Management Accounting
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Lecture 21: Master Budget- A mini Case-1

Welcome students, so, we are in the process of preparing the schedules and after preparing the sales budget and the sales collection budget now, we as I discussed in the previous class we had to prepare the purchase budget so, or the purchase schedules or the purchase budget schedules, so though I prepared these columns in the previous class also but let us do a fresh.

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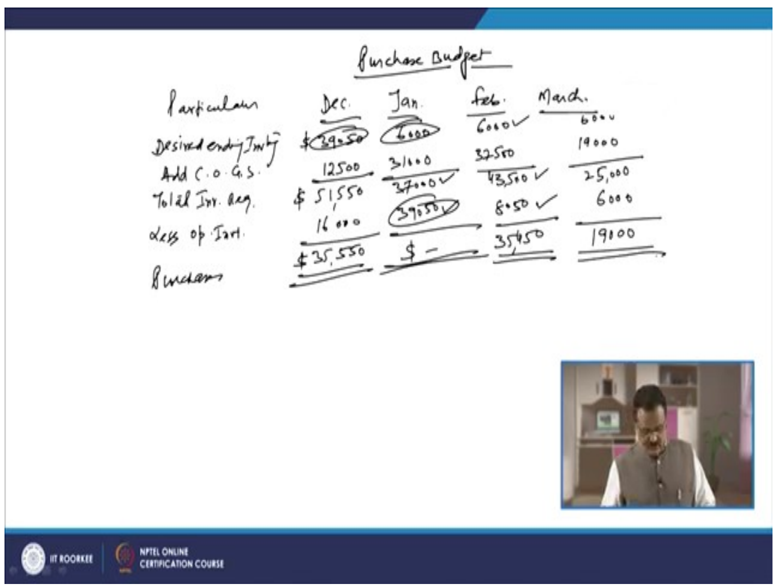

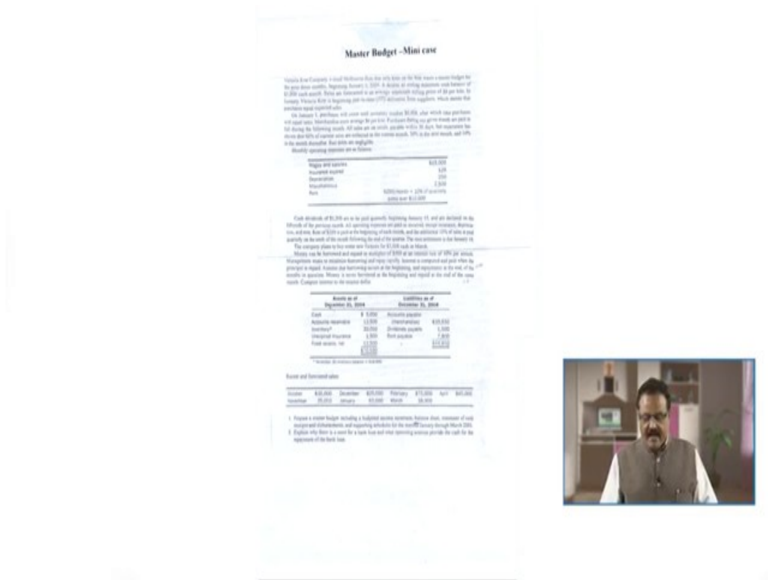

And we will be doing here is something like say as a purchase budget, purchase budget right. So, quickly let us put the things here particulars then is the month, normally we are preparing the budget for three months that is January, February and March right, but here we have to prepare the purchase schedule for not one previous month also that is the month of December. Now, why we are including the month of December here there is important requirement if you look at the case.

The requirement is that say, merchandise costs average 4 dollar per kite, purchasing during any given month are paid on the, paid in full during the following month, right. So, finally, while preparing the next schedule, purchase disbursements schedule we will have to make the payment in the month of January for the purchases of the previous month and previous month is December. So, for that we have to find out the amount of purchases which the firm has done in the month of December because if you do not know that figure, we won't be able to make the payment in the month of January.

So, the problem will come while preparing the next schedule that is the purchase disbursement schedule because for the month of December we are paying in Jan, in the month of Jan purchases we are paying in Feb and for the month of Feb purchases we are paying in March, right? So that way one month after we are making the payments. So, what we have to do is we have to include the month of December also in this schedule, though we have not included the month of December in the earlier schedule because we are preparing the budget for three months, the quarter starting from January till March.

