Management Accounting
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Lecture 43: Marginal Costing-I

Welcome students so in the previous class. I told you that after closing the discussion of the standard costing. Now we will use and another technique or learn about the another technique which normally is used by the management in there, a decision making process that is marginal costing, marginal costing is a very useful effective tool to deal with different situation and take the decisions in the different situations maybe there is a competitive market or maybe it could be the situation of entering into the new market with existing product but the new market or maybe introducing a new product in the market, in the existing market.

So whatever the situation in the market is there, we can use this technique if other techniques are not possible to be used, so what is this marginal costing? Marginal Costing is the one where we only take the decisions by dividing the total cost into the two broad components, variable cost and fixed cost.

We do not take or calculate the total cost in a way as we have been learning about to calculate under the absorption costing system or the total costing system, in the total costing system if you recall the first topic discuss that was cost sheet or the statement of the cost. There we learn about how to calculate the total cost of production and there, we took into consideration both, variable and the fixed cost with regard to a product and it should be taken also, because both the cost are cost and should be included while working out the total cost of the production, per unit or maybe total. Sometimes what happens that, normally we follow the absorption costing system because marginal costing is not the alternative to the total costing system.

For that the true alternative to the total costing system is for correcting the limitations of the total costing system is the activity based costing which will be the next topic I will discuss with you but the if you talk about the total costing system and its alternative as activity based costing system, implementing the activity based costing system is not very easy and very convenient for all the organisation because of its technicalities and the high amount of the cost of implementing their system in any form.

So, normally we follow the total costing system or the absorption costing system in a normal vision situation in a normal market situation for sometimes when the market changes or the market dynamics change maybe because of that some new players have come up in the market and the existing players are facing step competition because market size remaining the same with the number of suppliers increase the market So, what happens in that case the competition increases and the competition goes up, You have to deal with the staking the decision with regard to the cost for that you have to reduce the cost of the production and then to add of your margin you have to read the pricing whole pricing process.

It may be possible that temporarily because of the increased competition in the market because of the market dynamics for entry of the new players in the market leader in new players are very efficient in the market they are giving a stiff competition to the existing players in the market.

So in that case it may be possible that when the new player where is strength full powerful player comes in the market with similar type of services or sometimes even the better services. So the existing players facing problem and in that case the outcome of alternative with existing players is needed to go out of the market or provide a stiff competition market miss stand with your own convictions and with the belief with their product and services and compete in the market with the new player who may be very very strong very strengthful. Who may be financially very strong or very very effective player? But if the farm stay in the market and keep on providing the competition of fighting those competition sometimes even though, the biggest and very strength players can also be compelled to means come down to an eleven with existing forms are working.

Now, I tell you that very interesting situation or a very interesting case, in the mobile telephone sector, before the of this entry of Jio telecom. We have different players in the market and you might have seen that what was the price of the mobile services at that time, So talk time being means given to us by the other Companies like Airtel, Vodafone or maybe the other smaller companies or may be Idea at that time, what was the price, maybe we are using same a total per month. We were being given 1.5 GB, 2 GB data for the whole of the month and the price of that was somewhere 300 and 350 rupees.

So, that was the situation because Airtel was also pricing their services like that, Vodafone was also pricing their services like that and the Idea was also pricing their services like that, but when Jio as a very powerful strengthful player entered in the market and initially they started giving their Services free of cost to the people and later on when even they started pricing it also, they pricing such a low level that it became a question of survival for the existing giant, The biggest player that is Airtel and other two companies, Vodafone and Idea had to enter into a joint venture to fight against the competition of the Jio and the other players in the market.

Now in this case, means that situation when the Jio came in the market everybody knew that it is coming from a very powerful player very stengthful for company very strengthful, powerful name in the market Reliance Industries and if Reliance is behind any sector of be the promoter of any company into any existing or new area than the existing players, there is a reason for them to think about that how to deal with this competition given to them by this giant.

So Jio entered in the market at very later stage right, airtel is in the market, Airtel is the first mobile in the world telephone in India followed by Idea, followed by say Vodafone, Jio came very late in the market, they entered in the market very late but everybody knew it that when it is being launched by a very powerful player in the market it means you cannot take the entry of Jio in the market so lightly.

