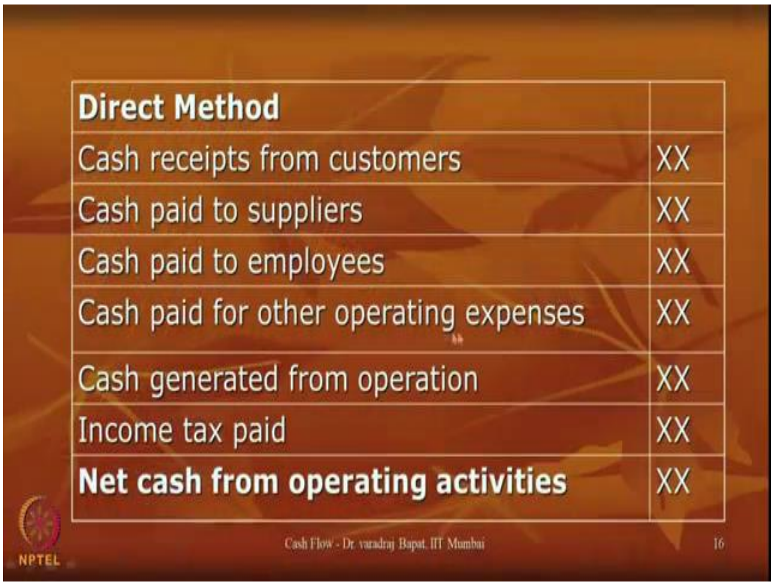
Financial Accounting
Prof. Varadraj Bapat
School of Management
Indian Institute of Technology, Bombay

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)



(Refer Slide Time: 01:03)

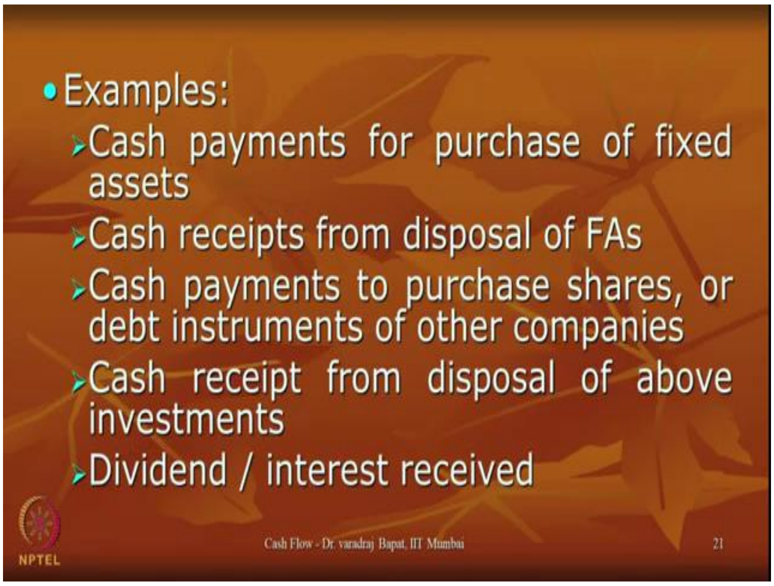
So, have a look at this format or it can be also calculated by indirect method that is starting from P and L, we have to list out certain activities which are non-operating or non-cash.

(Refer Slide Time: 01:17)

And then we also list out working capital items to get cash flow from operating activities.

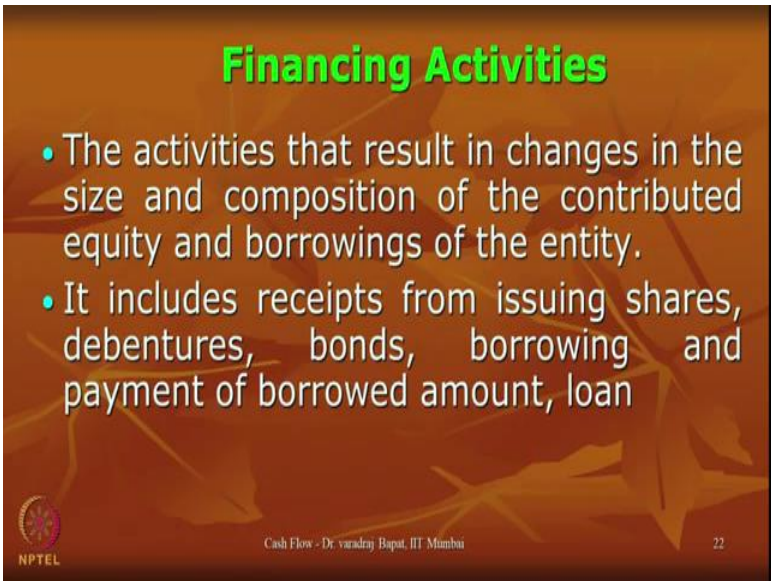
(Refer Slide Time: 01:23)

(Refer Slide Time: 01:35)



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.