But we have to include December, because the payment for December purchases has to be made in the current quarter that is in the first month of the quarter that is in January, right? So, the particulars as I told you earlier, we start with the Desired Ending Inventory, desired ending inventory. So, what is the desired ending inventory? That is going to be how much, I am writing in short for the inventory or because there is a shortage of the space. So, Desired Ending Inventory is how much?

Is going to be dollar, what is a Desired Ending Inventory, it is given to us here in the case that design ending inventory is inventory 39,050 worth of the dollars inventory was the closing inventory, it means it was a Desired Ending Inventory in the month of December. So, this we have to take is dollars 39,050 and add Cost of Goods Sold right. In this we have to add the cost of current goods sold COGS, we have to add here cost of the goods to be sold in the current month.

So, how much goods to be sold in the current month? The sales for the current month are how much, for the month of December, the sales are 25,000, so cost of goods sold for the sales in the month of December is half, that is a 50 percent of the selling price so total sales are 25. So, the cost of goods sold will be, goods to be sold will be 12,500 worth of the dollars, right? Then, this gives you the total requirement, total inventory requirement. Total inventory requirement is how much? This you can easily calculate is this sum of these two and this is going to be zero five then it is five, then it is one and then it is five.

So, it is dollars, how much? 51,550 worth of the total inventory will be required to be purchased for keeping 39,050 worth of the dollars as closing inventory and then for the current requirements sales requirement is just 50 percent of the sales that is worth 12,500 worth of the dollars. So, total inventory requirement will be, this is your 51,550. Now, less beginning inventory or we can call it as opening inventory, what is opening stock?

Opening inventory is how much with us? You are given that opening inventory information, you are given November 30 inventory balance was 16,000 worth of dollars.

So, closing inventory of the month of November is the opening inventory for the month of December. So, this we have to subtract this much is available with us from the previous month, this much amount is available with us. So, it means what is the amount of purchases? Total requirement is 51,550 dollars and less the opening inventory which is already available with us this amount is available with us.

So, it means the purchases will be how much is going to the purchases? The balance is going to the purchasing and this amount is going to be how much? 35,550, 35,550 worth of the dollars purchases will be made in the month of December, these purchases will be paid in the next month, so we required this information in the schedule that is why we prepared the purchases budget for the month of December.

Now, similarly, we come to the month of January that what is a condition here for the purchases? On January first, purchases will seize until inventory reaches 6,000 dollars, closing inventory will now be 6,000 dollars because firm is, will be implementing the JIT. So, how much we want to keep as a closing inventory? That is worth 6,000 dollars right, and now you add the cost of goods to be sold, cost of goods to be sold is, what is a sales value?

62,000 dollars so 50 percent of that is going to be how much, 31,000 worth of dollars, purchases. So, what is a total requirement? Total requirement will work out as dollars 37,000 right and what is opening inventory available with us? Opening inventory is the, this figure which is the closing inventory for the previous month. So, the closing inventory was 39,500. So, it means this much is available, this much is required, this much is available. So, how much is the amount of purchases?

Finally, nil, dollars, 0 or nil will be purchased, because our requirement is lesser than but we already have in the stock. So, we are not going to purchase anything in the month of January and when you are not going to purchase anything in the month of January you are not going to pay for any kind of purchases in the month of February. Similarly, now we go for the month of every purchase, desired ending inventory will be now again 6000 because this is the final level of inventory the firm wants to keep, after implementing the JIT in the firm.

So, it is a 6,000 dollars and what is the cost of goods to be sold? 37,500, so, total is the total inventory requirement is how much? It is going to be 43,500 worth of the dollars, right and what is opening inventory now? Opening inventory with us is how much? Our requirement is 43,500 and opening inventory available with us is how much? Opening inventory available with this was here was the closing inventory 39,050 so, this was the total material available.

Our requirement in that previous month was 37,000 worth of dollars, it means we have the surplus of how much 2,050 dollars and plus this, that is of the 6,000 dollars. So, what is the total opening inventory available with us? That is worth of 8050 worth of the dollars right now, so finally, you can find out this is your total requirement, this is available with us so, what is going to be purchased in the month is 35,450 worth of the dollars is going to be our purchase requirement for the month of February right.