So you have to not think it that how to survive in the market. So Jio came as a, means introductive offer it came as a free of cost initially, they extended, they kept on extending it. But because of the provisions of the competition act now they had to means start pricing their services, because beyond a limit you cannot miss distribute your services at a price which is lesser than the cost or sometimes free of cost, it is not possible, if you continue doing that the intention that is communicated to the market. The feeling which is communicated to the market is that you want to kill the existing competition from the market, existing player from the market and when these players will be dead, will be going out of the market then you will jack-up the price and exploit the customers.

So that is not allowed, so that was allowed for some period of time and under the predatory pricing that is one negative pricing system is defined under the competition act that under the that clause all the predatory pricing Jio was asked to then start pricing their services and then to say compete in the market but even you see when they started pricing it even today also.

Today they give you 1.5 GB data per day. That data which was given to us by Airtel, Vodafone, by Idea was been given to us 1.5 GB or 2 GB or 3GB data for the whole of the month at a very high price that same amount of data 1.5 GB data you are using for the whole month means that is per day data that is 1.5 GB data, you can use and your telephone is walking with the help of their system and your internet is also working with the help of their system. So even you buy a plan of Jio 449 rupees and not advertising for any company what is my personal experience that if you buy a monthly plan of the 449 rupees that gives you the facility of unlimited calling and 1.5 GB data per day, which was not possible before the entry of the Jio in the market.

When the Jio came in the market Airtel they have to redo the whole pricing system Vodafone they have to redo the read the whole pricing system then this Idea they have to do, the redo the whole pricing system to Airtel could survive in the market system. Because, they means revoked their pricing system? But the Idea and Vodafone found it that individually fighting this competition the market may not be possible. So let us form a joint venture that entered into a joint venture and now they are collectively they are competing in the market. Now the pricing of the mobile telephony both communication charges that is the internet as well as the mobile telephone have seriously come down after the entry of this big player in the market.

Now, at that time for the example if Airtel was not able to match the pricing of the Jio or the Idea and Vodafone were not able to match the pricing of Jio, so their of the one option in their mind was to go out of that sector, but since is not very easy for the existing players and that to the largest player to go out of the market immediately, so they keep on trying their luck and then they have to redo their whole costing process. Normal, I told you the beginning of this discussion that we have to recover the total cost of the production or the service or generating that service plus margin on that so work out the price because costing is the basis of the pricing miss cost plus Margin is the selling price per unit.

But sometimes it may be possible that it is not possible for the firms to recover the full cost of production that is both variable and fixed cost and they know it that sustain this competition for some period of time.

Then in the time to come even the existing this giant who is giving the services free of cost or maybe at very less surprise. They also would be compared to jack-up the price and to start charging High price but till the time that company starts pricing products or services or they increase the price we have to stay in the market. Now if you have stay in the market and you are not able to recover the total cost of the production plus margin so you follow the process of the marginal costing, here.

What we do it for some period of time for face between feel that this competition is there in the market also very high stiff competition in the market you forget your profit for some period of time, second step then you have to take is that you might have to forget fixed cost for some period of time and only you have to keep on pricing your product based only upon the variable cost.

And then I talk about marginal costing mean a variable costing system so you have to think about that see, If I am able to recover the variable cost that how much cost ? I am an increasing the recurring cost of say creating that product of the service, even if I am able to recover that and I am not able to recover the fixed cost and not able to earn the profits and this phenomena is going to be very short lived in the market.

Then you should use the marginal costing in this situation. You calculate the means divide the whole cost into two components variable cost and fixed cost. Fixed cost is otherwise we call it as sun cost you go for the production you do not go for the production till the time the company's existing in the market you have to pay the fixed cost.

