

Management Accounting
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Lecture 08

Cost Sheet-Role and Relevance in Management Decision Making-2

Welcome students, we are in the process of learning about the preparation of the cost sheet or the statement of the cost. I have sufficiently discussed about the cost sheet and the relevance of the cost sheet and how the cost sheet is preparing, so now we will practically prepare the cost sheets for one or two problems, the information which have drawn from certain resources.

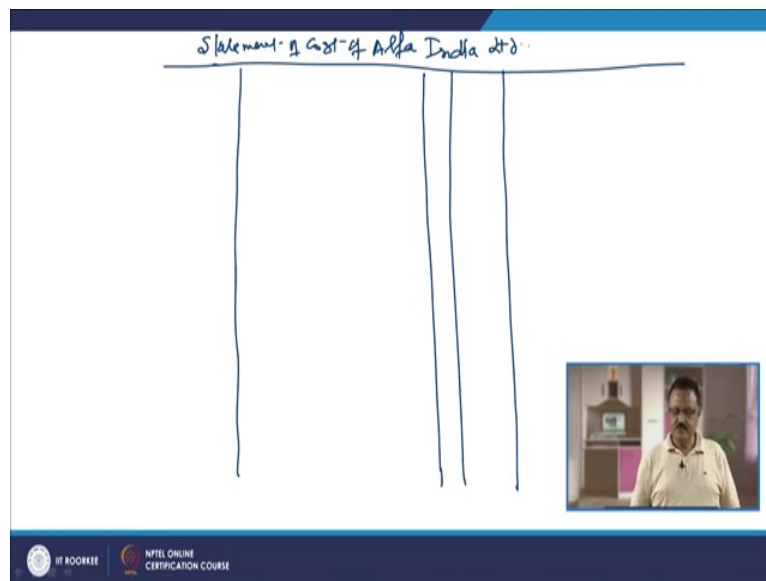
We will prepare the cost sheet first and then we will analyze cost sheet that how it is relevant for the managers or for the decision makers in the firms, to prepare the cost sheet have the different types of this sub cost, finally arrive at the total cost and then calculating the selling price by adding of the margin in the total cost of the production in the firm.

One thing I would like to share with you here is and to make clear that cost sheet is prepared product wise. For every product we have to prepare the independent cost sheet and one cost sheet is not common for all the products because, different products required different materials, different components of labor, different overheads, so requirement of the inputs is different in the different products depending upon the qualities of the product, size of the product, nature of the product and the price we are going to charge from the market.

You must agree with me that companies manufacture different type of the products, some are premium products some are products of the mass consumption where the people with the low income groups also can afford to buy the product if it is a necessity. And even in case of the comforts and luxuries also, the products in the different ranges are manufactured right.

So, cost control is important for all the products because ultimately we will have to determine the, means we have to match with the selling price not determine but to match with the selling price in the market because selling price is decided by someone else, that is decided by the market forces not by the firms. So they have to, the common denominator they have to keep in mind the sales and keeping into the selling price in the market, they will have to match cost, minimize the cost and maximize the profits. So, let see that how to prepare the cost sheet and what are the different components elements of the cost sheet.

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So the format of the cost sheet is very very simple and this nothing complex in this format so when we talk about the format, I have shown you here that this is the format of the cost and in this format we will have to, now add up the values. So, here we are writing the title of the cost sheet is that is the statement of cost or you can write it as the cost sheet, statement of the cost of Alfa India Limited this is a company so we are preparing a cost sheet here.

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Prepare cost sheet and work out cost of sales and profit form the given information drawn from the books of Alfa India Ltd.

Particulars	Rs.	Particulars	Rs.
Direct materials	1,00,000	Depreciation:	
		Factory plant	500
		Office premises	1250
Direct wages	25,000	Consumable stores	2500
Direct expenses	5,000	Manager's salary	5000
Wages of foreman	2,500	Director's fees	1250
Electric power	500	Office stationery	500
Lighting: Factory	1500	Telephone charges	125
Office	500		
Storekeeper wages	1000	Postage and telegram	250
Oil and water	500	Salesman's salaries	1250
Rent: Factory	5000	Traveling expenses	500
Office	2500		
Repairs and renewals:		Advertising	1250
Factory plant	3500		
Office premises	500		
Carrage outwards	375	Warehouse charges	500
Transfer to reserves	1000	Sales	189500
Discount on shares written off	500	Income tax	10,000
		Dividend	2,000

And if you look at the information given here is that this is the total information which I have derived from certain source and this information is relating to the all different components of

the cost right, for example, we have the information about the material, we have the information about the wages, we have the information about the expenses, direct expenses, then we have some factory overheads, then we have some administrative overheads, then we have some selling and distribution overheads.

