Management Accounting
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Lecture 20: Financial Budget

Welcome students, so, we are in the process of learning about the master budget. In the previous class we completed one small case, mini case and learned about that how to prepare the master budget, there we starting from the different schedule and then we ended up with the say budgeted income statement as the end of the operating budget and then the budgeted the balance sheet as the last statement as a part of the financial budget, right.

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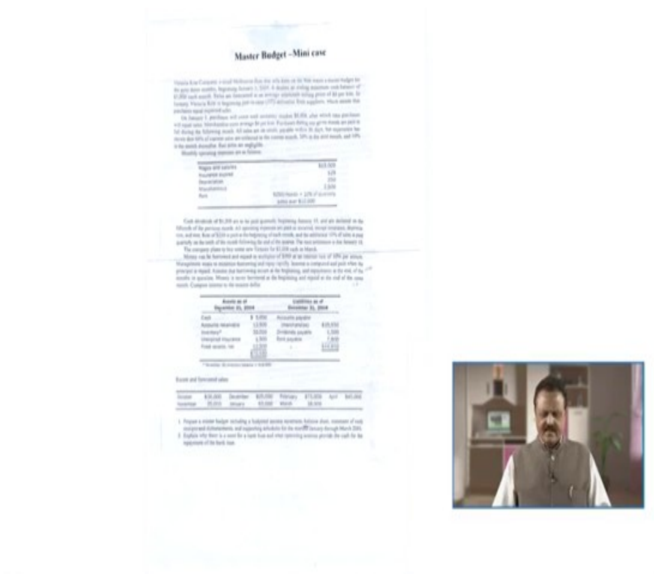

So, to clarify means further on this issue, I will discuss one more case, I will solve one more case of the similar nature almost, little bit different as compared to the previous one because the PDF file which is given here for your reference, there are the two cases, two mini cases and very nicely means treated these two cases are, if you are able to means understand these two cases, you will be very clear (means) thorough with the say the process of budgeting or using the budget and budgetary process or the budgeting process as a important tool of the management decision making or maybe say introducing in any organization, the management control process.

So, after that knowing the theoretical say the conceptual part of the budgeting, we are now into the cases, small mini cases we are discussing one case I have discussed, finished, in the previous class. Now, I will take up a new case, almost as I told you, it is a similar but somewhat differences are there. So we will solve this case also in detail from the beginning till end, we will start the sales forecasting should do and will end up with a budgeted balance sheet and then we'll try to find out that finally, means what are the important issues?

What are the important parts, what are the important concepts which should be clear in our mind with regard to the budgeting process, and finally, we can learn about that how the budgeting or the budgetary process can be used by the managements in the managerial decision making and to increase the effectiveness of the organizational process, organization decisions and organizational performance, right? So this is a case First, let us understand the case that what the case is all about? And what are the requirements of this case.

So if you go through again, its say, you can call it as the case about us one, this American company the information given here in the monetary units used here is again dollars and whatever whether its dollar, its rupee or its belongs any market, ultimately the budgeting process going to remain the same. So, let us understand that what are the important points given in this case, so that if we are means, if you are clear with the requirements of the case, if you are cleared with the information given in the case, then it is very easy for us to say prepare the detailed budgets on the basis of the information given in this case.

So, I will just discuss important points. So what is given here is Victoria, Victoria Kite Company is a small Melbourne firm that sells kites on the web, wants a master budget for the next three months, right beginning January 1, 2005 it desires an ending minimum cash balance of 5,000 dollars that is Australian dollars each month. In the previous case what was the minimum requirement? That was 25,000 dollars. In this case, it is 5,000, dollars sales are forecasted at an average wholesale selling price of the 8 dollars per kite price.

The selling price per dollar is that 8 dollar per kite. In January Victoria kite is beginning just in time, JIT. That's a technique of material management means JIT deliveries from suppliers which means that purchases equal expected sales, JIT is basically a material management technique which is the firms use to reduce the costs of inventory or the cost of storage of inventory as well as overall cost of inventory.

So if you are using the JIT, we do not need to store much of the material with us largely we create a system in the firm, in the organizations that from the one site a truckload of material comes with the raw material that goes to the plant and then converted into the finished product and the finished product goes to the market. But the inventory level in this case also under the JIT also does not come down to zero, there is some minimum inventory to be maintained that has to be kept, but not a very large amount of inventory is required to be kept.