You cannot avoided but the variable cost only happen if you go for the production of generating of the services. When the fixed cost has to be in any case and we want to close pull down the shutter or closed down the business you want to stay in the market and fight the competition then forget the profit for some period of time, forget the fixed cost for some period of time. Considering that is it sun cost and you only start price in your product only on the basis of the variable cost right for example we talk about that, For example that say earlier we were selling a product

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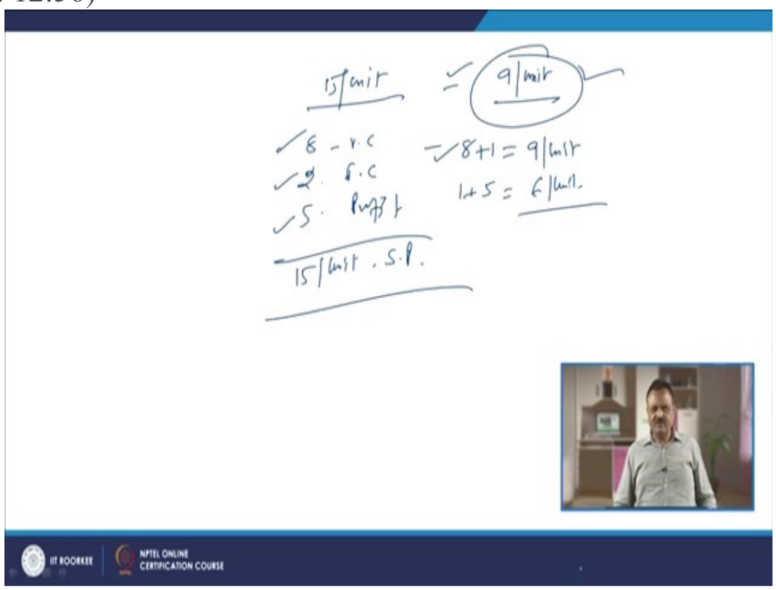

If this is a situation you are selling a product in the market for 15 rupees per unit that is our selling cost and in the selling price your eight rupees is the variable cost two rupees is the fixed cost and five rupees is the profit. These are the 3, so how much is 15 rupees per unit is the finally selling price? What we have decided and we are selling the product in the market per unit.

Now there is a new player which has come up in the market and that player has started selling their product at 9 Rupees per unit the product which are selling in the market for 15 rupees. Now they are selling your competitive is selling for 9 Rupees in the market. They know it that selling at 9 rupees is also not possible for the new player.

But the new player is knowingly doing it that if I start pricing the product is such a low price and offering it to the people people will means the players or the customers of the existing player in the market shift to my side and later on when I am able to kill the small companies in the market

I will check the price 15 rupees or 16 rupees and then recover the whole loss or maybe the lesson recovery of the price which I have done in the past.

Now this player has come up in the marketplace seller 9 rupees per unit existing player for selling for the 15 rupees per unit their cost was 8 Rupee as a variable cost two rupees per unit as a fixed cost and 5 rupees margin they ware earn.

Now, they are two options available either to close business pull the shutter and go out of market what it they feel the still they can fight the competition. This company can also not can be forced to raise the price later on. So, how they have to look at the total costing system, here it is, what is not the variable cost, 8 rupees have to recover it. You cannot miss think of staying in the market without image recovering the variable cost. You cannot pay the cost from your pocket so whatever the variable cost of generating that service for manufacturing that product.

You have to recover there in that 9 rupees, we are able to see that we are able to recover the variable cost out of the 2 rupees are the fixed cost. We are able to recover, how much 1 rupees. So it means we are also able to bring it down 9 rupees per unit, what we are not able to recover now? 1 rupees the fixed cost and 5 rupees as the profit that is a 6 rupees per unit. So rather than going out of the market and if you feel that this pricing is a short lived pricing this only give it used by the new player to kill the existing players from or to shunt the existing player out of the market.

In that case if you feel that there is a scope for the future improvements you start redoing the pricing system and you can also say reprise your product at 9 rupees per unit. Whenever competitor would see that my all competitor are selling the product at 9 rupees per unit and that say the customers of the existing companies not shifting towards a new player. So it may be possible that even the new player how long the new player will also be able to sustain that loss? So they may think about that the strategy, pricing strategy which I used, by lowering down the price to 9 rupees my competitors existing players in the market they have also miss for the same

And whatever the new market he thought that by offering the product of 9 Rupees per unit he will be having for some example 20 percent market but that is nothing happened, because the customers of the existing companies are with existing companies.Because existing players also have broad on the cost 9 rupees so anticipating a market share immediately the market share of 20 percent snatching it from the existing players.

The new player is not able to do anything and when your market is only 2 percent, 1 percent or 3 percent as against your standard estimate of 20 percent you how big or how strength for you might be? You have to means revise your pricing system then you have to bring it up to enable where we are able to recover the total cost fixed cost and variable cost and add some profits and, when the moment it is done.