(Refer Slide Time: 01:38)



We have also discussed financing activity.

(Refer Slide Time: 01:40)

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)

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)

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)

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.

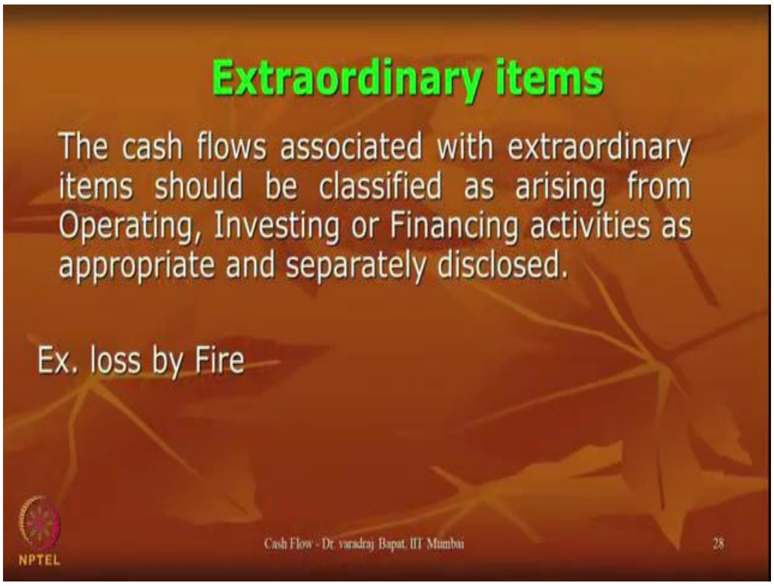
Second important thing is download your annual report and read the statement which we are discussing for your own company. So, for last two sessions we have discussed cash flow, I hope you have seen you have start reading the cash flow of your own company. If you observe any special things, you can of course discuss in the discussion forum are you clear, we will look at some more peculiar items now that is foreign currency transactions.

(Refer Slide Time: 04:24)

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.

(Refer Slide Time: 05:50)



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?

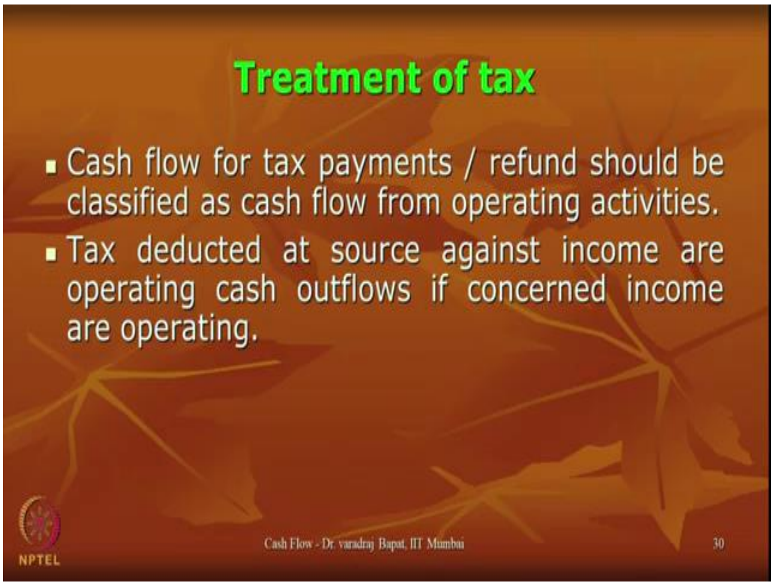
Now here we have to look at what we have lost, suppose stock is lost by fire, then that loss will you show it in cash flow and if yes under which head. First of all this being a non cash item it will not flow in coming cash flow, but if you receive insurance claim for loss of stock where will you show? 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.

(Refer Slide Time: 07:43)

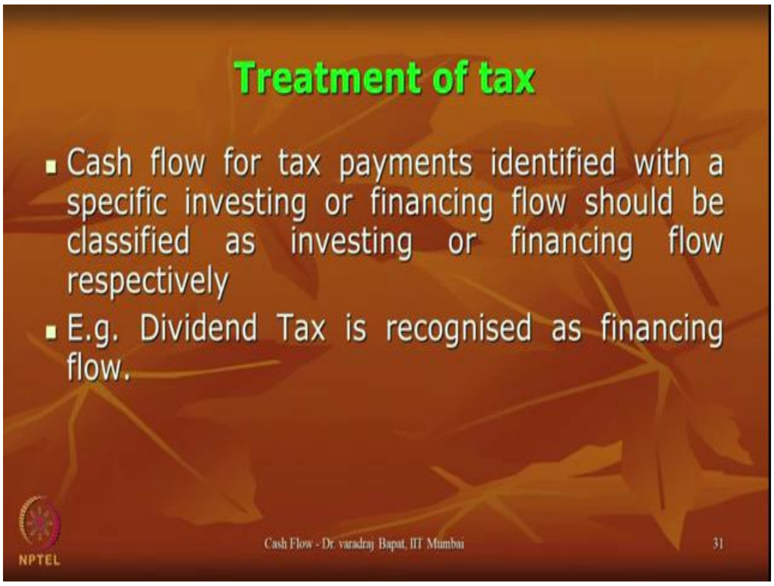
So, whatever is a relevant item normally it is either operating or investing.