So, our role is or as the role of cost accountant is that to from the given information he has to find out which information is important for him and how to take that information into account. For example, this total information all the information may not be of our use, right. So, we are not preparing a complex statement or may be the statement where we have to take into consideration all these items because they are given here.

They might be given some extra items to confuse the decision maker or may be, for example, as a student in the class or may be in the exam, you might be given some surplus or some extra information also which is not the subject matter of the cost sheet. So, you have to find out which component belongs to the cost sheet and which component does not belong. So we have to identify that information and take that information to the cost sheet.

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Statement of Cost of Alpha India Ltd.

Prime cost -
Factory cost -
C.O.P.
C.O.D.
To L.S. cost

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Statement of Cost of Alfa India Ltd

Particulars	Cost	
	Per Unit	Total Cost
Direct Material		100000
Direct labor		25000
Direct exp.		5000
Prime Cost		1,30,000 ✓
Add factory overheads		
Elect. Power		500
lighting		1500
Stores & water		1000
oil & Gas		500
factory rent		5000
Repairs & Rentals		3500
fact. Dep. (Plant)		500
Consumable stores & materials		2500
factory cost		1,47,500



So, now this is the statement of cost of Alfa India limited with very simple statement and we have to start preparing the statement like, first of all as I told you that cost sheet has the 4 different types of the cost right, first cost sheet is the for example the prime cost, second is the factory cost, then is the cost of production COP, then is the cost of sale that is the COS and finally the total cost.

Cost of sales sometimes is the total cost, so this we want find out, this we want to find out the cost of sale or the total cost and once the total cost is available with us, then we can determine the profit margin as well as the selling price, normally selling price we take from the market and we match our cost with the selling price, try to minimize the cost so that the profit is maximized.

So first of all now, what we have do here is that we will have to calculate the first sub component of the cost or the sub cost and their sub cost is the prime cost. We do not jump to the directly to the cost of sales of the total cost, first we will have to calculate the prime cost. So once we have to calculate the prime cost, in the prime cost we take into consideration only three items, first item is the direct material.

Second component we take here is the direct labor or before that I will just add a one more column here that column is like say we have not put the headings here so let us put the headings here first and the headings of this sheet will be something like particulars, these are particulars actually, this is the cost per unit, sometime we calculate the cost per unit also if we are given the total number of units we can manufacturing and sale in the market and then is the total cost.

So even we are able to find out the total cost and we know the number of units we can produce then I think it is very easy to calculate the cost per unit, so here we will not calculate the cost per unit because we are not given the total number of units to be produced and sold in the market. So we will only take the components of the cost or the factors which are going to contribute to the cost and the total cost.

So first is the prime cost, from this information we have to calculate the first cost and that cost is the prime cost and for the prime cost the first component is say that is the direct material. This is the direct material. Now, what is the direct material given here is, it is already given to us, some time we have to calculate the value of the material, I will discuss with you in the other problems but in this problem direct material is directly given to us and that material is how much, that is this is a total cost in rupees.

You can write here the total cost in the rupees so the, this is how much it is one lakh rupees, this cost is one lakh rupees, total cost is it is in the rupees you have to write somewhere in the bracket that is rupees and direct material is one lakh rupees. Second component of the prime cost is the direct labor and how much is the direct labor here or the direct wages, sometime it is direct wages, direct labor, it is given to us and this amount is how much? 25,000 rupees, right.

Now, the third component is the direct expenses or the direct other expenses you can say, so the direct expenses are how much, they are 5,000. If you see the other information given here is nothing is you can call it as a direct input. We either require direct material, direct labor working on the plant and then the direct expenses which are incurred which are manufacturing the product or converting the raw material into the finished products.

So others are either the factory overheads or they are administrative overheads or they are selling and distribution overheads and there is some information which is of not at all over use we will ignore that information, so these are only three information given to us about direct material, direct labor and the expenses so now we will total it up here and calculate the cost which is called as the prime cost.

So this is the prime cost, how much is the prime cost if you see here that is rupees hundred and thirty thousand, 1,30,000 rupees is the prime cost, right? So we have calculated the prime cost, first component of the cost and why we call it is a prime cost because it is the outcome of the 3 direct cost, sub components of the cost and those things are called as direct, those

items are called as direct without which you cannot think of making any production or going for the production.

