Security Analysis & Portfolio Management

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Lecture 39

Balance Sheet Analysis VI

So, let us continue from where we left off, but before that a quick recap about deferred taxation about which I was talking about towards the end of the last lecture. Now, as I mentioned, when we compute the profit of a company, there is a difference between the provisions that are relevant in so far as computing the taxable profit is concerned and insofar as computing the accounting profit is concerned, the computation of taxable profits is governed by a different legislation the Income Tax Act, whereas the accounting profit is computed on the basis of the provisions of the Companies Act and the accounting standards that are issued under the Companies Act.

So, that difference manifests itself in terms of the difference in the taxation calculations as per the Companies Act profit that is the accounting profit and the actual tax liability which is computed on the basis of the taxable profit which is the profit computed as per the taxation provisions, the Income Tax Act. Now, these differences essentially relate to the valuations of certain assets and liabilities.

The taxation laws provide a different methodology of valuation or different rates in some cases or different methods in some cases, and whereas, the accounting approach emphasizes certain other different approaches. As a result of which these valuations in the context of income tax are called tax basis in the context to company law called carrying amounts. The carrying value of an asset is the value at which it appears in the books of accounts. The tax base is the valuation on the basis of a taxation levy is calculated taxation profits are calculated.

So, when there is a difference between the tax base and the carrying amount, this would manifest itself as impacting the future taxation in some cases. And in some cases, this difference would not result in any impact on future taxation. in the event that this difference between the tax base and the carrying amount impacts future taxation and or it is likely to reverse in the future, it is called a temporary difference.

And the typical example of course, that we discussed also is the case of depreciation. However, there are certain allowances rebates over whole tax holidays which are given in some cases to boost certain types of expenditure like investment expenditure, which may not reverse in the future, which are one-time transactions and which do not impact the tax liability for future years. These types of differences are called permanent differences.

Now, deferred tax are the, or the provisions of deferred tax relate to the recognition, the recognition of the impact on tax law, on taxation, on future taxation of the temporary difference that manifests themselves in terms of differences between the tax base and the carrying amounts. So, let us recap the main provisions that we discussed last time. A deferred tax asset or liability is to be recognized when the difference between the carrying amount and tax base will affect future tax payments. So, there are two issues.

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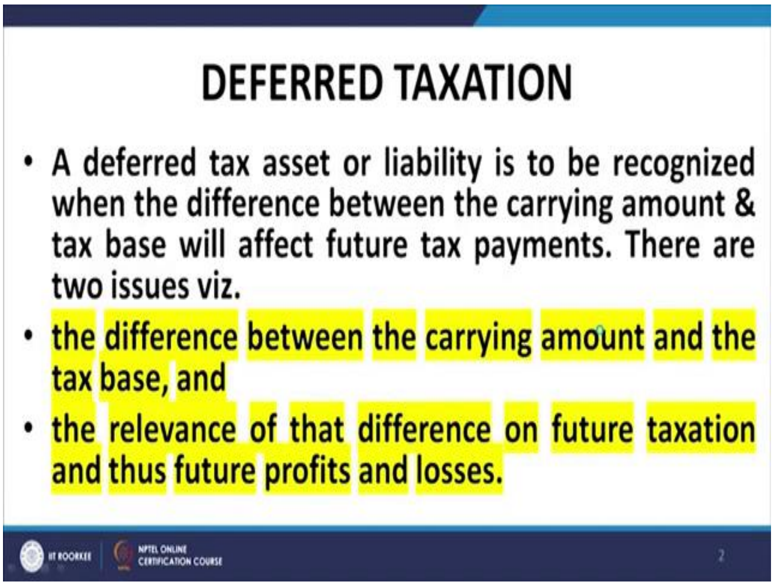

Number one, the difference between the carrying amount and the tax base and the relevance of this different for future taxation and the future profits and losses. Please note here, I reiterate the fact that permanent differences do not give rise to any deferred taxation recognition in the accounts, because they are not likely to influence the future taxation status, future tax assets or liabilities of the company or future tax payments or receipts of the company.