Then other players can also check the price and the price can come back to may not be 15 rupees, because entry of the new player in the market has been there and you have to miss face some heat. Because of that it may not be possible to sell the product again at 15 rupees per unit, currently if it is comes down even to 12 rupees per unit still you are earning profit of 2 rupees.

Their profit has come down from the 5 rupees per unit to 2 rupees per unit but still you are a profitable organisation, and it can be increased the passage of time. All the players and start increasing it the existing players can also increase it and take and they come back to the old pricing system.

So in this situation, for example if the marginal costing system is not there then we are immediately dead. we are not able to fight their competition and to sustain in the market because, we will see here, our total cost of production is 10 rupees their selling price is 9 Rupees so we are not able to recover the total cost even there is a loss of 1 Rupee in the cost for to talk of the profit there for us to go to the market it has happen in the past

For example, I am give you the electronics industry in India, before this Economic liberalization, we had many Indian companies manufacturing colour TV for us or maybe all electronics products for us. Because these multinational companies were not allowed in India they were not allowed to enter in the Indian market.

You call it Samsung LG or Sony these three bigger company right, two Korean companies and one Japanese company so, when they were in the market they are not allowed in the market so many other companies manufacturing and selling electronics products maybe a refrigerators your see TV is your other electronics items they were manufacturing and almost, because they were domestic players with their cost of production was almost same so they charging the same cost of production which was as compared to today's pricing is very high at that time.

There is a company's like Onida, Videocon who had a very larger and market share, and their product was considered as a pride to the owner. This two companies are nowhere in existence now, when the multinational centre in the market. After liberalization of Indian economy Samsung, LG and Sony enter the market. They came out with the best of the Technologies best of the products and at a very competitive price new at that time what we were buying till date? We were being exploited by these Indian companies as a customer we should have the power to detect the terms to the manufacturer they were rather exploiting of sentiments and work the charging is very exorbitant prices for the products or services they were selling to us.

And when these existing Indian companies, when they also found that we will not be able to find the competition from these three giants. So what happened, slowly and steadily this company started vanishing out of market. There were many brand name Western, texla, dialora, Salora, baltake so many brands were there in the market.

They all went out of the market, because they knew it that will not be able to strive for and to fight for this competition. Videocon Onida they try to strive in the market to stay in the market, some period of time and today also there in the market but the market share has, become so low that mostly they are the loss making companies their making the last ditch effort, but I do not think that they will be able to compete with this three multinational giants so you have seen it that even by following the variable costing system of the marginal costing system. The cost of production of see TV by the existing or rest by Indian companies was so high that it was not possible to match with the cost of production of the multinational giants so they left the market they gone out of the market.

This one famous Howard professor Mickle Porter, He say that if any market dynamics change and the new competition comes up in the market and you find it that is not possible for you to find the competition in the market it is better to pull down the shutters change your business and move towards the other areas of the business maybe the production or the services sector.

Is no points. People fighting the joints because simply you will be wasting your time and archive money and ultimately you will be going out of the market, since certain cases firms the strive for stay the market to stain the fight of the competition, where is in certain cases they prefer to close down the business go out of the market and then not to means fight with any kind of the competition. Which they are not able to, I will give another classical example of for example you talk about cold drinks industry in India.

You know that know the largely have almost 100 percent market is in the hands of the two multinational companies Coca Cola and Pepsi before the entry of these two companies in Indian market, the soft drink market was controlled largely by Parles Industries, parles was manufacturing all this cold drinks and they were selling in the market. When the Coca-Cola came to the market and Coca-Cola offered the price that parles will not be able to fight the competition with us, So better you sell Business to us and you go out of the market situation parles analyse the total market dynamics and total market situation and they thought it.

Well it not possible for us fight with giant who has its present not only in India but in many countries in the world. We are only in India but they are into many countries in the world if they even have to sell the product in India clause will be able to make up that clause good from the other countries markets.

So why to keep on hitting your head against the wall is better to sell the business or to close down and change the area of your operation. They sold their soft drink business to Coca-Cola, Coca-Cola acquire the total soft drink business from the parles and finally now the two companies are there in the market Coke and the Pepsi, because they are international giants or global giants there financial might, there innovative might, their quality of the product and other things are so different and so high so better that you are not able to compete in the market.