No manufacturing is possible, no production is without these direct expenses, so they form the sub cost called as prime cost. So, now we have calculated the prime cost, now we will go to the next part add as, add factory overheads, they are factory overheads and put a line here just to demarcated that we are going to add of something now further here.

So, if you talk about the factory overheads you have to find out those items of expenses which are required in the factory apart from the material labor and the direct overheads. There are certain supportive materials which are required in the factory but they are not prime materials, they are supportive materials that is why we include them at the second stage for calculating the factory cost or the works cost.

And now we will see that out of this given information that which of the overheads are the factory overheads and how they have to be taken into account. So, now we will see the next item here is the, electric power and we know that without electric power factory cannot run so certainly electric power is the factory overheads.

It may be possible that electrical power is required in the office also but there we use the term only power not the electric power and if it has to be taken as a administrative overheads then it will be clearly given to the problem that this overhead has to be considered for the administrative over heads, but since here nothing is mentioned and the word returns here is the electric power so it means electric power is the power required in the factory and it is a additional overhead.

So, it means electric power, so this is the one overhead that is called as electric power and how much is the electric powers figure here? Electric power is 500 rupees, right? Now, we will proceed further with the next part is the lighting. Power is different and lighting is different and see in the lighting you are clearly given, lighting in the factory and lighting in the office, so only factory lighting we will have to take into account here and that amount is how much that is 1,500 rupees.

And the next items is the store keeper wages, so now you will be wondering that how we consider the storekeeper wages as the factory items, see there are two kinds of materials available with us, one is the raw material and second is the finished goods. When we use the

term storekeeper or the store, we indicate that in the store we store the raw material and when it is a question of storing of finished products then we store them in the warehouse.

So, if the term used is warehouse you consider that it is the selling and distribution overhead and it has to be added in the selling and distribution sub components and if it is a store keeper wages then you have to consider it as a raw material storing part and that is required in the factory or for the factory.

So the store keeper wages are how much, 1,000 rupees then we have oil and water. Certainly we required it in the factory, oil and the water. So we require oil and water in the factory and how much that amount is 500 rupees. So this is 500 rupees' item oil and water.

Then we have rent, so we can directly see here that it is the factory rent we are given clearly that how much is the factory rent and if you see the factory rent here they are given two kind of rents one is the factory rent another is the office rent. So we will take into account here is the factory rent and that rent is how much 5,000 rupees, after that you go ahead and if you find out the next item then we have the R and R that is the repairs and renewals.

So, it is repairs and renewals, and if you talk about the repairs and renewals, number one is the factory plant, so factory plant item is given to us and how much that item that is 3,500 rupees. This is the factory repair and renewal. Then we talk about the next item is carriage outward now we will see you will find two items in the information given carriage inward and carriage outward.

Carriage inward if it is given then certainly it is a part of your prime cost because carriage inward is given on the material which is coming in the factory, so it means the total cost of material consumed will be direct material cost plus carriage paid for transporting the material so that way you will calculate the total material cost.

But since it is given as the carriage outwards it means the carriage is paid transportation is paid on the material which is going out of the factory and finished going out of the factory so it means this will be considered as a selling and distribution overheads do we are not considering it here that is the carriage outward. Then we have the item like transport reserves, is not a cost sheet item.

Normally this item is the profit and loss appropriation account item transport reserves we calculate only, once we calculate the profit after tax and then we have to apportion that profit or distribute that profit for that we prepare the profit and lost appropriation account and in

that we will have to show on the credits side on the profit and loss appropriation account that how much is the total profit that will be shown on the credits side and on the debit side will show that how that profit will be distributed.

So you must be knowing it how to prepare the profit and loss appropriation account, so we will not consider the transport reserves here because, it is not nothing to relate the cost. Discount on shares return of, so we are not talking about preparing the balance sheet or anything we are simply preparing over the cost sheet so this is gain not the cost sheet item because, discount on shares written off is the share capital item. We will treat it somewhere in the balance sheet and some time if it the loss to the firm than it in the profit and loss account.

Now, we talk about the next item that is the, depreciation, yes depreciation we will take into account and we are given here the factory depreciation. That is very clearly given factory depreciation we are given two kinds of depreciation, plant depreciation and second is the office premises depreciation. So you can say factory depreciation, in the bracket you can write it as a plant or you can straight write the plant depreciation, so plant belongs to the factory so we will take this into account that is 5 hundred rupees,

After that if you see then we have only one more item consumable stores. Consumable stores are small type of the material very means which is used in a very negligible amount but still it is used and we have to take that into account so it is consumable stores or the consumable items. So if we take that in to account consumable items, this amount is how much 2,500.