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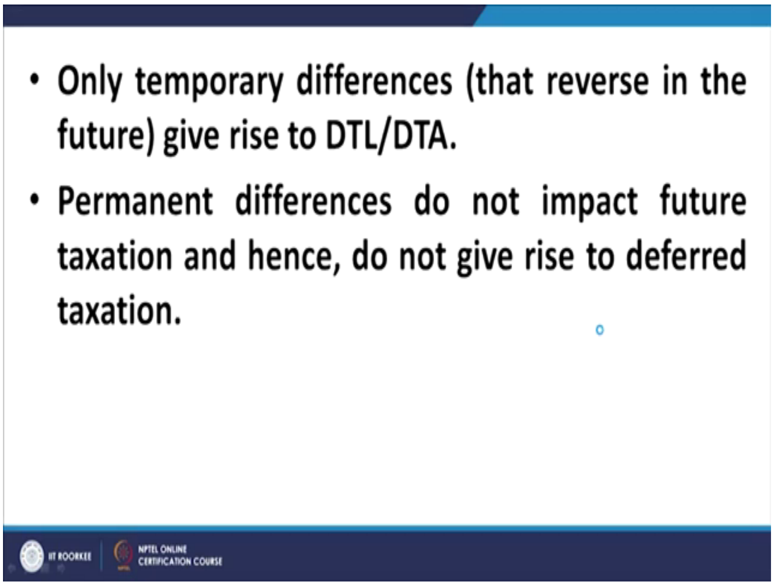

Only temporary differences that is, what I mentioned just now, only temporary differences that reverse in the future give rise to deferred tax liabilities or deferred tax assets. Permanent differences do not impact future taxation and hence, do not give rise to defer taxes. And this is strongly emphasized.

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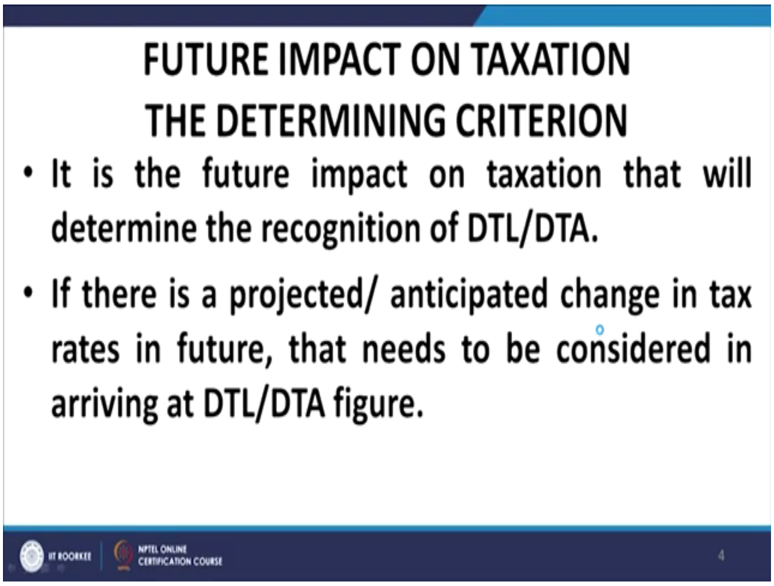

Now, the future impact of taxation is the deciding criterion. This is another important point that I deemed fit to discuss that it is the future impact of taxation. Let me give you an example if there is a projected or anticipated change in the tax rate, how would that impact deferred taxation it will definitely affect deferred taxation because the future tax liability or the impact on the future tax liability of the company is what is the determining factor for the recognition of deferred tax asset or liability.

So, it is the future impact I repeat is the future impact, as is usual in fact, when we talk about the recognition of assets or liabilities, the future economic benefit, or the probability of future economic benefits is the deciding criterion. That is precisely what is operating here. That doctrine is operating in this case as well. And it is the future impact that determines whether our difference between a tax base and the carrying amount is going to be recognized are going to give rise to defer taxation, for recognition in the books of accounts.

So, it is the future impact on taxation that determines the recognition of deferred tax liability or deferred tax assets. If there is a projected oblique anticipated change in that tax rates in future, that needs to be considered while arriving a deferred tax liability or deferred tax asset figure. So, let us recap know the circumstances in which deferred tax liabilities and deferred tax assets arise.

First, we talk about deferred tax liabilities and deferred tax liabilities will arise when items of expense are included in taxable income in earlier periods, then for financial statement net income. So, items of expense are included in taxation in earlier periods compared to when they are recognized or when they are incorporated in the financial accounts. For example, the WDV depreciation amortizes higher value of the asset in earlier years compared to what the straight-line method amortizes.