Similarly, now, we go for the March, March is again the inventory requirement, closing inventory we are going to keep is 6,000 dollars right. In this case now, what is that cost of goods to be sold is, what are the sales? Here in the month of 38,000, so our requirement for purchases for the current month cost of goods sold will be 19,000. What is a total requirement is 25,000 dollars right? And what is opening inventory available with us now?

The opening inventory available with us is, that is the, we have already utilize this, so this is a closing inventory 6000, this is the opening inventory available with us 6000 right, so it means current amount of purchases is going to be how much, 19,000 worth of dollars, 19,000 worth of dollars. So, you could easily find out purchases to be made in the month of, purchases of inventory to be made in the month of December, that is 35,550, January is nil.

We do not want to purchase anything because we have enough inventory available with us, February 35,450 and then is the March 19,000 worth of dollars inventory we want to purchase. So, this is the total amount of the purchases we had to find out or we have found out and the simple formula for finding out the amount of purchases is closing inventory plus cost of goods to be sold in the current period minus opening inventory will give you the amount of purchases right, so this schedule is ready.

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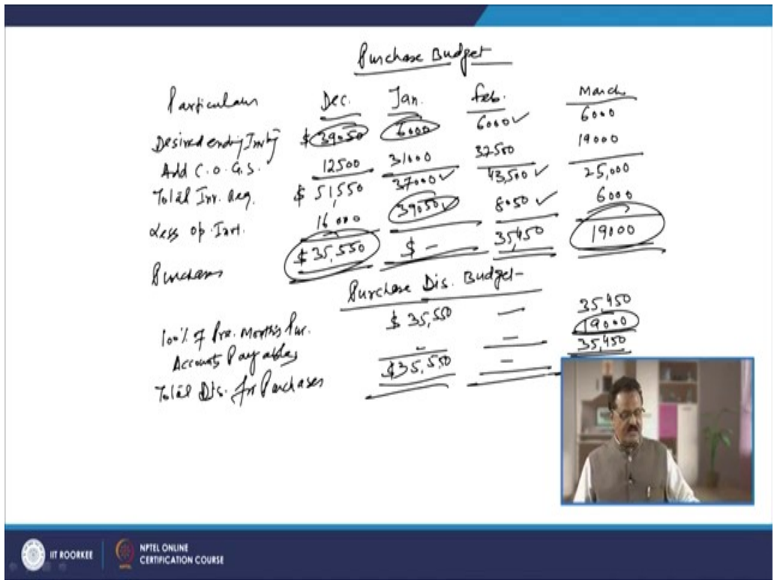

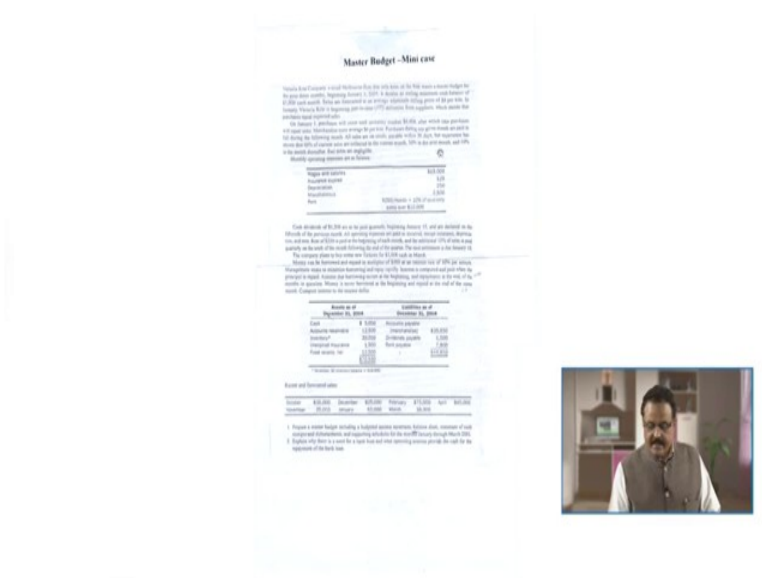

Now we will go for the next schedule that is a purchase disbursement schedule, purchase

Disbursement schedule or purchase disbursement budget, purchase disbursement budget right? Now, again same columns, same process, what is the condition for the payment? Condition for the payment is that say purchases during any given month are paid in full during the following month, very simple state we have already found out how much are the purchases, so, we are going to make the payment.