(Refer Slide Time: 07:48)



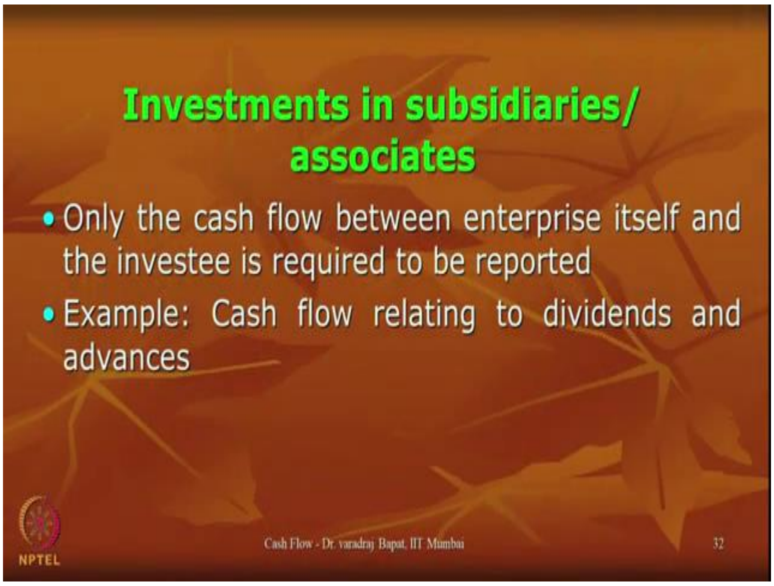
Now, next is about treatment of taxes, normally taxes are an operating item; so whatever is a tax paid we will show it as a operating expense.

(Refer Slide Time: 08:01)



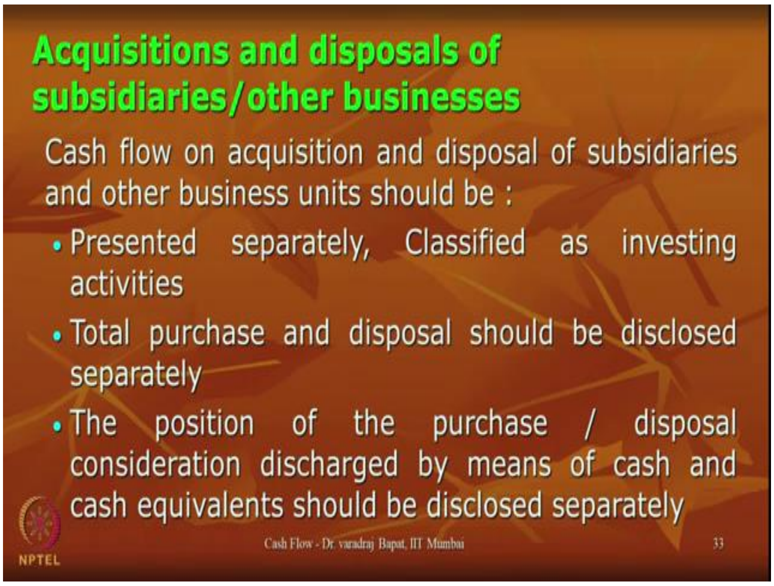
If there are some specific taxes on investing or financing related items we will show it under the respective head. So, example is dividend tax whenever we pay dividend we have to pay tax on that dividend, so taxes on dividend will be categorized as a financing flow. I hope you remember that dividend 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)



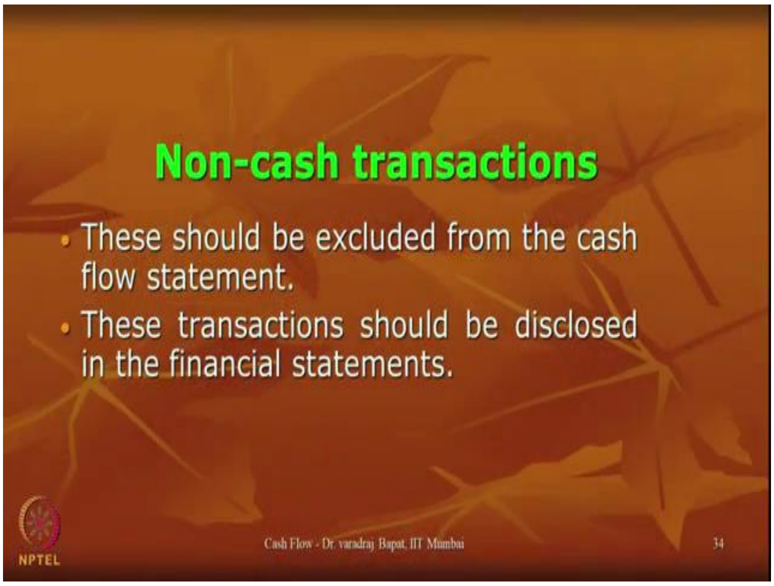
Now, for subsidiary companies or associate companies since this is a cash flow statement only the cash flow related to enterprise and the investee would be reported, so cash flow related to dividend and advances will be shown.