So that depends upon the supply chain managements, arrangements with the suppliers, availability of the raw material, type of the raw material we are using. So we have to make sure that there is no shortage of the material in the plant or at the say production unit level. And if it is possible to run the show, without keeping the large amount of inventory maybe of the raw material or of the finished products, it is always better because it reduces the overall cost of production, because inventory in any way has the cost, it increases the cost of production and if the cost of production goes up finally the selling price will increase and the product remains less competitive in the market.

So, this firm is of the view that they want to introduce the just in time inventory management system. So they want to reduce the level of inventory in the firm. So that is clearly given here, so if you look at this, which means that purchases equal expected sales, they will not keep any amount of inventory. So, purchases will be according to the sales. On January 1 purchases will cease until inventory reaches up to 6,000 dollars, it means if you look at this table given here.

For example, if you look at the, say closing inventory, is given to us here is inventory that given to us in this statement, this is the balance sheet, asset on 31st December, 2004 and liabilities on 31st December, 2004, if you see the level of inventory given here is that is

39,050 worth of dollars inventory, which is very high. So, they want to keep this much amount of inventory in the time to come. So, the finally the inventory levels they want to bring it down from this about 40,000 dollar to 6,000 dollar. So till then no purchases will take place right.

Merchandise cost average 4 dollars per kite, means cost of production is just 50 percent of the selling price, purchases during any given month are paid in full during the following month. So, these are important conditions which you have to bear in mind while preparing the budget right, how we are making the sales, how much is the sales revenue expected over the different months, how the payment for those sales means the cost of production has to be made and the cost of production say has different components like material, then the other important expenses. So, those conditions should be very clear in your mind while preparing the budget or before preparing the budget.

All sales are on credit another important condition, all sales are on credit. In the previous case, we have seen that 10 percent of sales are on cash and 90 percent on credit in this case, 100 percent of the sales are on credit, payable within 30 days or say all sales are on credit payable within 30 days or receivable by this firm within 30 days. It means, they sell their total production at a credit period of 30 days, but experiences have shown that 60 percent of the current sales are collected in the current month.

60 percent of the current month sales are collected in the current month, 30 percent in the next month and 10 percent in the month thereafter. So, this is the way how you have to distribute your total sales collection part. So first we have to prepare the schedule for the sales which are hundred percent on credit. And second schedule we will prepared that is for the sales collection and in the sales collection, these three percentages or these three conditions will apply where we can say 60 percent of current sales are collected in the current month and 30 percent in the next month and 10 percent in the same month thereafter.

So these are the very important conditions to be born in mind. Bad debts are negligible, no bad debts are there, you have not to assume any bad debts because normally, when we sell on credit, it is always expected in the businesses that part of the credit sales will be irrecoverable and they will turn as bad debts, right. That is the reason that the firms do not tend to sell on credit in the market, they tend to sell on cash, but since it is not possible to do any business always on cash, 100 percent business on cash, so they have to give the credit and when they give the credit, part of the sales become irrecoverable which are considered as bad debts.

In this case, it is assumed, it is given that no bad debts are going to be there and there is 100 percent recovery of the credit sales though all the sales are on credit, right. Now, we are given the monthly operating expenses as follows. These are the different expenses apart from the say the cost of production, the monthly expenses are given here are wages and salaries 15,000 dollars per month, insurance expired that is 125 dollars per month, depreciation is 250 dollars per month, miscellaneous expenses 2,500 dollars per month, rent is 250 dollars per month plus, this is very important condition 250 dollars per month plus 10 percent of quarterly sales over 10,000.

So, we have to see the quarterly sales, sales for three months right, for example, in this case, we are going to prepare the budget for January, February, march. So, what are the total quarterly sales over and above that 10,000 dollars of sales 10 percent of those sales will also be the further added rental value. So, minimum is 250 per month plus 10 percent of the sales over and above that 10,000 of the quarterly sales. So, this is a very important condition you have to understand it very clearly.

Then further information is cash dividends for 1,500 dollars are to be paid quarterly, this is again a cash outflow they have to take that into account while preparing the cash budget, beginning January 15, and are declared on the 15th of the previous month. So, very important condition which people have to be careful while preparing the cash budget. All operating expenses are paid as incurred, except insurance, depreciation and rent, right. Rent of 250 dollars is paid at the beginning of each month clear, means rental value will be paid at the rate of 250 dollars at the beginning of each month.