So, it will be 100 percent of, 100 % of previous months, previous months purchases, hundred percent of previous month's purchases, we are going to pay. So, in the month of December we are not preparing the budget for the month of December, so now we will forget December but we will use this figure, this figure is this is 35,550, so now, you will come out to straight way for the month of January because we are preparing the month of three, the quarter of a say this January to March.

So, in the month of January how much we are going to pay? For 100 percent of previous months, previous months purchases. So, what are the previous purchases? 35,550 that we are going to pay in this, so this is dollar 35,550 this we are going to pay in the month of January and now say in the month of February are we going to pay for anything? No, because purchases in the month of January are nil, so no payment will be making in the month of February.

And the month of March how much payments we are going to make? We are going to make the payment of this, that is 35,450 that will be paid in the month of March, 35,450 will be paying in the month of March right. Then finally, this amount of 19,000 of the purchases which we made in the month of March will be paid when, next month that is April, so this amount will be shown here as the accounts payable, accounts payable and this accounts payable will come where? As a liability in the balance sheet, accounts payables, so it means accounts payable are how much?

Nil in the month of January, nil in the month of February and in the month of March is going to be how much? This is the 19,000 right. So, total disbursements for purchases, total disbursement for purchases will be how much, 35,550 in the month of January, total payment in the month of February nil and in the month of March again you have to not to take this figure, this is accounts payable. So, payment will be for how much?

This is 35,450 worth of the purchases we are going to pay for or disburse that amount for those purchases. So, these are the total disbursement for the purchases. And this is basically the purchase disbursement schedule right. Now, we will have to go for preparing the other schedules or the other budgets. And in this case as in the previous case, we have seen that we are preparing the budgets for the operating expenses also because that information of the operating expenses was given to us was not very clear or state. So, we will have to prepare the budget for the operating expenses also.

But in this case, no schedule is required because operating expenses are very clearly given to us, monthly operating a expenses are as follows and these are wages and salaries, insurance, depreciation, miscellaneous and rent so same way without preparing any schedule is a simple information, crisp information, straight information can directly be taken from this case itself to the next statement. So, till now all the schedules are ready, we have prepared four produce schedules.

One is a sales budget schedule or the sales budget, sales collection budget, purchase budget, purchase disbursement budget, and then now we will prepare three major statements. First is the cash budget, then we will prepare the budgeted profit and loss account and then the budgeted balance sheet, so, now next statement, which we are going to prepare is the cash statement or the cash budget right.

This is going to be again, very, very interesting statement. Very, very interesting budget and as we did it, in the previous case, we will be preparing the budget in the same form, cash budget in the same form. And, again, we will have to have the particulars three months, and we will start with the opening balance of cash in any month and end up by finding out the closing balance of the cash for that month.

And the closing balance of the cash for that month will become the opening balance for the next month, and then the closing balance and then for the third month. So that way, we will have to find out the closing balance at the end of the quarter, at the end of the month of March. That closing cash balance will go to the balance sheet as the asset on the asset side of the balance sheet right. So, let us start preparing the cash budget for the three months starting with the month of January.

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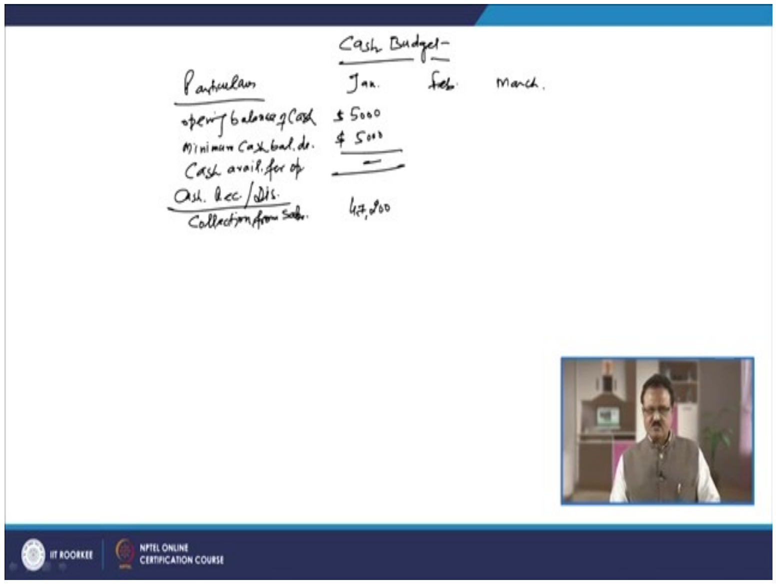