(Refer Slide Time: 08:51)



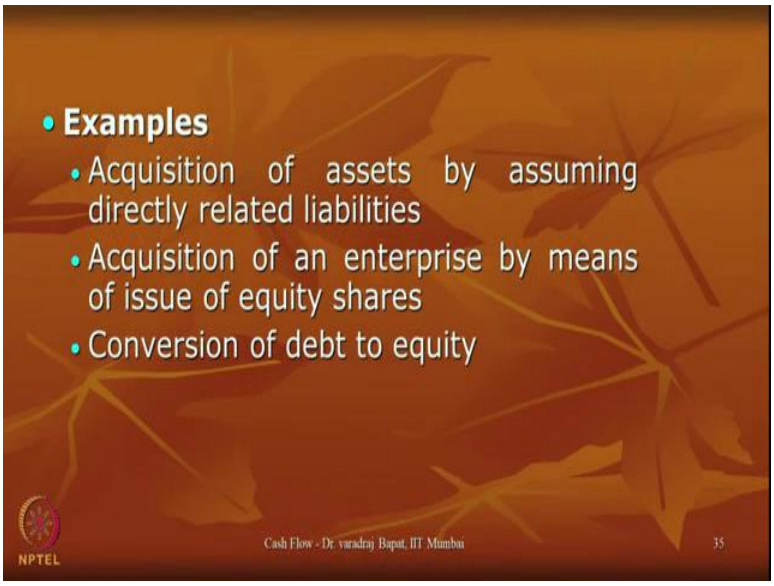
Now, the next one is a case about acquisition and disposal of various businesses. Now, suppose we acquire another company and make payment there off then it is considered as an investing activity. But, within investing activity it will be separately shown as a investing activity and total amount which 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.

(Refer Slide Time: 09:46)



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.

(Refer Slide Time: 10:14)

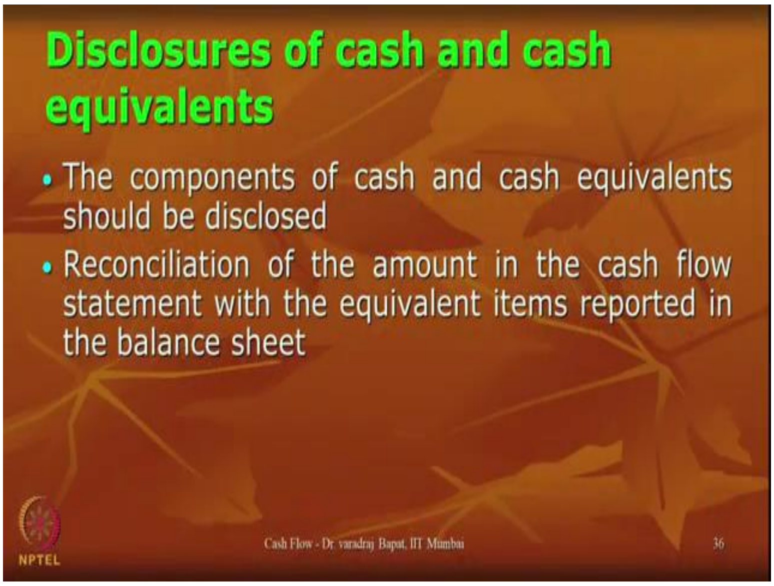


Suppose, you purchase new assets normally we purchase fixed asset and pay for it, so it will come as a investing outflow. But, suppose new assets are purchased, but we do not pay cash instead of paying cash we are assuming liability against the asset, so we are taking over asset and also taking over 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 nodes to see whether there are any non cash flow items then they should not be considered in the cash flow.

(Refer Slide Time: 12:09)