And the additional 10percent of sales is paid quarterly on the 10th of the month, following the end of the quarter, right. Now, for example, you are given here the information about two quarters. One is the sales you are given is October, November and

December, this is one quarter and then January, February, March, this is another quarter. If your total of the sales of this quarter, previous quarter, this works out as how much sales 88,000 dollars of the sales were there in total quarterly sales, the quarter end by December 2004 and over and above 10,000.

10,000 is the sales over and above the 10,000 dollars will be how much 78,000, total is 88,000 less 10,000 you simply forgot that. So what are the additional sales over and above 10,000, 78,000, so 10percent of that will be 7800 plus 250 the normal monthly rental will be considered in the cash budget for the month of January. Similarly, in the month of April again when the company will prepare the budget then again that 250 plus the 10 percent of the sales over and above the 10,000 will be considered in the month of April.

So quarterly we will have to take this also into account while preparing the cash budget right. Then, next installment settlement is in due in January 10. The company plans to buy some new fixtures by or for 3,000 dollars in cash in the month of March. This is again a very important information and worth taking into consideration while preparing the cash budget, right? Money can be borrowed and repaid in multiple of, multiples of 500 dollars; we have to prepare the cash budget while preparing the cash budget.

We will see as in the previous case, we have seen that at the end of the month, when we try to find out what was the cash available for the operations from the opening balance right, after keeping minimum balance of the cash as the closing balance or the minimum desired balance of cash, some balance will be available for the operations for the current month. And then we will see that how much cash will be available from the sales or the sales collection and how much cash has to be paid over on the different on account to the different operating expenses and what is going to be that net difference.

So if the receipts are going to be more than expenses or the disbursements then certainly there is no need to borrow cash but if the reverse is happening, that your receipts are lesser than the disbursements we are going to make in any month, then certainly we need to borrow from the bank. So, condition here is borrowing has to be in the multiple of 500 dollars, in the earlier case it was in the multiple of 1000 dollars right and now what is the interest rate?

The interest rate is that expected interest rate that will be charged by the bankers 10 percent per annum, management wants to minimize borrowings and repay rapidly, interest is computed and paid then the principle is repaid. Same condition what we saw in the previous case, that when you are going to, if there is any surplus amount we have to utilize that amount for repaying the loan back then that will be bifurcated into two parts, principal as well as the interest component and will be utilized for repaying the loan or part of the loan back along with the interest.

Assume that borrowings occur at the beginning and the repayments at the end of the month, which is natural at the end of the month or the month in question. Money is never borrowed at the beginning and repaid at the end of the same month. So, beginning in the, borrowing in the beginning of one month and repayment at the end of the next month, in the same month beginning in the, borrowing in the beginning and repayment in the end of a month will never happen.

Compute interest to the nearest dollar, means absolute value nearest dollar nothing in cents, compute interest to the nearest dollar. After that we are given here the balance sheet, in the balance sheet we are given the information it is in the order of liquidity, first of all the most liquid asset is given, most liquid current asset is given that is the cash, then we are given accounts receivables, then we are given inventory, then we are given unexpired insurance, then we are given the fixed assets.

Total value of this balance sheet is how much 70,550 dollars on the other side, we are given the liabilities again in the order of liquidity, most liquid liabilities given at the top, that is accounts payable 35,550, dividends payable 1500 and rent payable is 7800. So, now, this is the balance sheet available with us. So, you are given the assets, how much 70,550 dollars, you are given the liabilities that is 44,850. So, what is the difference? Difference is the capital right, because there is a accounting equation and that accounting equation is how do we write that accounting equation?

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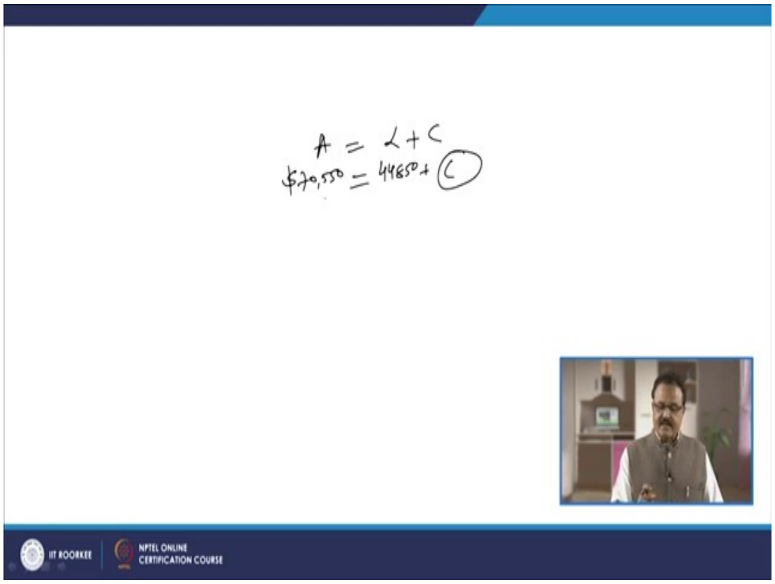