So in this situation means you have to make the last ditch if you want to make it because of the change market dynamics you can do that. You have to think about that now the market has changed we cannot recover the full cost plus profit now, rather than simply dying its own death let us make the Last ditch effort.
Let us see how long our new competitor or strengthful player stays in the market. See use statistical changer costing system rather than we covering the total cost variable and fix plus profit you think about that now, what is the best price available in the market in this case it is 9 Rupees your cost variable cost is 8 rupees and still you are able to recover 50 percent of the fixed cost no profits, if you do not go for the if you stop the production all your fixed cost will go down in the drain. You will not be able to recover much out of it only Salvage value.

Profit is not at all there what you feel that this competition is short lift, for example Airtel also fit like that Airtel is not making you can call it is is very significant profits now as they were doing making in the past. Airtel being the first mover in the market they have faced stiff competition in the market from Jio and other two company even the Vodafone is a UK based company and multinational company and Idea also have very good presence in the market.

They had to join hands but they were both these three companies were sure about that one day Jio will have to start pricing in their services and second thing is when they start price in the services they will have to recover The Lost which have done while distributing the service free of cost so they will jack-up the price and then the moment they will jack-up the price we will also jack-up the price and we will now miss create a level playing field, where all the four companies are competing with each other and they have sizable market share so anticipation to that the state in the market they are striving the competition in the market and Jio is still the cheapest service provider in the market.

Many people have shifted from the existing companies to Jio and other companies they are striving out facing stiff competition but it may be possible that they are again now, pricing their services based upon the variable cost and recovering only the part of the fixed cost it may be possible, that Airtel is increased lost it may be possible that Idea and Vodafone joint venture is in loss, they cannot making the profits, but they are knowing very large in size give we give offering the we continue offering the innovative services to the people may be our customer base will improve and over services will also improve over this quality of the services also improve it may be possible that the customers who have immediately shifted from our customer in the past.

If there shifted to Jio then, they will compelled to come back and to join again as a back us to avail our services but still it is not a very difficult situation for these three companies to sustain in the so market sustaining striving and now they are competing with each other in the market number of cases especially before liberalisation and after liberalisation of Indian economy number of cases.

I can tell you talk about the Steel sector, there was the same situation only Steel Authority of India sale was the soul Steel provided to the country but after this say liberalization. When Jindal’s came to the market when see or this SR came to the market Lloyds came to the market with the Steel products. People means could get the better options at the very very competitive price so sell become a seek company and today the sell is dying for the company sustenance in the market.

This all has happened because of the change market dynamics change the competitive situation in the market and before pulling down the shutter. You can make the last ditch effort by using the marginal cost or the marginal costing system in hope that in future the situation will improve and then we will start recovering our total cost fixed plus variable plus adding some profit or that.

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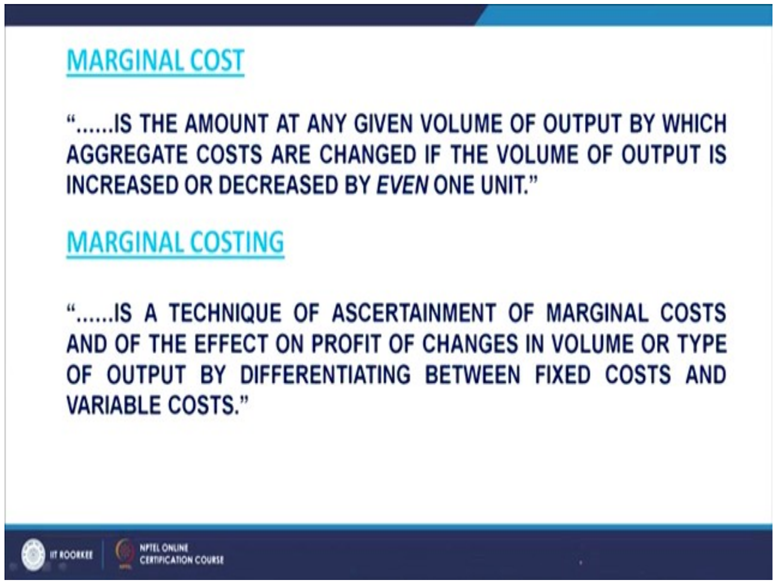