The second most situation is DTL, Direct Test Liability would also arise when items of income are included in taxable income in later years. So, expenses if they are accounted for in taxation in earlier years, and income if they are accounted for in taxable income in later years. Compared to when they are recognized for the purposes of accounts or the purposes of accounting profit, they give rise to deferred tax liabilities.

In the case of deferred tax assets is the other way around, it is simply a reversal of the aforesaid provisions, a company may be required to include certain income for tax purposes in the current period. So, here the situation is reversed. In the case of deferred tax liabilities, what did we have? We had the expenses being recognized in earlier years compared for taxation, compared to the recognition of expenses for accounting and income the other way around.

Here it is that the income is recognized for taxation in the earlier year in the current period, for example, and the it is recognized for the purpose of accounts in later periods. So, it is reversed. Similarly, with the recognition of that income for financial statement purposes is in subsequent years. So, that income is recognized in the earlier year for the purpose of tax purposes, and it is recognized in the later years for the purpose of financial accounting, then it will give rise to deferred tax assets.

As I explained, the possibility is one of aware and the lease rental is received in advance and the losses the taxation losses that you have to recognize lease rental on received or accrual basis, whichever is earlier, then as soon as you receive that lease rental, you will have to incorporate it while computing taxable profit. So, your net tax liability would be higher than the liability computed as per accounting income, which you will recognize that rent in the period to which it relates on the basis of the accrual principle and as a result of it in for that particular year, the taxable profit will be higher than the accounting profit and this will give rise to a deferred tax asset.

The second situation could be a company may claim certain expenses for financial statement purposes, that it is only allowed to claim in subsequent periods for tax purposes. Let me give you a typical example usually, usually, the tax laws allow the deduction on the payment of interest of financial institutions and banks on actual payment basis. So, while that, that amount of interest would be recognized in financial status in the year in which it is accrued, however, if the payment is made in a later year, then the deduction on account of taxable profit or while computing taxable profit will be allowed in a later year.

And therefore, what will happen is that as far as the accounting profit is concerned compared to the taxable profit in the earlier year is concerned the accounting profit would be less the taxable profit would be more because it is not recognizing that interest in that particular year it is recognizing the interest in a subsequent year in which it is being paid. And therefore, the taxable profit is more than you get a situation where you should create a deferred tax asset.

So, the third situation could be deferred tax assets may also result from carrying forward of unused tax losses and credit, if you have unused tax losses, tax losses which has not been set off against the profits then may result in the creation of deferred tax assets, because the taxable profit in that case will be more compared to the accounting profit which would be less and as a result of it, you would be paying more tax compared to the in the accounting profit.

Now, calculation of tax expense for a period. What are the various steps? I elucidated this in the last lecture, step one is calculate the income tax payable actual income tax liability on the basis of the calculation on the basis of the provisions of the Income Tax Act the relevant tax legislation, or using those provisions, using the information contained in the profit and loss account and other information if required, you work out the actual tax liability that we have to actually pay to the government on the basis of this taxation provisions.

So, this is step number one. Then what we do is we calculate. We compare the carrying amounts and tax basis of the various assets and liabilities of the company. And on that basis, we arrive at a statement or we arrive at a figure of the deferred tax assets or deferred tax liability that is to be carried forward to future years. And where we take account of the possibility of realization of the deferred tax, we will come back to it.

But the important thing is, we make a comparison of all the carrying amounts, all the tax bases of all the relevant assets and liabilities and then on that premise, we work out the deferred tax liability or asset which has to be carried forward to the subsequent year. This is step number 2. Let us say this amount is B.

In this step number 3, what we do is we deduct the opening balances of deferred tax assets or liabilities as the case may be from this amount B that we are calculated in step number 2, this gives us the additional deferred tax asset or liability that needs to be created in the current year in the relevant year. I repeat, you work out the closing balance or the carry forward balance that you need.

In the account of deferred taxation, you have the opening balance, which is the closing balance of the preceding year, the difference between the two is the amount that needs to be considered as the additional input that goes into the creation of deferred taxation for the current year. So, this amount is then added to, algebraically added to depending on whether it is a liability or asset, and this amount is then added to the income tax payable.

And we arrive at the total figure of income tax expense which has to be debited to the profit and loss account. So, these are the four steps which you can understand the how the deferred tax asset or liability is actually calculated. The step two, let me explain further the relevance of step two. At the end of each fiscal year, deferred tax assets and liabilities are recalculated by comparing the tax basis and carrying amounts and identifying temporary differences of the balance sheet items.