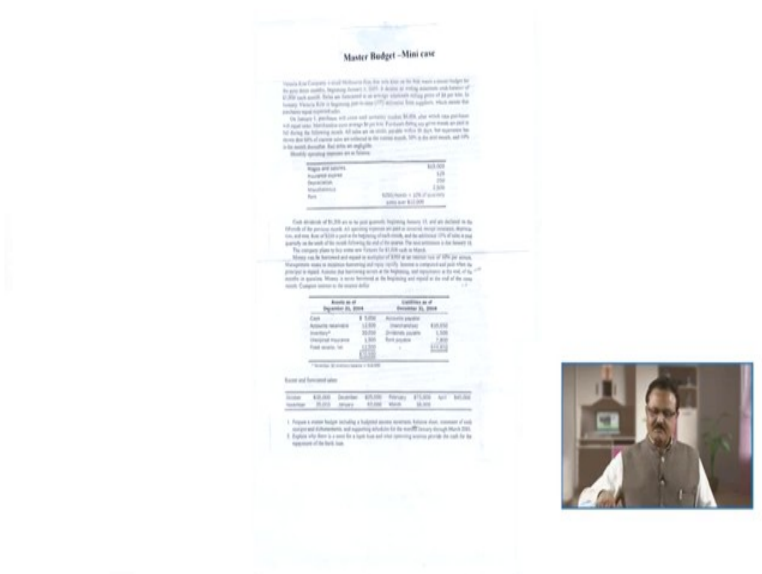

So this is the cash budget, this is the cash budget right and here we start with the particulars, this is the month of January, this the month of February and this is the month of March right, we take it like this month of March. Now, we will have to take this and starting with the month of this January particulars, so we will start with the opening balance of cash, opening balance of cash we will have to find out, what is opening balance of cash?

What is the closing balance of month of December? What is the closing balance of the month of December? Dollars 5,000 this will become the opening balance for the month of January. So, we are starting with this, this is the dollar 5000, this is opening balance of cash and what is the minimum desired balance of the cash? Again we have to find out from this case, minimum desired balance of the cash is given to us here is, that is we want to keep the desires and ending minimum cash balance of 5,000 dollars at the each month.

So, in this case, the minimum cash balance desired is how much again? Dollar 5000 right, now cash available for operations, cash available for operations is how much? We have 5000; we want to keep as a safety stock minimum balance of the cash as 5000. So available here is nil, we do not have any cash available for operations, this is nil, we do not have any cash available for the operations in this month, this all will not depend upon the collections, how much sales collections we have, from those collections will have to make the payment for the disbursements.

And finally, we will have to see whether that net balance of the cash is positive or negative, if it is positive, fine, that will become the closing balance of the cash for the month of January. But if it is negative, then we will have to go for the financing arrangements and financing arrangements are by borrowing from the bank and condition for the borrowing given to us is that borrowing has to be in the beginning of the month and the payment has to be at the at the end of the month.

Means repayment of the loan has to be at the end of the month and the borrowing has to be always in the multiple of 500 dollars and the interest has to be paid to the nearest 1 dollars at the rate of 10 percent. So now we go for the say cash receipts and disbursements, cash receipts/disbursements right, this is the main title heading here. Now, the cash receipts, cash receipts are first coming from the, cash receipts or you can call it the say collection from sales, collection from sale sis going to be how much?