I think after that if you look at all the items remaining, manager salary, its administrative overheads, director's fees, administrative overheads, telephone charges we use the telephone in the office normally, stationary it is the office, post and telegram is the office, sales man salaries is the again selling and distribution, traveling and expenses, sale selling and distribution, advertising is selling and distribution, and then the other all items. So it means for they factory I think we have only this much of the items,

So, now what we have to do is? You have to total it up and finally calculate the factory cost, you can put a line here, so that segregating the prime cost from the factory cost, but finally when you will calculate the factory cost, sometimes it is written as a factory cost or some time it is as a works cost. So for calculating the factory cost if you calculate the factory cost we have the prime cost here that is one item and in this we will add this overheads, which are factory overheads.

So we will arrive at the factory cost or the works cost. So how much this works out as you total it up in other paper outside the statement and add it up here, so how much works out as it is a very simple figure, so I am directly counting it, so it is 2,000, 3,000, 3,500, then it is 8,500, then it is 9,000, 12,000 and then finally it is the 12,000 then it is 14,000 and finally it is you can call it as 15,000.

So, but I think this is not correct, we will have to add of something more here so, how much it works out as it is 2 plus 3 plus 3, 5, then it is 8,500, 11,500, 12,500, then it is 13,000 and then to 15,000. We have missed out I think one item here, for about 2,000 rupees which will again the factory overhead or the part of the works cost, so we will have to see here, which item we have, left out here.

And we have again recheck it again, we have taken the amount direct material, direct wages, direct expenses, finally we have taken here in the prime cost. I think we have missed out the foreman wages right? This item is left out foreman wages, so it means when we talk about the foreman wages, foreman is the person who works in the factory, he is the part of the factory operations, he supports the factory operations and he is a technical guy so, he supports the factory the production process so his wages will be included here.

So it means here we have to write one item that is the foreman wages, we have missed it out so it means we will have to add it up and how much is this, this is 2,500 rupees. So, how much is now the total factory overheads, you can add up these overheads in to this cost and this works out as how much that is, now let us again count it 2,000, 3,000, 3,500, 8,500, then it is 9, 12, 12,500 and this is a 17,500. So, this is a 17,500, this is 130,000.


So, it means total factory cost is how much, you can say here that the total factory cost is, we will have to find out the total factory cost so I will have to write here in the lower part that is the factory cost or some time you have to write it as works cost, so factory cost is how much? Total cost is 147,500. In this cost say 130 is the prime cost and remaining is the 17,500 is here, 17,500 is the your works cost of the factory cost,

So, we will have to find out this cost here, I am writing it again so it means this is our total cost and if have to calculate you have to add up all the direct cost, then you have to add up the factory overheads and finally it become the 147,500 as the factory cost. So, these two cost we have calculated so far and then we will be moving had with the statement so I am taking to the next page.

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Particulars	₹	Total Cost (₹)
<u>Add Admin overheads</u>		
Office lighting	500	
Office Rent	2500	
Repair of office Prem.	500	
Dep. of office Prem.	1250	
Manager Salary	5000	
Director's fee	1250	
Office Staff	500	
Telephone charges	125	
Postage Telegram	250	
		<u>1,59,375</u>
Cost of Production		
Selling & Dist. Over		345
Carriage of sales man's salary		1250

$$\begin{array}{r} \text{₹. } 147600 \\ 11875 \\ \hline 159375 \end{array}$$



And again we are continuing with the statement, the statement of the cost again making the same columns, largely we have two columns but sometime when the total number of units' information is given to us then we make the one more column and the column is for the calculation of the cost per unit, so gain it is a particulars, then it is the cost per unit and then it is the total cost and it is in the rupees, right?

So, now we will continue with the, we have calculated the factory cost here now we will move with the add, administrative overheads, we are adding the administrative overheads because you can manufacture the product in the factory but taking it to the market, we need some office support, we need many people who support from behind the curtain, who supports in the office, who support in the sales and distribution so there is a cost for those overheads we have to account for those also,

So, now again you can keep on taking it, we have taken direct material, direct wages, direct expenses, wages of the foreman, electric power, lighting. Now, first is the office lighting, first item is the office lighting, office lighting how much is office lighting here? If we take the office lighting, then it is only small amount that is 500 rupees right? Office lighting is the 500 rupees then is the storekeeper wages we have taken oil or water we have taken now, the office rent we all take to office rent.