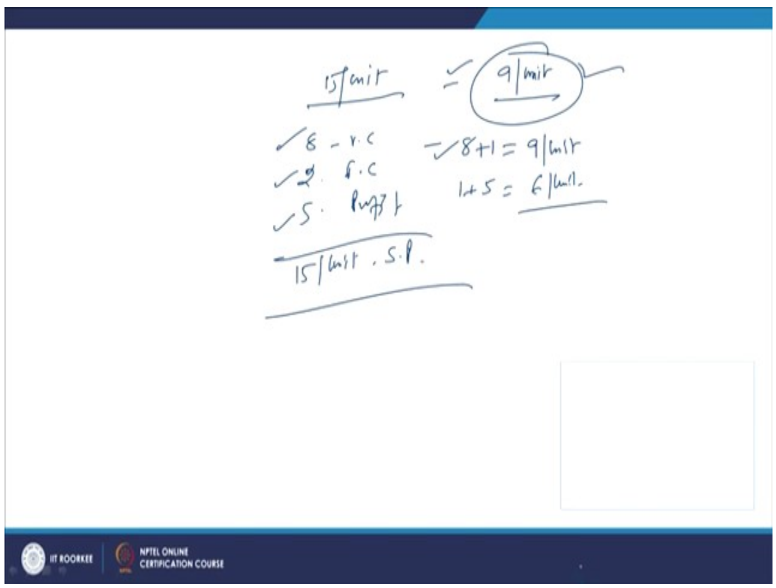

So now, let's understand what is the marginal costing system? And what do we mean by it. Marginal cost means is little increase in the the cost because of the increase in the production. If you have the certain amount of the production and you increased by one unit then that cause which increases the cause of increase in the production by one unit that is called as the marginal cost in ever you call it at the variable cost.

So marginal cost is the amount at any given volume of output by which aggregate Cost are change if the volume of output is increased or decreased by even one unit and marginal costing is a technique of a certainly of the marginal cost and of the effect on profit of changes in volume or type of output by differentiating between the fixed cost and the variable cost.

This is a technique where you cost the products based upon the variable cost and fixed cost but separately not like the total costing system where you take the total cost into account. So let us understand what is the definition of the marginal cost is the amount at any given volume of output by which aggregate cost are changed if the volume of output is increased or decreased by even one unit what does it means now.

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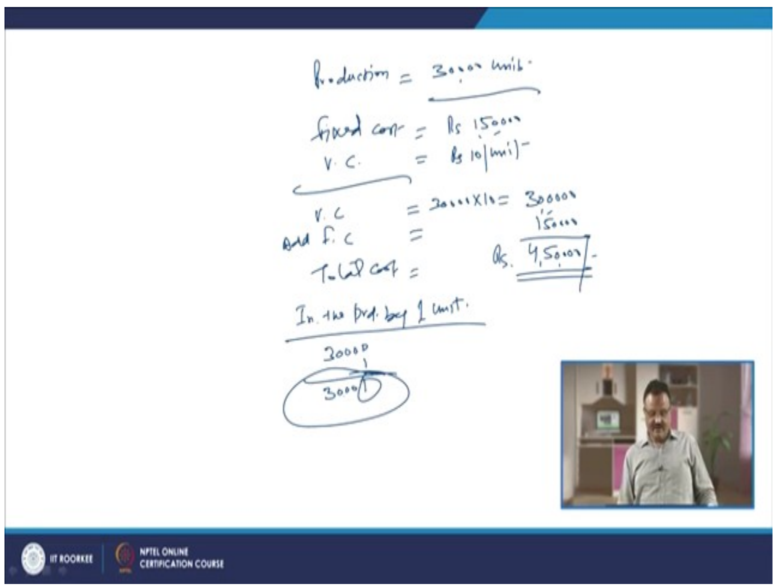