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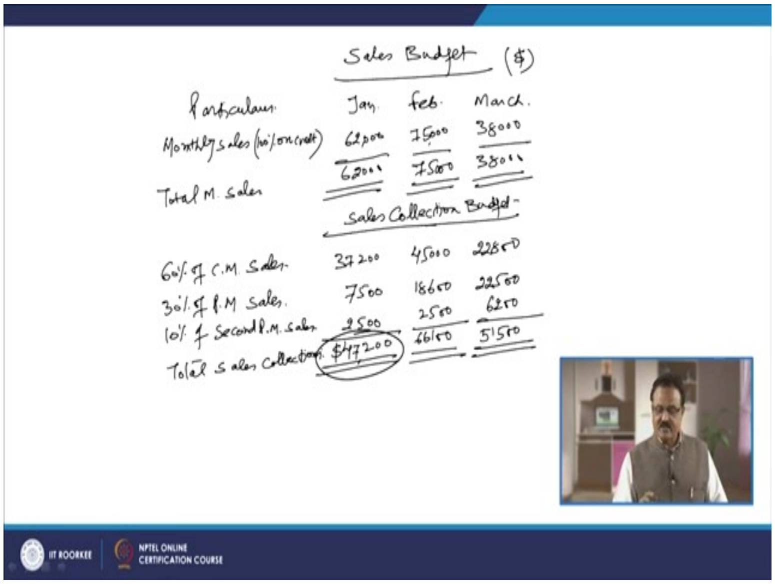

Collection from sales is going to be how much? We have to find out, we have to refer to the schedules. How much is the collection from the sales in this month? We have got the collection from the sales here is that is for the month of January is 47,200, this figure of the 47,200 will go to the cash budget.

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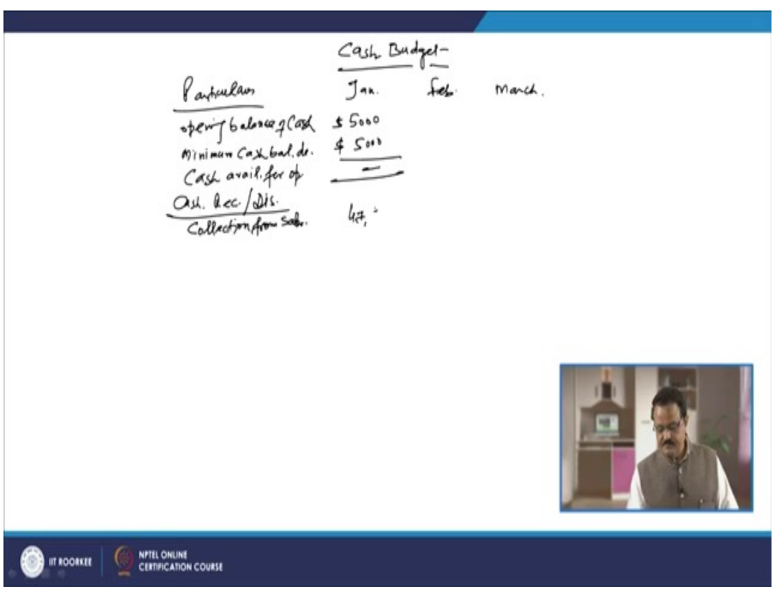

So it means collection from the sales is dollar 47,200, no further collection, no other source of collection, only collection from the sales we are going to do here. Now, the disbursements so, first disbursement is payment for, payment for purchases or merchandise, payment for purchases or merchandise how much payment we have to make for the purchases?

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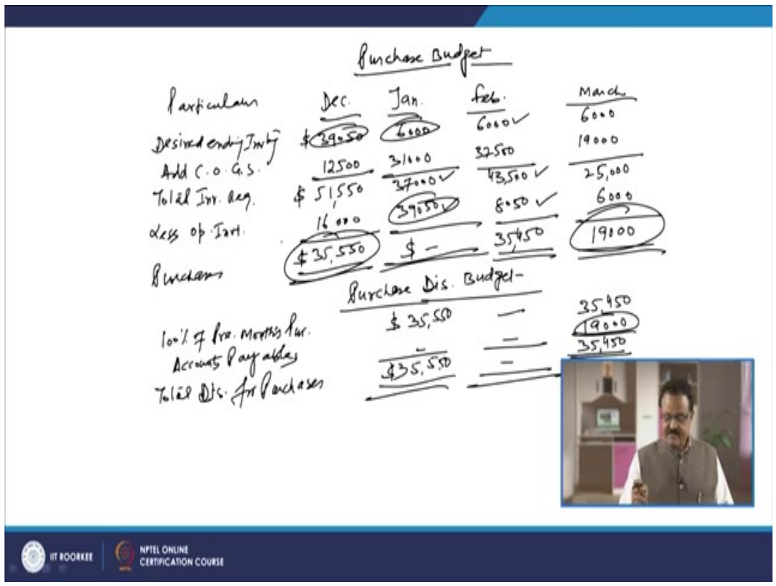

We have already calculated in the previous and this payment we are going to make in the month of January that is for 35,550.