These identify temporary differences should be assessed on whether this, this is important, identify temporary differences should be assessed on whether the difference will result in future economic benefit. That overriding criterion of an asset providing future economic benefits or the probability of an asset providing future economic benefit must need to be considered when we consider the figure of deferred tax.

So, deferred tax assets are only to be recognized if number 1, there is an expectation that there will be taxable income in the future and against the taxable income, there exists temporary difference or carry forward losses or credits which can be applied to reduce the tax liability. So, the impact on future taxation is very important.

And for the assessing the impact of future taxation, the possibility or the extent or the probability of the profitability or the earning profit stream of the company needs to be considered as well as the impact of those temporary differences on the overall tax liability that also needs to be considered. Let us take an example to illustrate what I have just been stating.

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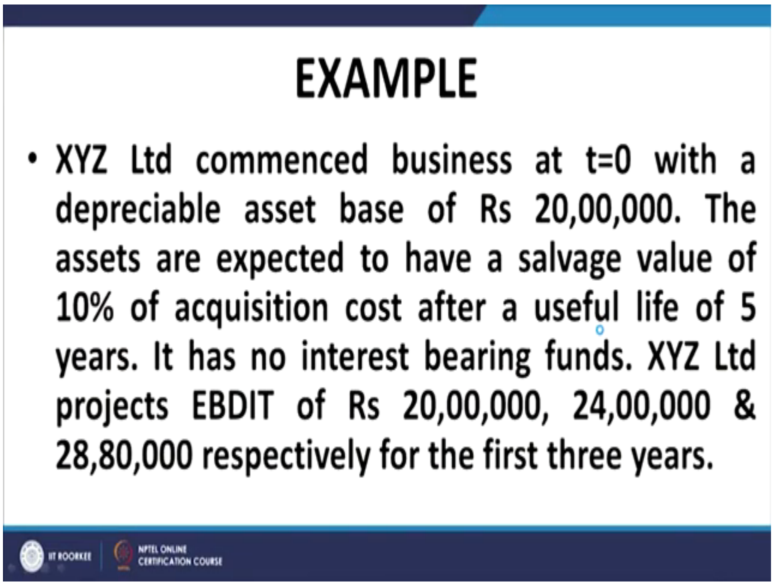

XYZ Limited commenced to business at t equal to 0 with a depreciable asset base of rupees 20 lakhs. The assets are expected to have a salvage value of 10 percent of acquisition cost after a useful life of 5 years, it has no interest-bearing funds. XYZ Limited projects EBDIT that is earnings before depreciation interest in taxes of rupees 20 lakhs, 24 lakhs, and rupees 28.80 lakhs respectively for the first 3 years. It adopt straight line method depreciation for accounting purposes. However, the tax laws allow WDV depreciation with the same parameters of useful life and resale value.

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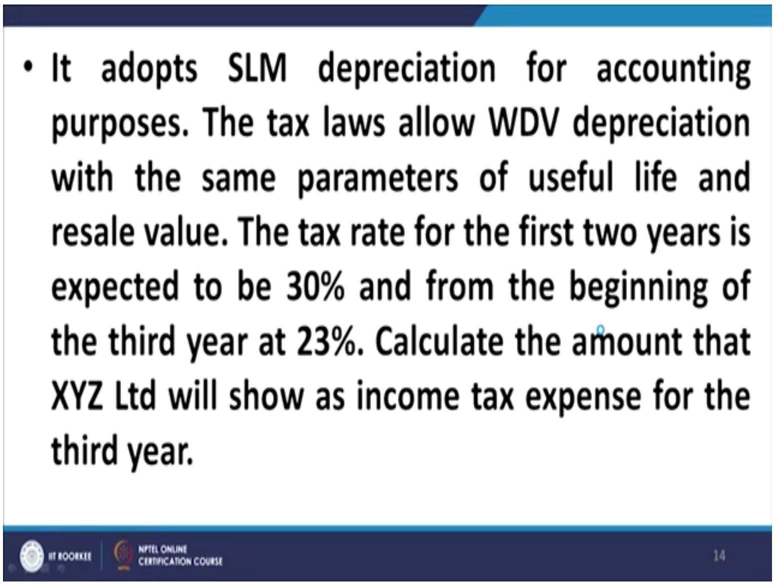

The tax rate, now this is important, the tax rate for the first two years is 30 percent. And from the beginning of the third year, it will go down to 23 percent, that is the expectation. The first two years the tax rate is projected at 30 percent. And at the end of the third year at the beginning of the fourth year, the beginning of the third year I am sorry at the end of the second year or beginning of the third year, the tax rate is going to decline to 23 percent.