That is the assets are equal to liabilities plus capital. So, same is the case here, you are given the information about assets, how much assets information is given? That is 70,550, worth of dollars assets are given 70,550 how much liabilities information is given to us? Liabilities information given to us is that is 44,850 and plus is the C. So, you can easily find out the value of C. So, that will be somewhere 70,550 minus 44,850. So, that will be the value of the C or the equity capital you can easily find out.

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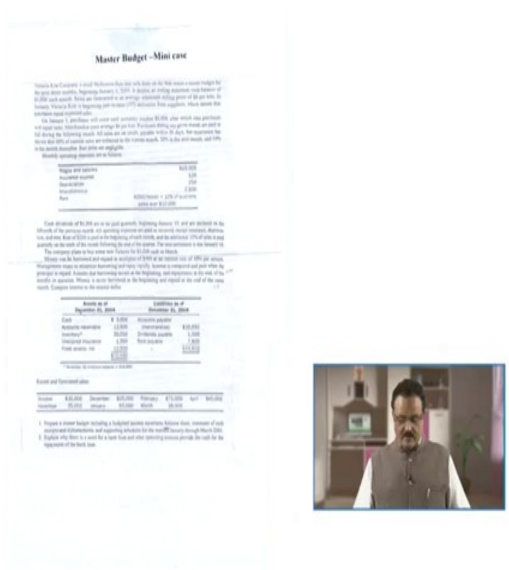

So we will require the value of equity capital while preparing the last statement that is a budgeted balance sheet, right. Lastly, you are given the information about the say, sales forecasted sales. So, we are given the sales for two quarters, one is the actual sales which have taken place, these are the recent sales that is in the month of October, November and December, and then the forecasted sales for the coming, forthcoming quarter that is for the January February, March.

So, we are given these sales, and then we have to use the previous actual sales in some cases and use the forecasted sales in the some cases and finally, what you have to do here is, what is the requirement? Prepare a master budget including a budgeted income statement, balance sheet, statement of cash receipts and disbursements and supporting schedules for the month of January through March 2005. So it means this quarter, January to March for this quarter, we will have to prepare the budget.

Both the operating budget and the financial budget, end of the operating budget like the previous case will be the budgeted income statement or the budgeted profit and loss account. And the end of the financial budget will be the budgeted balance sheet. And then second requirement is explain why there is a need for bank loan, and what operating sources provide the cash for the repayment of the bank loan, right. So these are the two conditions we had to fulfill, we have to means; create the information to fulfill these two requirements.

First is a major requirement that is the preparation of the master budget. So, now before, means I am doing it, I will start attempting it if you want to understand it very clearly, you read it this case this information, first of all, maybe not once or twice thrice. And be clear, what are the requirements? What is the information given in the case, and how we have to utilize that information, so as to prepare the required schedules and the budgeted income statement, budgeted cash statement and then the budgeted balance sheet, right?

So, if what I am, how I am taking all the figures here in all the schedules and all the statements, if you are not clear you again, read this case, as many times as you want it, so first you grasp this information, that is why I read it, everything and there was anything important, I clarify, try to clarify here, and then I am now going to do it, so that we can clearly understand that how to prepare the master budget, right?

So after this, now we will open the new sheet and we will start preparing the budget and if we start preparing the budget like the previous one, we will have to now start with the schedules and the schedule here will be using is that is something like, what was the first schedule in the previous problem in the previous mini case? The first schedule was the sales budget, because always anytime or for any time horizon, anytime period, you prepare the say, budget, maybe the budgeted profit and loss account and the budgeted balance sheet that begins with the forecasting of sales.

