted. So, you add them add depreciation amortization with operating profit you get EBITDA I have not shown it here.

Now, after getting this operating profit our job is to estimate profit before tax before we estimate profit before tax we have to understand the taxable income. For estimating taxable income we have to find out we have to deduct interest from operating profit, because interest is an expense that we have not deducted any expense that is regarded as valid allowable expense by accounting standard board means of individual countries that is to be deducted before estimating income tax because government allows that.

So, we deduct interest from this expense from 13,343 we deduct interest that we expensed to get profit before tax. But then we have some other income by hiring the truck so this is not our regular income. So, we first of all we deduct this interest, but then we add the 300 rupees which is part of our income then we get 12,623 this is the profit before tax or PBT. Now we pay tax on this depending on the tax slab if you are a proprietorship company in India still you are paying 30 percent tax.

Whereas, if you are corporate like say single person company or a private limited company or even partnership firm you pay tax as per as per the current rule which is 17 percent and with other charges becomes 32 percent. So, income tax as per 30 percent rule is 3,787 on 12,623. So, net profit becomes 8,836 then 8,836 your net profit this profit belongs to the founders, they are the owner of the company this money belongs to the owner.

Now, it is the prerogative of the owners to take all the money back home or to keep to take part of the money and retain part of the money before that we should estimate what is the percentage sales percentage or net profit percentage on sales. So, that is equal to net profit divided by sales into 100.

So, it becomes 5.89 percent. So, now, if we have many companies to compare you can see what is the net profit margin of this company, net profit margin of another company, different companies then you estimate you can compare which company is doing better on the net profit margin that becomes some kind of a comparison.

Similarly, you can compare on operating profit margin basis. So, there you are actually holding the interest as constant you are comparing all the companies holding or neglecting interest; that means, even if different companies have different interest payment liabilities you are trying to identify what is their profitability holding interest is constant; forget about that. This company paid dividend of 1000 rupees so pay that dividend out of 8,836. So, you are left with 7,836 this amount goes to the balance sheet and merges with reserves and surplus. So, from here it is added to reserves of surplus of the previous year to receive the reserves of surplus the current year.

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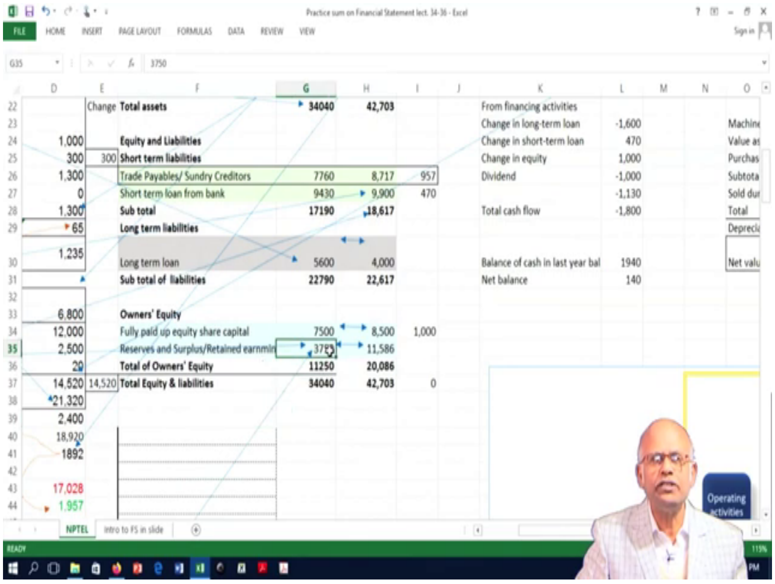

So, while preparing your profit loss account you must have noticed that we have already estimated the building value that is previous value plus whatever construction you have made if you have sold you minus that and then you have received and you have allowed depreciation then you have received whatever is the net value or the book value that is that is populated immediately in the balance sheet. Similarly for plant machinery you had some carrying value from the previous year; you added all the machines that you acquired during the current year, then you deducted all the machines that you sold during the year, whatever you receive that was depreciable value of the machines.

Then you depreciated that value at 10 percent which is which you think that is the is company as per company policy that is the red. And then whatever remains after allowing depreciation that becomes the book value and it comes to the balance sheet in total and whatever depreciation you have estimated you add that depreciation with the depreciation on building to get total depreciation and then you also received this value reserves and surplus.

So, these are already populated a good practice is to keep on populating your balance sheet as and when you estimate the profit loss account. Now we shall populate other sales of the balance sheet from the information that are available in the ledgers which were here say open closing stock, closing stock is here and will populate that in the balance sheet we will do it in the next session.

Thank you very much.