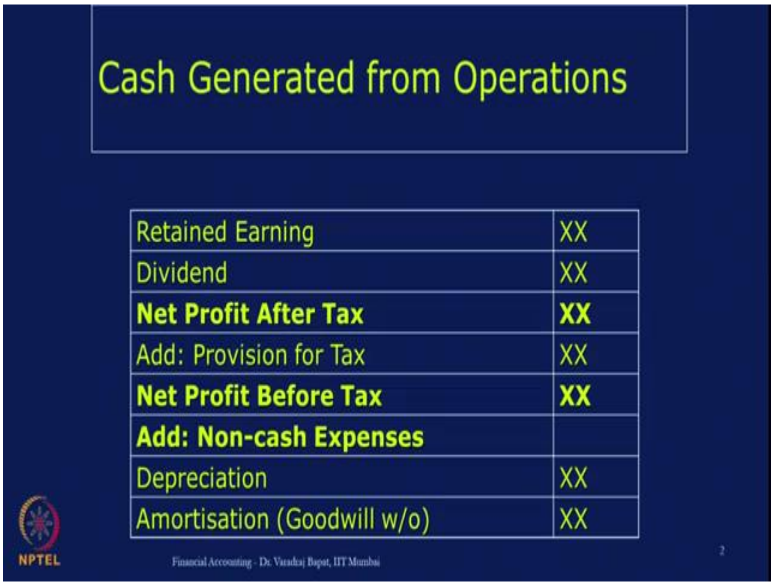
Now, in the end you are required to make disclosure of cash and cash equivalent, so you should show the total cash, cash equivalent in the beginning and in the end and a reconciliation. Because, in the cash flow statement you have listed all inflows and outflows, the net total of that should match with 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?

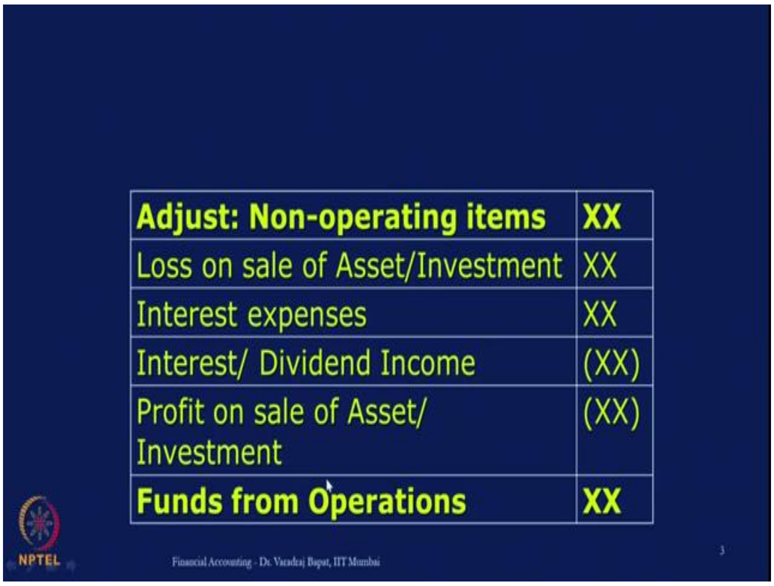
Now, after this we will move to we will have a look at certain formats and then we will move to the actual cases of calculation for cash flow. First let us look at certain formats, now whenever we discuss the operating, investing, and financing items we have looked at examples, but let us look at the actual format how it will be disclose in the cash flow item.

(Refer Slide Time: 14:26)



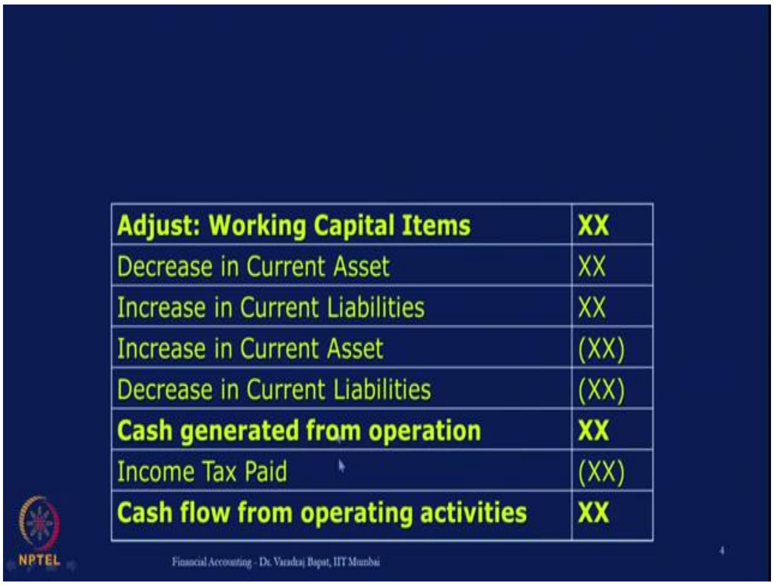
So, this is a format for cash generated from operations I think you have already seen it, but this is more detail. So, have a look at it, it starts with retained earnings, add dividend you get net profit after tax; keep in mind normally in P and L account your incomes minus expenses the last item is 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)



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.