Office rent is how much? office rent is say rent factory and office 2,500, this is office rent, then we talk about the repair of the office premises and how much is the cost, that is the 500 only, not a big amount again, 500 only repair of the office premises. Then we have carriage outwards not to be taken transfer no, then discount on shares no, we have now to take the

depreciation, and depreciation of what that is the of office premises, so for calculating this depreciation of the office premises we have to take the figure and that figure 1250, right?

Then is the consumable stores no, we have not too take manager salary, manager works in the office, he is a permanent white color employee, manager salary, so if you take the manager salary here how much is the manager salary, it is 5,000 rupees, then is the directors fees and how much we are paying to director, director fees is again 1250, then is office stationary.

Next, item is the office stationary so, so office stationary is how much, we are taking the office stationary as 500 rupees and then is the telephone charges, how much, 125, then we have to take P and T, post and telegram and how much is the post and telegram, here is 250, office telegram. Then sales man salary, traveling expenses, advertising this is none of our concern.

So finally we will arrive at a cost which will be called as cost of production so how much is going to be the cost of production for us, COP, we call it as COP, so cost of production is how much, we have to calculate the cost of production? So, already we have some item, the total amount was 147,500 was our factory cost.

This was the factory cost and in this you have to add something like, you have to add here that is the total office overheads and for this, this is 147, in this let us see how much it works out as, it is 3,500 then it is the 4,750 then, 9,750, then it is 10, 11, 11,500 then it is the 11,875 so I think this works out as 11,875.

So, 11,875 we have to add here and if you add it up here, this cost of production works out as how much? This works out as this is the COP, this works out as 159,375. So we have calculated it, this is 159,375. So this is 57 then, it is 3, then it is 9, then it is 5 ya, I think its correct, 159,375. So this is the cost of production we have calculated now.

Now we will go to the finding out the next part of the cost and the next part of the cost is the cost of sales, right? So, we will have to add up now, add selling and distribution overheads, so how much is the selling and distribution overheads? We will have to take now the items which we have not taken so far, that are the direct wages, direct expenses foreman, electric power, factory lighting, office lighting, we have taken storekeeper wages we have taken, oil and water we have taken, then is the factory rent we have taken.

And then if you talk about the repair and renewals we have taken, carriage outwards is first item. This is the carriage outward o/w you can write carriage outward is how much? 375, so

what are the other items, other items are depreciation we have taken, consumable stores, manager salary, director fees, office stationary, then is the telephone charges, post and telegram, sales man salaries, next item is the sales man salaries in this case are 1250.

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Traveling Exp.	500
Advertising	1250
Warehouse charge.	500
Cost of sales.	1,63,250
Op. Profit	26,250
Sales.	1,89,500

The image shows a handwritten table with two columns. The left column lists items: Traveling Exp., Advertising, Warehouse charge., Cost of sales., Op. Profit, and Sales. The right column contains numerical values: 500, 1250, 500, 1,63,250, 26,250, and 1,89,500. Horizontal lines separate the rows, and a double horizontal line is under the Sales row. In the bottom right corner of the slide, there is a small video inset of a man speaking. At the bottom of the slide, there are logos for 'IIT ROORKEE' and 'NPTEL ONLINE CERTIFICATION COURSE'.

And other items we will have to now take to the next part and the next part is let us see here, we are continuing with the selling and distribution overheads, so we have to take now, we have taken the sales man salary, traveling expenses, right. Traveling expenses are how much? They are 500. Advertising, if we take the advertising here this is how much? 1250, right? Then are the warehouse charges, as I told you store and warehouse.

So warehouse charges are here, how much are the warehouse charges? They are 500. So, I think these are the only items here so how much it works out as the if we take this? This is 1750, 2250 and how much was earlier? It is 24 and then 34 and it is 37, you can call it as total amount is 3,875.

So you have to add it here, 3,875 and if you see, if you add it up 3,875 so how much is the cost of sales? It is called as cost of sales. Cost of sales, we have to calculate here is we total it up, this works out as total amount is 163,250.

Now you are given here the one information that is sales, put here sales after giving some gap, sales are how much? Sales figure given to us is directly given to us is 189,500. Close the cost sheet and the difference is the operating profit. And how much is the operating profit if you see here, this is 26,250 rupees.

So it means we have calculated the total cost by dividing it into different components like your prime cost, factory cost, cost of production, cost of sales and finally the operating profit and the sales value is given to us so it means we could find out that this is the 26,250 is the operating profit.

So, in this class we have learned about how to prepare a very simple cost sheet and how to arrive at the total cost of production and the operating profit. Now, how to analyze this cost sheet what is the relevant information to be taken into account that I will discuss with you in the next class, Thank You very much.