That gives us the level of business, level of business operations and on the basis of that we can find out, that whatever the level of business we are going to do for a given quarter, what is going to be the outcome of that in terms of profit and loss and finally, how that means quarters business is going to impact your balance sheet right. So, we are starting with the first thing that is with the schedule and that first schedule is, what is the first schedule, schedule of the sales or the say, sales budget. So, we will start with the sales budget, this is the first schedule will are preparing.

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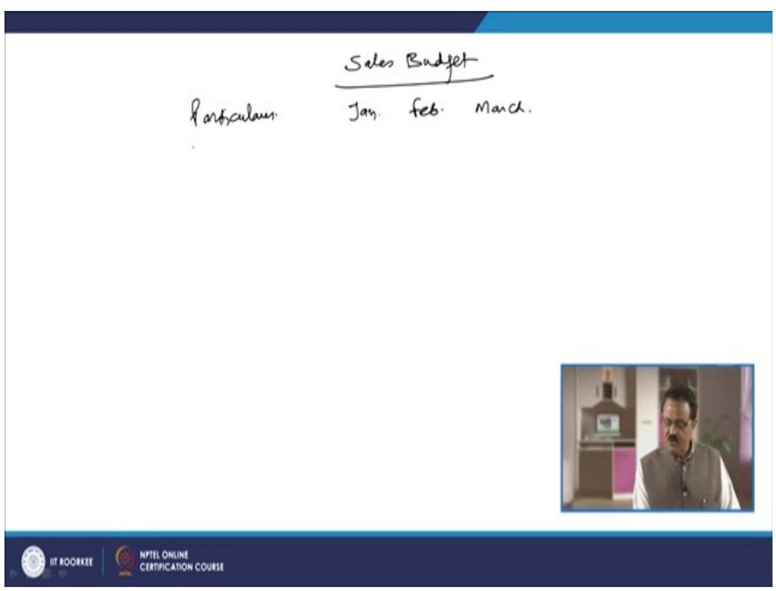

So, this is the first schedule we are preparing here and this is the sales budget right. Again, we will have to make the same columns, particulars, then are the months, so what are (quarter) months here? January, then it is February and then it is March, right. These are the three months. Now, again, go back, I will take you again back to the case and what is the condition with the sales, sales are given to us right, sales for the month of January are 62,000, sales for the February are 75,000 and sales for the March are 38,000 dollars right.

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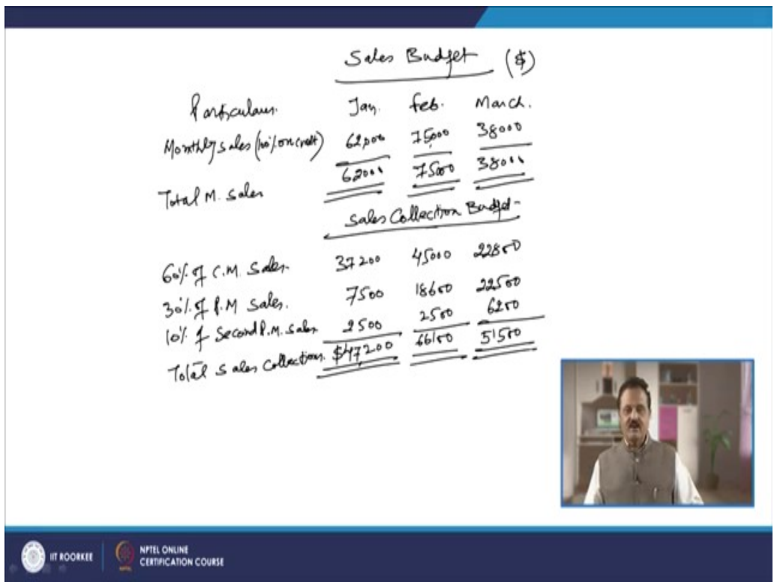