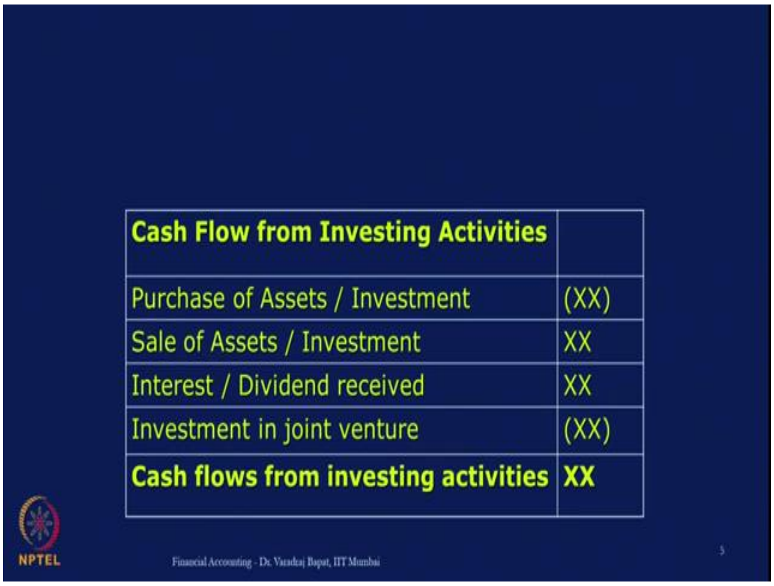
(Refer Slide Time: 15:23)



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 false; that is why increase in current asset is reduced, if there is a decrease in current liability then the cash falls.

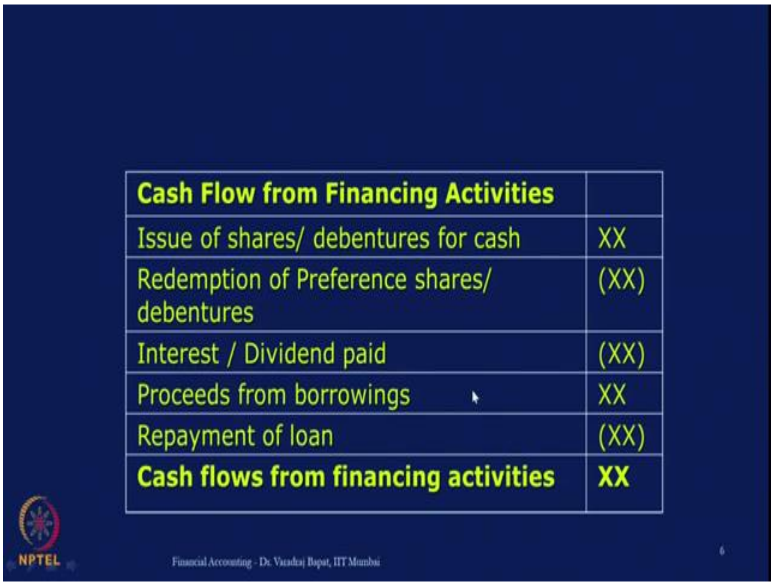
So, cash and current liabilities go together any increase in current liability you can see here is leading to increase in cash decrease in current liability reduces our cash. Now, these items will be adjusted and you get cash generated from operations of course, you will have to now reduce the income 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)



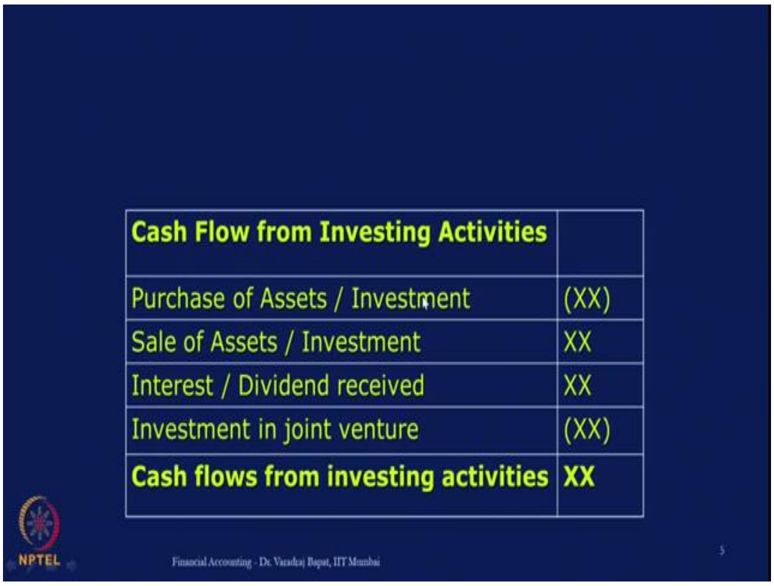
The second and third are very simple, now cash from investing activity you have to just list the items.

