

Financial Accounting
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Lecture – 64
5.13 Calculating Cost of Goods Sold

Welcome to another tutorial. We are going to discuss the concept of Cost of Goods Sold a little bit more. I have emphasized upon this concept in the previous videos, but let me do a dedicated session on this.

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Calculate CoGS and Gross Profit

Opening stock	4800
Purchases	20800
Direct Expenses	15110
Other incomes	500
Sales	47070
Closing stock	5200
Operating expenses	1060 - IE

(1) $COGS = \text{Cost of Sales}$

$COGS = OS + Pur + DE - CS$

Cost of all available stock Cost of Unsold stock

↓

Cost of goods that are sold ↓ COGS

On the screen, you have a list of items: opening stock, purchases, direct expenses, other income, sales, closing stock, operating expenses. You need to calculate the cost of the goods sold and the gross profit. So, as we have discussed before, the cost of goods sold is also called cost of sales: number 1, this is one thing you should remember.

$$\text{Cost Of Goods Sold} = \text{Opening Stock} + \text{Purchases} + \text{Direct Expenses} - \text{Closing Stock}$$

This is the formula that we will use.

What is the concept of cost of goods sold? Cost of goods sold is equal to the cost spent on getting the goods in the final product shape, something that you can sell. You will have some unsold stock from the last year, the cost of it is the cost of the goods, the purchases of goods in

this year again is the cost of the goods, the direct expenses can be factory related expenses which you have to spend to convert the raw materials into the final goods. So, these three form the part of the total cost that you bear to convert the goods into final product, to have the stock of goods to be sold. Then, you take out from it the closing stock because this is not being sold during the year, this is the unsold stock. Let me write this:

Cost Of All Available Stock - Cost of Unsold Stock: this is what gives you, what leads you to arrive at this number of Cost of Goods Sold and this is what needs to be shown in the profit and loss account, in the trading account. This gives you the COGS or the cost of sales. So, this is the concept behind it.

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Calculate CoGS and Gross Profit

+ OS	4800	} 40710 ✓	✓ Gross Profit = Sales - CoGS ↑	
+ Pur	20800			
+ DE	15110			
- CS	5200	5200 ✓	Sales	47070
CoGS	35510 ✓		CoGS	<u>35510</u>
			GP	11560 ✓

P&L A/C		✓ CoGS = Sales - GP	
Opening stock	4800	Sales	47070
Purchases	20800	Closing stock	5200 ← CoGS
Direct Exp	15110		
Gross Profit	11560		

P&L A/C
 Sales 47070
 CoGS 35510
 Gross Profit 11560
 47070

Using this formula, we are going to calculate the cost of goods sold in this case. So, the opening stock is 4,800, the purchases need to be added to this 20,800, and we have direct expenses 15,110. Then you have other incomes, sales, none of this has anything to do with the calculation of cost of the goods sold so ignore these. You have 5,200 closing stock; you have to certainly deduct the closing stock. You have to add all these things and deduct closing stock 5,200 and one last item that we have is operating expenses. Now, operating expenses can be direct expenses as well, but you have been clearly given the amount of direct expenses here. So, you do not need to worry about operating expenses, you can assume all of these as indirect expenses. That is it. That is all the information we needed from these numbers in order to calculate the cost of the goods sold. All we have to do is just sum this up. So, this comes out to

be 40,710 deduct from this 5,200 and you are left with 35,510 is the cost of the goods which have been sold during the year. So, total available stock was worth 40,710, but you could not sell 5,200 rupees worth of stock: the cost which should be compared against the revenue according to the matching principle is only 35,510.

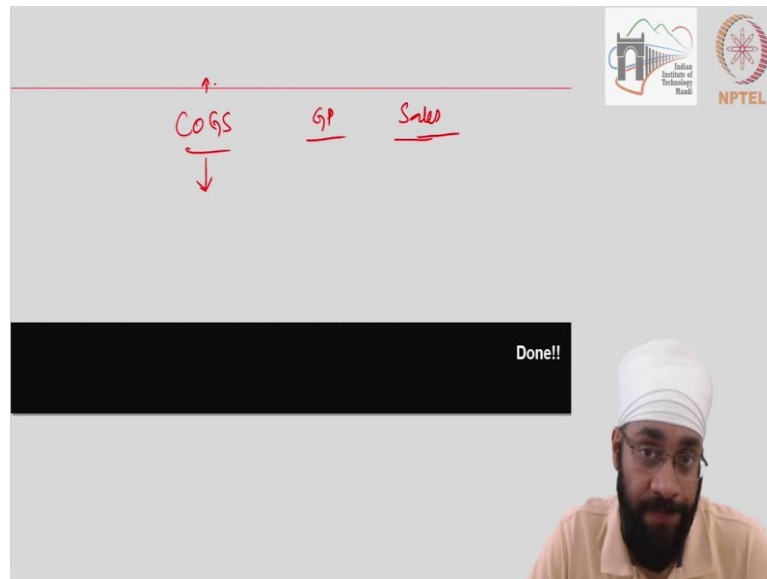
We are done with the first part where we needed to calculate the cost of the goods sold. Now, the other part is gross profit. How do we calculate the gross profit? Gross profit is equal to sales minus the cost of goods sold. You see that cost of goods sold and gross profit are complementary to each other with respect to sales. So, the sales number that you have been given is 47,070 and the cost of goods sold we have just calculated is 35,510. Therefore, the gross profit comes out to be 11,560. If this is true; that means, the cost of goods sold can also be calculated by deducting gross profit from the sales. So, that is another way to figure out the cost of goods sold. I think this is pretty clear you need not over emphasize it. Understand these dynamics, the use of these numbers. In this case, operating expenses were not of any use, other incomes were not of any use, you only needed the rest of the information to solve for cost of goods sold and for gross profit. If you imagine the trading account, this is how it looks: Trading and Profit & Loss account. You show sales here. So, sales are 47,070 and you show closing stock. So, closing stock is 5,200 and you have opening stock here, opening stock is 4,800, you have purchases which are 20,800, direct expenses are 15,110 and finally, you now have calculated gross profit as well, so gross profit is 11,560. This is how the trading account looks. All you did was use this information to figure out two numbers, cost of goods sold and the gross profit. In order to calculate the cost of goods sold, you used these three numbers and this one number. You used it to calculate the cost of goods sold. This is the equation which is written here. This equation, cost of goods sold is opening stock plus purchases plus direct expenses and then, you deduct closing stock from that. By writing it on the credit side, we are deducting this. So, this in effect gives you the cost of the goods sold.

If you reimagine this profit and loss account, it will look like this: on the one hand you have sales which is 47,070 and on the other side, you will have cost of goods sold directly you write this figure 35,510 and now, you need not write any of these four numbers because you have written the net effect and then, you can write the gross profit number which is 11,560. I hope this comes out to be correct? Yes, that is right 47,070 is the total. This cost of goods sold is the number that you see in the income statements. This is the number, the consolidated number, that is shown that is presented to the public and of course, you can go to the details, the notes,

other things to look at, more data. But internally, when we prepare an income statement, we like to give all the details in the profit and loss account.

Now we know how these numbers were arrived at and as we move forward, we will do more analysis based upon these numbers and then you better have the breakdown of these numbers.

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To summarize, in this video, we learnt the concept of cost of goods sold. You were already aware of it but I gave you some more insights as to how these three numbers are related and the fact that COGS, or Cost Of Goods Sold, is shown in the final accounts and you can look at the back end which we just learned. The back end of it is opening stock plus purchases plus direct expenses minus the closing stock.

So, that is all I wanted to discuss in this video. I will see you in the next tutorial.