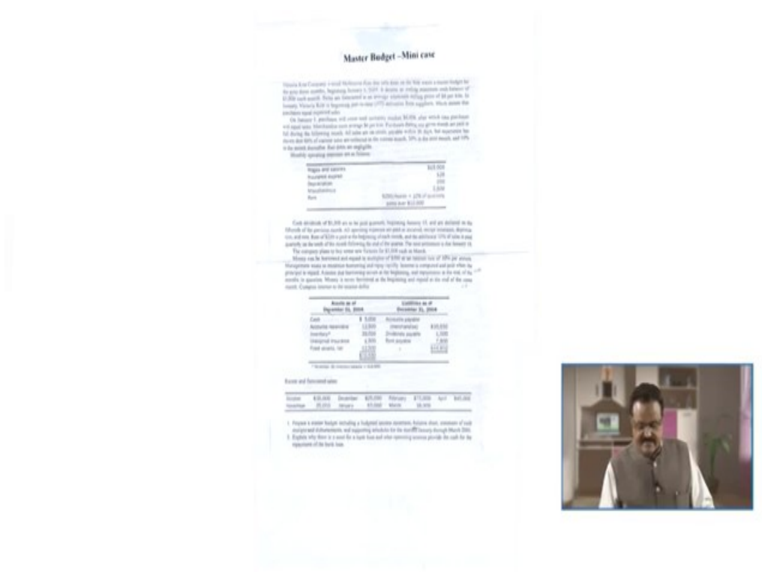

So, let us put these sales here, sales or you can call it as the monthly sales, monthly sales and you put it in the bracket so that you always remember it 100 percent on credit, 100 percent on credit, right. So, how much are the sales here, dollars, I am putting here the sales in terms of say the units are Australian dollars. So, we are putting here once on the top and that amount is how much January is 62,000 worth of dollars, February the sales are these are the forecasted sales for the quarter 75,000 dollars and then we had the these sales here as 38,000 dollars right.

So, you close it, these are your total sales, total monthly sales are going to be how much? 62,000, 75,000 and it is 38,000 dollars right. Simple schedule, very simple schedule, no further information nothing, in the earlier case what was the requirement we were given? The information like that sales are 10 percent on cash and remaining are on credit. So, we had to put it like cash sales, this much credit sales this much, and total sales are this much. In this case only very simple information is given to us that all the sales are hundred percent sales are on credit nothing on cash.

And that if you calculate the total monthly sales, these total monthly sales are working out as same amount that is 100 percent on credit 62,000 dollars, 75,000 dollars and 38,000 dollars this is very simple first schedule and we are complete with this schedule. Now, the second schedule is the important schedule and this schedule is sales collection budget, sales collection budget, sales collection budget, right. Again, we have not to put this information; we are preparing the same schedule means the schedule under the similar headings or similar months.

So, now we will have to go for the sales collection. Now, 100 percent sales are on credit and the credit period is, what is the credit period given here is? On a credit period of 30 days, it is given to us that sales are on credit and the credit period, all sales are on credit payable within 30 days, but experiences have shown that 60 percent of current month sales are collected in the current month, 30 days credit period we are giving but 60 percent of sales are collectable at the end of the current month 60 percent, 30 percent of the sales will be collected by the end of next month and only 10 percent will go to the next to next month collection so these are the conditions.

So, how we would write here? Sales collection 60 percent of current month, so, what is the 60 percent of current month sales? Your total sales are 62,000 and 60 percent of current month sales are how much, worth 37,200 dollars right, in the month of January we are going to collect, then is 30 percent of, 30 percent of previous month sales, 30 percent of previous months sales. So in the month of January, what was the previous month sale? Previous month sales are how much in the month of January, previous month is December.

And 30 percent of the December sales will be collected in the month of January so that amount works out to us how much that is 7500 this amount and then 10 percent of second previous month, second previous month sales. So, what is the second previous month here? November, November sales are how much? November sales are given to you is that is the 25,000 again and what is it 10 percent of that 2500 worth of dollars. So, these are the total collections here in the month of January this is going to be the sales collection.

If we total it up how much it works out, total months, total collections, total sales, collections are going to be how much? 47,200 dollars, 47,200 worth of the collections will be possible from the sales by the end of month of January. Similarly, now we go for the next part and that is the month of February, in the month of February how much are going to be the collections? 60 percent of the current month sales and 60 percent of current month sales are how much, 45,000 dollars, 30 percent of the previous month sales is working out so much, 18,600 right?

And then is the again 2500, so again, what is the total collection for this is dollars 66,100 simple right, now you go for the March collections. March collections are going to be how much? March collections are going to be 22,800 as 60 percent of the current month sales of 38,000 dollars, 30 percent of previous months is going to be 22,500 and then is 6200 is the 10 percent of the previous month. So, it means how much is that? It is going to be 62,000 for the month of January which will be collected, 10 percent of that will be collected in the March. So, this works out as 66,200, right.