(Refer Slide Time: 16:37)



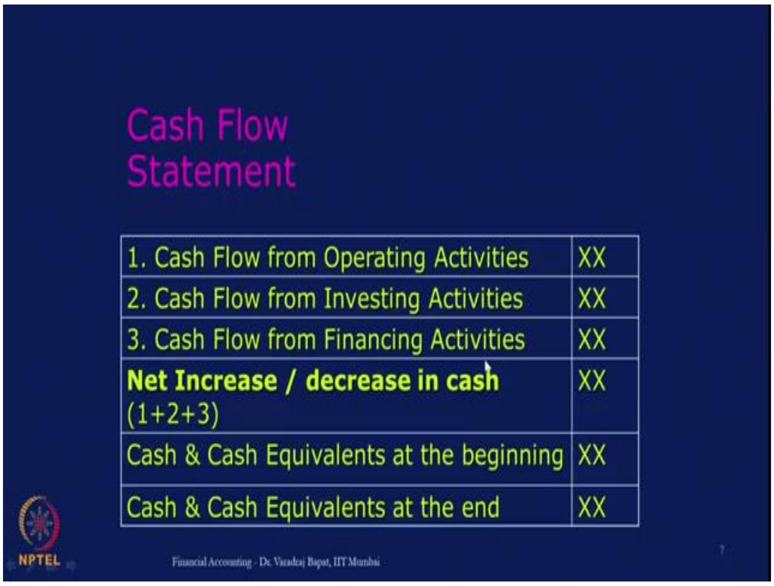
Next is cash from financing activity.

(Refer Slide Time: 16:45)



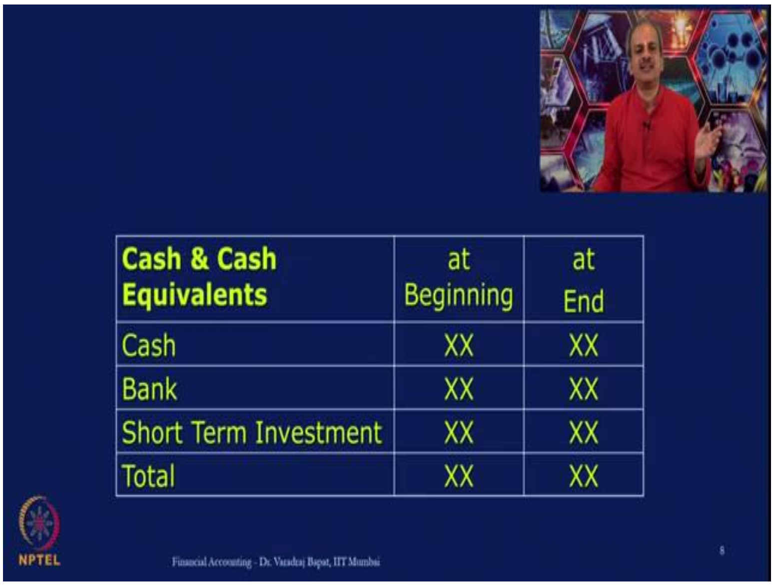
I think you know the examples, so though there is no direct or indirect directly those items you can add in the cash flow statement.

(Refer Slide Time: 16:54)



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.

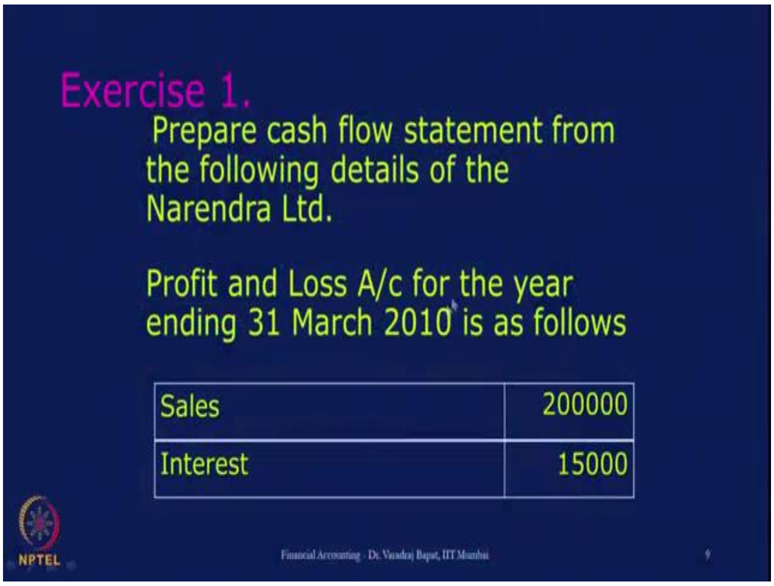
(Refer Slide Time: 17:21)



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)



So, have a look at the case we are given a profit and loss account.

(Refer Slide Time: 18:18)

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.

(Refer Slide Time: 18:48)

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)

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 a 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 is increases because of the profit generated, so it is a 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 redeem 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 a 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 a 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 a outflow, 3000 is not outflow it is basically a P and L item. So, you can write it as a 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.