Calculate the amount that XYZ Limited will show as income tax expense for the third year and the deferred taxation also. So, the first step is that we prepare the depreciation chart under the straight-line method and we prepare the depreciation chart under the WDV method after working out the WDV rate of depreciation which you can easily do because we are given the opening balance, we are given the closing balance, and we are given the life of the asset. So, with these parameters given to us we can easily work out the WDV rate of depreciation as well as the straight-line rate of depreciation.

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DEPRECIATION CHART			STRAIGHT LINE	
YEAR	OPENING	DEPRECIATION	DEPRECIATION	CLOSING
	BALANCE	RATE	AMOUNT	BALANCE
1	20	0.18	3.6	16.4
2	16.4	0.18	3.6	12.8
3	12.8	0.18	3.6	9.2
4	9.2	0.18	3.6	5.6
5	5.6	0.18	3.6	2
DEPRECIATION CHART			WDV	0.630957344
YEAR	OPENING	DEPRECIATION	DEPRECIATION	CLOSING
	BALANCE	RATE	AMOUNT	BALANCE
1	20	0.369042656	7.38085311	12.61914689
2	12.61914689	0.369042656	4.657003479	7.962143411
3	7.962143411	0.369042656	2.938370548	5.023772863
4	5.023772863	0.369042656	1.853986478	3.169786385
5	3.169786385	0.369042656	1.169786385	2

And the calculations are summarized in this shot, the balances the closing balances are given in the last column. In the first table these are the carrying amounts please note this and in the second, in the second part, or in the second table, the last column of the second table, we have the value of the taxpayer that is the written down value. And this is the computation here. This was the, this earlier slide is the Excel slide which these learners can refer to for more details of the calculations. But the calculations are summarized in the next slide, here it is.

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YEAR	1	2	3
CARRYING AMT	16.40	12.80	9.20
TAX BASE	12.62	7.96	5.02
DIFFERENCE	3.78	4.84	4.18
TAX RATE	30%	30%	23%
DTL C/F	1.13	1.45	0.96
ΔDTL	1.13	0.32	(-)0.49
IT PAYABLE	3.79	5.80	5.95
IT EXPENSE	4.92	6.12	5.46

We have the carrying amounts of the machinery for the first second and third year. This is based on the straight-line depreciation 16.40, 12.80, and 9.20. The tax base which is based on the WDV depreciation calculations, the written down value after charging WDV depreciation turns out to be 12.62 at the end of the first year, 7.96 at the end of the second year, and 5.02 at the end of the third year. So, the difference between them is 3.78, 4.84, and 4.18. The tax rate is given as 30 percent in the first-year, 30 percent in the second year, and 23 percent in the third year.

So, the deferred tax liability that we need to carry forward. Please note in this case, the carrying amount is more the tax base is less so the amount charged to the taxable, or the taxation profit, or the taxable profit is more and the amount charged to the accounting profit is less therefore we will be creating deferred tax liability in this case, the taxpayer does less and the accounting or taxation or the taxation based on accounting income is more therefore, we will create a deferred tax liability.

The value of the deferred tax liability will be worked out, how? It will be worked out by calculating by applying the tax rate to the difference between the carrying amount and the tax base, which in this case turns out to be 1.13 for the first year. Similarly, in the second year, again, we work out the deferred tax liability to be carried forward. But in calculating the difference between the carrying amount and the tax base at the end of the second year and taking the 30 percent of that which is the tax rate and we arrive at 1.45.

So, the difference between these two that is 1.45 minus 1.13 is the additional deferred tax liability that needs to be created during the year and which is 0.32. So, this 0.32 will be added to the income tax payable for the second year which is 5.80. And the total amount of income tax expense for the second year will be 6.12. Similarly, for the third year, what happens is again we work out the difference between the carrying amount and the taxpayer that is 9.20 and 5.02 respectively.

But in this case, because the tax rate has dropped down to 23 percent instead of 30 percent, we shall be taking 23 percent of this difference because that is the impact of taxation that will be realized in future the tax rate has changed for the future. And therefore, this difference between the carrying amount and the tax base will result in a lower impact on future taxation. I repeat because that and now, if the difference between carrying amount and tax base is 100, it will impact future taxation only to the extent to 23.