So, what are the total collections here in this month? It is going to be 51,500, right, so now, close this, this schedule is also already. So, we sold in the month of January for

62,000 worth of dollars, say 75000 worth of dollars in February and 38,000 worth of dollars in the month of March. Looking at the collection conditions, sales collection conditions 60 percent, 30 percent and 10 percent divided over the three months, your collection, total collections in the month of January will be 47,200, in the month of February it will be 66,100 and in the month of March 51,500 dollars, right. So, these two schedules are ready with us.

Now we have to go with the next schedule and that schedule is the, now because if you want to sell you have to produce and if you have to produce certainly we need some inputs and first major input is what? That is the raw material, purchases. So, we will have to go for the purchases of raw material. First we will go for the purchases. So, we will prepare the purchase schedule and then looking at the conditions given in the case, will prepare the purchase disbursement schedule and then finally, we will take all this information from these schedule to the cash budget and then to the respective other statements right.

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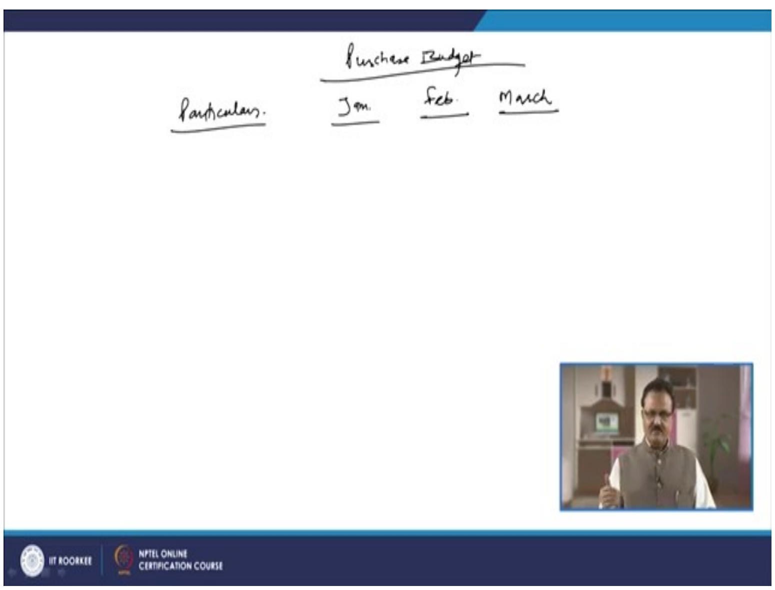

So, now we will move forward and then we will go to the next page next sheet and now we will prepare the purchase budget right. In case of the purchase budget again same thing will do. So purchase budget is again, this is another schedule purchase budget schedule and in this case also will have the columns like particulars, then the again months January then it is February and then it is the march right. So, these are particulars, January, February and March. So, if you recall the schedule which we prepared the purchase schedule, purchase budget, we prepared earlier in the case.

So, what we have started with this that is that desired ending inventory, same formula we will follow to find out the amount of purchases the simple equation is that is a closing inventory plus cost of goods sold minus opening inventory is going to give us the amount of purchases which we are going to do in the one month or in one say adjusting month or in the current month. So we will have to find out that what are the conditions given in the case here. So, if you look at the purchase condition, first of all you have to find out here is that purchases are going to be, what is the cost of merchandise?

Merchandise costs, merchandise means the cost of raw material, merchandise cost is just 50 percent, 4 dollar per kite right. So, we have to take that into consideration or keep that in mind that material cost is, purchase cost is half that is 4 dollars that as compared to the 8 dollars of the selling price and then we have to find out that if it is the 50 percent, means the cost of raw material is 50 percent of the sales amount, then how much purchases we are going to do in one month starting with the closing inventory, desired ending inventory we want to keep in that month and then how much we are going to have say the cost of goods sold for the current month, how much is the opening inventory available, which is the closing inventory of the previous month.

And then finally, we will be able to find out the amount of the purchases for that month right. So now, we have prepared schedule and as per this schedule or as per the columns given in this schedule, we will prepare the purchase schedule or the purchase budget and then we'll try to find out for every month, that is month of January February and March what is going to be the monthly amount of purchases and accordingly, accordingly then given as per the conditions given in the say case, we will go for the next schedule that is the purchase disbursement budget. So purchase budget and the purchase disbursement budget plus other statements. I will prepare and discuss with you in the next class. Thank you very much.