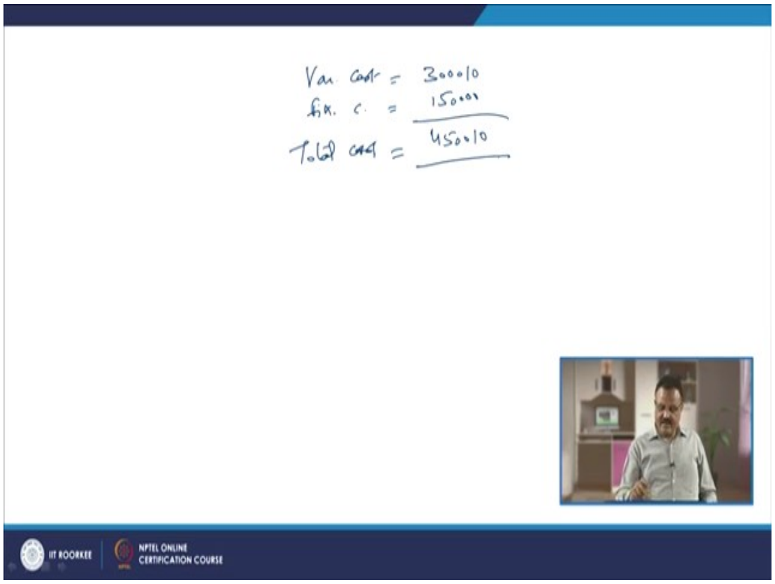

It means for example, we are currently producing how much production? Is 30000 units. We are producing currently 30000 units our fixed cost is our fixed cost of production is 1,50,000 and our variable cost is rupees 10 per unit, variable cost is rupees 10 per unit. So now you calculate the cost here, to calculate the total cost of production, if you calculate the total cost of production what is the variable cost? You calculate the variable cost is 30,000; 30,000 into 10 will be how much? 3,00,000 rupees and at fixed cost if you add the fixed cost in this that will remain the fix, that is 1,50,000.What is the total here cost total cost is, 4,50,000is the total cost of production that is 3 lacs plus1,50,000 is the total cost of production is rupees 4,50,000.

Now, what is the marginal costing? That is a cost which changes by increased or decreased in the production by even one unit now what we, do is we increase the production increase the production by one unit. Now how much we are producing earlier producing how many units? 30,000 how much we are producing now? It is 30,001 this is the total number and this unit have increased by 1 now you rework the whole costing system now you are workout the the whole process system what is the variable cost now? Variable cost is going to be how much this is going to be 300,010 is the variable cost.

Now, what is a fixed cost it is same 150,000. So what is the total cost now? Total cost is rupees 450,010 earlier what was the cost? It was 4, 50,000.Now, what is the cost? 4,50,010 rupees, so this 10 rupees cost has increased because of increase in the production by one unit.

Earlier we are producing 30000 now you are producing 30001 units and because of that your fixed cost has remained as fixed. That is 1,50,000 your variable costs only has changed from the 3 lac to 3 lakh and 10 rupees and the total cost has become that is 400000 and the 4,50,010 rupees to increase in the cost, this increasing in the cost what is written, because any reason is increase in the cost, because of any reason is if you look at this increase in the cost is amount of any given volume of output by which aggregate cost are change, If the volume of output is increased or decreased by even one unit

That is what we did it? When we increase the volume of production one unit then you have seen the total cost of production is changed but only by the cost or the amount of the variable cost not the amount of the fixed cost of is remain the same only variable cost a change. So This is the technique of marginal costing just beginning to learn about the marginal costing.

So this 10 rupees increasing the cost is called as the marginal cost. This is the marginal cost and this is because of the increase in the variable cost. So variable cost happens when you go for the production, if you go for the production of variable cost is according to that, if you do not go for the production of variable cost is zero. But fixed cost whether you go for the production you do not go for the production fixed cost you have to pay.

So, the cost which is getting affected by increasing or decreasing in the production that is the variable cost so sometimes when it is not possible to recover the total cost from the market, because of certain changes in the market dynamics you now change your costing strategy costing technique from the total costing system to marginal costing system and then you think the first I would like to recover the variable cost then the fixed cost and then I will talk about the profit.

So if you are not able to recover the fixed cost and profits at least try to recover the variable cost and stay in the market and fight the competition so this the just beginning discussion of marginal costing technique furthermore and the technique and how this technique will work? What are the different you can call it is a component of the marginal costing. This all I will discuss with you in the next class, thank you very much.