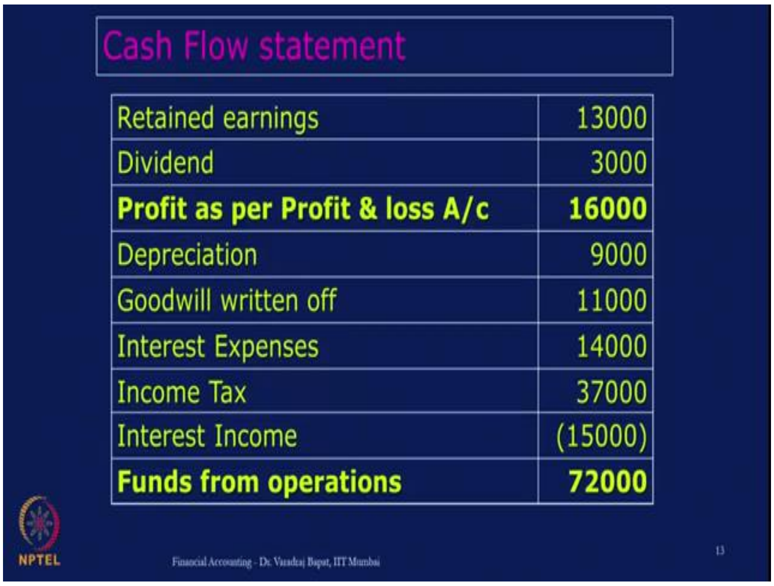
Now, let us I hope you have understood the liability items we are going to see the answer also, but better you note it and we will solve it together. Now, we will go to assets in assets the first item is land, land there is no change so dash, fixed assets there is a fall in fixed asset from 140 to 190 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)



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.

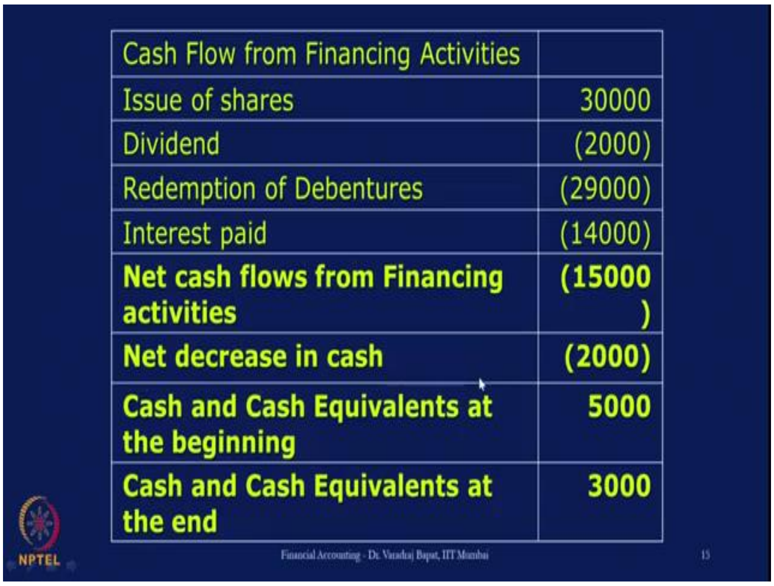
So, retained earnings plus dividend give you profit as per P and L account which is 16000, add depreciation, add goodwill, add interest expense, add income tax, add and reduce interest income. See here in P and L we had a interest income of 15000 which was added for P and L now we will reduce it; I know 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)**

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)

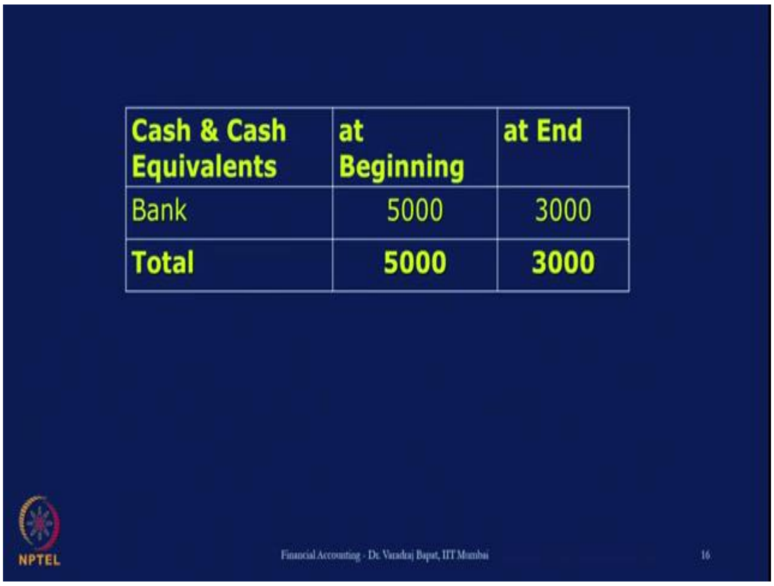


Cash Flow from Financing Activities	
Issue of shares	30000
Dividend	(2000)
Redemption of Debentures	(29000)
Interest paid	(14000)
Net cash flows from Financing activities	**(15000)**
Net decrease in cash	**(2000)**
Cash and Cash Equivalents at the beginning	**5000**
Cash and Cash Equivalents at the end	**3000**

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)



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.