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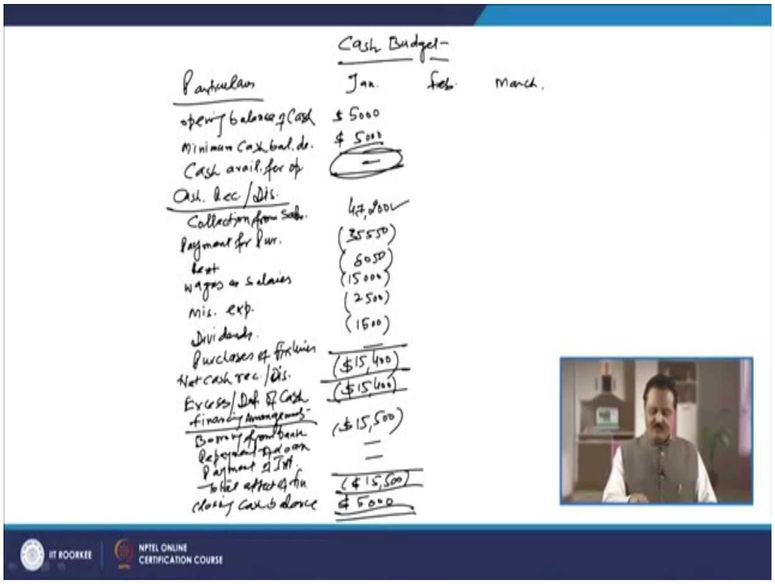

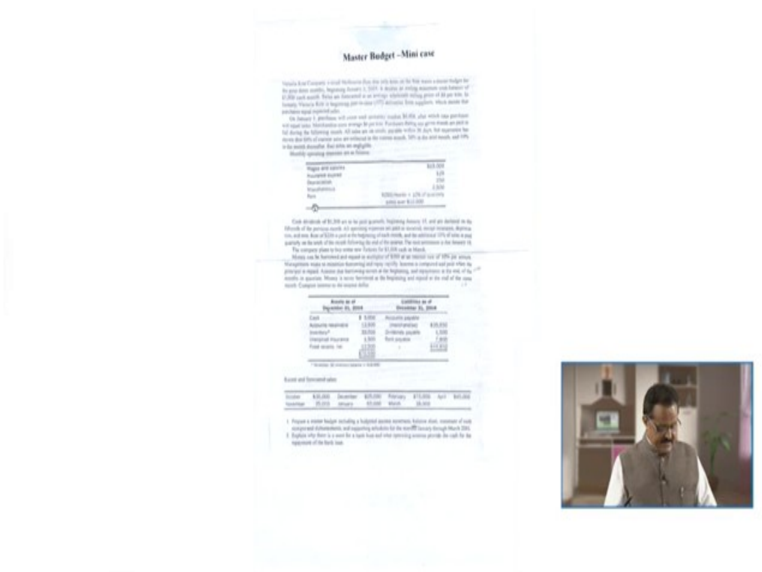

So this is the first payment we are going to make 35,550 put it in the bracket because it is the negative figure it is going out, it is not coming in, it is going out, next is the, what is the next? Head of expense is the, will take here is as the, say next head of expense you can take as it is for example, we take the rent right, if you take rent, rent is how much now, normal monthly rent is 250 dollars plus condition is that 10 percent over and above the 10,000 dollars of the sales for any quarter has to be paid as rent.

So, what is a previous quarter sales? 88,000 dollars and minus 10,000 setting aside 10,000 you are left with 78,000, so 78,000 sales and 10 percent of that is 7800 plus 250, so rent payment will be or the for the rent will, in the month of January will be for the amount is 8050. This is the second payment we are making, that is the rent payment is or the payment for that entity 8050, other disbursements are now wages and salaries, wages and salaries, wages and salaries are how much?