So, that is because, we are in a position to estimate or project this the change in tax rate, we should take cognizance of this, we should take account of this while calculating the deferred tax liability. So, the deferred tax liability will be worked out that the liability that needs to be carried forward for subsequent years will need to be worked out by multiplying the difference between carrying amount of tax base by the projected tax rate for that year which is 23 percent and that comes to 0.96.

So, there is a right back of deferred taxation liability and the deferred taxation liability at the end of the second year was 1.45. However, at the end of the third year, that deferred tax liability is required to be only 0.96. So, there is a right back of one of 0.49. And so, this will reverse or this will reduce the amount that has to be transferred to the profit and loss account as income tax expense by deducting it from the income tax payable, the income tax payable is 5.95, you deduct 0.49 because this is a reduction in your deferred tax liability that is to be carried forward to future years.

And the amount that is to be debited to the profit and loss account on account of income tax expense will be 5.46. So, I hope this example I brings to you or conveys to you the new answers that are associated with the calculation of deferred taxation. We will conclude this topic here and move on to the next topic which is fictitious answers.

Now, just to recapitulate, I had defined deferred revenue expenditure as expenditure which is a revenue in nature, but which is likely to result in economic benefits for a future period or medium-term future period. So, 3 to 5 years for the company. The typical example that I gave to you was of advertising expenditure.

And another example is the development expenditure that is incurred in context of development of a new product, these kinds of expenditures, although they may not have any realizable value, but they do tend to give or they are expected or there is a probability that they would give future economic benefit to the company.

So, these are called deferred revenue expenditure and they are written off over not in the, not entirely they are not expensed in the year in which they are incurred, but they are written off over a sustained period, which is approximately the same as the period over which the life or the worth or the value of those expenditures can be extracted or sustained in the business.

So, that is what is deferred revenue expenditure or related term sometimes considered as the superset offered or sometimes deferred revenue expenditure is considered as a subset of this concept of fictitious assets. Although I am inclined to not really agree with a putting a deferred revenue expenditure as part of fictitious assets on the basic, for the basic reason that deferred revenue expenditure does give you or is definitely expected to give you future economic benefits over the medium term.

And therefore, to say that they are fictitious assets is I think not correct not justified, there should be kept in a class of its own, although some analysts do in corporate deferred revenue expenditure as part of fictitious assets. So, let us first understand what are fictitious assets. Fictitious assets are assets that are created by an accounting entry and included under assets in the balance sheet.

Fictitious assets are assets that are created by an accounting entry and included under assets in the balance sheet that have the following characteristics. Number one, they have no tangible existence. Of course, deferred revenue expenditure also does not create any tangible asset that is true and they are more realizable value, but they represent actual cash expenditure.

So, fictitious assets are those assets which are created by an accounting entry, but they do not have any tangible existence and they do not have any net realizable value although actual cash expenditure has been incurred in generating those assets, they are usually expenses which are not written off in the year in which they are incurred, but in more than one accounting period, they are in the nature of you see, they are in the nature of losses rather than in the nature of items which are going to give you future economic benefit.

Deferred revenue expenditures likely to give you future economic benefit, but fictitious assets are fictitious they are not real and very use of the word fictitious in their definition means that these kinds of assets are not likely to give you any benefit for future years. But however, in order to facilitate proper accounting, because cash expenditure has been incurred in that generation of these assets, they need to be incorporated either in the P&L account which is not correct, which is not justified because they are not revenue in nature in any case.

And therefore, they are not incorporated or not placed in the P&L account in its entirety, but they are written off over the shortest possible period. So, these are fictitious assets. The purpose of creating a fictitious asset is to account for expenses such as those incurred in starting a business that cannot be placed under any normal account heading, so that is the rationale of keeping these kinds of expenses under a separate heading called the fictitious assets.

Typical examples are preliminary expenses that is expenses that are incurred in connection with the incorporation of the company, discount allowed on chain issue of shares, discount on issue of debentures, underwriting commission, profit and loss account, debit balance also now of course, the debit balance in the profit and loss account is to be shown as a deduction from the results in surplus.

But nevertheless, it is a fictitious asset in his own right because it has accumulated losses of the company. What is the difference between deferred revenue? I briefly alluded to this issue, let us formalize it, difference between deferred revenue expenditure and fictitious assets. Deferred revenue expenditure is a revenue expenditure in nature, but it is written of charge to more than one accounting period because it is estimated that benefit of such expenditure will accrue in more than one financial year.