Wages and salaries are 15,000 worth of dollars, these are the wages and salaries clearly given in the case, we have not picked up from anywhere else. Miscellaneous expenses, miscellaneous expenses, how much are the miscellaneous expenses? 2500 right. So, we are closing it as a negative part and then we have to go for the one more payment given in the cases are dividends, dividends they are given the information here in the case that cash dividends of 1500 dollars are to be paid quarterly beginning January 15.

So, we are going to pay this dividend also, this amount is going to be how much? 1500 and this is the one more payment we are going to make here dividends that is 1500. And we will have to make a column though we are not making the payment here that is that payment for fixtures or a purchase of fixtures, purchase or purchases of fixtures. We are not going to pay in the month of this January but let's make the column here, so that you can fill the figure here, when it is going to be purchased.

Normally we are going to purchase in the month of March, so we will put the value there against the month of March but column has to be built here. And then now we will have to find out these this is the total source of receipts 47,200 dollars and these are the different heads of expenses, payment for purchases 35,550, rent is 8050, wages and salaries 15,000 worth of dollars, miscellaneous expenses 2,500 dollars, dividends 1,500 dollars and purchases for fixtures nothing in the month of January, but it will come in the month of March.

So, now, what we have to find out here is, that is the net cash receipt/disbursed, net cash, net cash received oblique disbursed that will depend upon what is now the balance available, net cash this minus all these right. So, if you calculate this, the net balance comes out to be negative and that negative balance comes out to be by 15,400 dollars, it means our payments have out paid the receipts, our payments are more by 15,400 dollars as against the receipts, receipts are 7,200 dollars our payments are all these which are more than 47,200 dollars by 15,400 dollars.

So, this is now the negative balance, once it is now the negative balance. So, it means now you can call it as excess or deficit of the cash after adjusting the cash available for the operations, in this case it is 0. So it means excess/deficit of cash, it is the same because no cash is available otherwise if some cash for operations is available, so we will use this amount and then finally we will find out the real shortfall, but here it is the same figure. So this figure is again dollar 15,400.

So, this is the amount here 15,400. So, this part is now going to be the total deficit with us 15,400 and we have to now arrange this much of the amount from some source and which source is going to be finally what? We know it, financing arrangements are going to be from bank. So, what we are going to do here, borrowing from the bank, borrowing from bank is going to be how much? Borrowing from bank is same amount 15,000. But condition is the borrowing has to be in the multiple of 500 dollars.

So we will have to borrow by 100 more dollars that is 15,500 dollars borrowings, right. Next column will be repayment if there is any surplus, so we will have to go for the repayment, repayment of loan which is nothing, we are borrowing this month. So we have nothing to pay, we do not have any surplus funds with us and then the payment of interest, payment of interest, we are not paying anything, so no payment for interest here. So this is going to be that payment for interest, so we are not going to pay anything for the interest here.

So it means we are only borrowing from the bank that is worth of 15,500 dollars, repayment of loan not possible. We are borrowing not repaying and when we are not repaying the principal, we are not paying any interest on that also. So, it means finally these means, figures will be 0, nothing. So total effect of financing, total effect of financing is how much? Negative borrowings 15,500 worth of dollars we are borrowing. And finally, we have to come up with the closing cash balance.

Closing cash balance, how much is the closing cash balance? 5,000 dollars is the closing cash balance. Now the process will continue, we have found out the closing cash balance we had opening cash balance of 5,000 dollars and after accounting for all the receipts and payments we could find out we are running short of the cash in this month, we had to borrow from the bank to pay extra to the tune of 15,400 dollars. So we had to borrow 15,500 dollars because it has to be borrowed in the multiple of 500 dollars.

And after adjusting everything we could find out is that the closing cash balance for the month of January is just 5,000 dollars which was the opening balance of the cash. This opening balance of, closing balance of the cash for the month of January will become an opening balance for the month of February and then we will keep the minimum balance of the cash and then we will put the other things. So, we will go first simply means adding all these figures here for the month of February, for the month of March and finally we will calculate the closing cash balance at the end of the quarter.

Maybe the closing cash balance for the month of March will be the closing cash balance for the, this quarter and their closing cash balance will go to the balance sheet finally. So, the remaining two months cash budget February, March, February and March these two months cash budget. I will prepare in the next class. Thank you very much