So, it is a revenue expenditure firstly, and the second thing is that the benefit of this particular expenditure is likely to accrue over more than one financial year. Fictitious assets are those assets, which are neither tangible nor realizable assets nor intangible nor tangible and nor do they carry any realizable value, they are losses not written off in the year in which they are incurred, but written off over more than one accounting period. So, these are in the nature of losses.

And so, this is the contrasting point between deferred revenue expenditure and fictitious assets. And therefore, I do believe that too, it is not really justified that we include deferred revenue expenditure is fictitious assets, because they do have value to the enterprise in the sense that they are likely to generate future economic benefit to the company over a medium term. Now, what are provisions? A provision is an amount which is set aside for the probable but uncertain economic obligations of an enterprise.

A provision should be recognized, when? Number one the occurrence of the related obligation is probable, the occurrence of the related obligation is probable and one can reasonably estimate the amount of the expense. So, this is the fundamental principle of for recognition of a provision. The first one is more important, most important, the occurrence of the related obligation is probable, it is likely that that particular liability or that obligation is going to arise in the future.

But however, we are not absolutely certain about what price or what value that particular obligation is going to take place or manifest itself as. So, as a result of which we work out an approximate amount, an estimate of that particular obligation and make or set it apart for the meeting of that obligation when it actually manifests itself. So, that is what is the meaning of a provision.

What are the salient features of a provision? Provisions are made to meet specific liabilities or contingencies, for example, we have provision for doubtful depths, we have provisions for taxation. These are two typical examples where provisions are made to in anticipation of a certain liability. The second thing is just like interest provision is a charge against the profit, provision will be debited to the profit and loss account proper.

And therefore, it will contribute to the determination of profit or loss itself. In other words, provision the charge of a provision is mandatory irrespective of whether the company is in profit or loss in fact, profit would be determined after debiting the amount of, amount required in the provision to the profit and loss account. So, they are created by debiting the profit and loss account they cannot, obviously, they cannot be used for distributing dividends, and it is mandatory to create provisions if the liability is manifested, the liability is expected if you are expecting a liability you must provide for that liability even if the amount is a bit uncertain.

A bit uncertain means it may not be precisely estimable but you on the basis of a reasonable working estimate you are required to create a sub set of profits or extract our profits from the profit and loss account to meet this liability as and when it arises. So, provisions are either shown as current liabilities, but if there is a provision in respect of the diminution in value of a particular asset, then it is usually the practice that that particular provision is deducted from the value of the asset and shown as such in the balance sheet.

So, general type provisions like taxation would be shown as under the heading current liabilities and provisions in the balance sheet where a specific provision in respect of a specific asset or diminution in value of a specific asset would be shown as a deduction from the value of that asset. Now, reserves, provisions need to be contrasted with reserves. What are provisions?

Provisions are these set asides to meet anticipated liability, a liability which is more likely than not, which is very much likely rather, but the amount of which is not absolutely certain. On the other hand, results are an appropriation of profits just like dividend I would like you to recall the difference between interest and dividend whereas interest is a charge against the profit, dividend is a distribution it is a portion or appropriation of profits.

Similarly, a provision is a charge against the profit because the liability is certain only thing is the amount is uncertain. Reserves on the other hand are voluntary provisions are not voluntary. Reserves are voluntary and reserves are created in respect of liabilities that may or may not arise. There may be created to meet certain liabilities voluntarily. For example, we have a sinking fund or reserve created for the repayment of debentures that is called a debenture redemption reserve.

We may have reserves also of general type which are created to meet contingencies which may or may not arise, unknown contingencies, unknown liabilities which may arise in the future. So, these are called general reserves. So, reserves the basic differences, reserves are an appropriation of profits provision are a charge against the profit. So, reserves may be created for various purposes or for no purpose in specificity, you may have reserves for dividend equalization, you may have reserves for replacement of fixed assets, you may have reserves for the redemption of debentures as I gave you an example just now.

So, these are typical examples where you can create reserves but they are voluntary. They are appropriation of profits. And they are to be distinguished from provisions which are in the context of a liability which is very much likely to arise and whose amount is not absolutely sure. And provision is a charge against the profits whereas reserves are appropriations of profits. So, then now we talk about income statement which I shall take up after the break. Thank you.