

COST SHEET

Q1. A Ltd. has a capacity to produce 100,000 units of the product every month. Its work costs at varying levels of production is as under:

LEVEL	WORK COST (Rs.per unit)
10%	400
20%	390
30%	380
40%	370
50%	360
60%	350
70%	340
80%	330
90%	320
100%	310

Its fixed administration expenses amount to Rs.150,000 p.m. and fixed marketing expenses amount to Rs.250,000 p.m. respectively. The variable selling costs amounts to Rs.30 per unit. It can market 100% of its output at Rs.500 per unit provided it incurs the following further expenditure:

- a) It gives gift items costing Rs.30 per unit of sale,
- b) It has lucky draw every month giving the first prize of Rs.50,000, 2nd prize of Rs.25,000, 3rd prize of Rs.10,000 and three consolation prizes of Rs.5,000 each to its customers buying the product.
- c) It spends Rs.100,000 on refreshments served every month to its customers.
- d) It sponsors a television programme every week at the cost of Rs.500,000.

It can market 30% of its output at Rs.550 per unit without incurring any of the expenses referred above. Prepare cost sheets to compute the amount of profits at 30% and 100% capacity.

Q2. ABC Ltd. provides the following information for cookers manufactured during the last year:

PARTICULARS	AMOUNT(Rs.)
Material	450,000
Direct Wages	300,000
Power and consumables	60,000
Lighting of factory	117,500
Clerical Salaries and Mgmt. Expenses	168,000
Selling expenses	27,000
Sales proceeds of factory scrap	10,000
Plant, repairs, maintenance and depn.	57,500

The net selling price was Rs.158 per unit and all units were sold.

From 1st January of the current year, the selling price was reduced to Rs.150 and it estimated that production could be increased by 50% in the current year due to increased spare capacity.

Prepare:

- A cost sheet for the last year.
- A cost sheet for the current year if 15000 units were Produced and sold. The factory overheads are recovered as a percentage of direct wages and office and selling expenses as a percentage of works cost.

Q3. A fire occurred in the factory premises on October 31, 2003. The accounting records have been destroyed but some records were kept in another building and they reveal the following for the period September 1, 2003 to October 31, 2003:

i.	Direct material purchased	Rs.250,000
ii.	WIP inventory 1.9.2003	Rs.40,000
iii.	Raw material inventory 1.9.2003	Rs.20,000

iv.	Finished goods inventory 1.9.2003	Rs.37,750
v.	Indirect manufacturing costs	40% of conversion costs
vi.	Sales revenues	Rs.750,000
vii.	Direct Manufacturing labour	Rs.222,250
viii.	Prime costs	Rs.397,750
ix.	Gross margin percentage	30%
x.	Cost of goods available for sale	Rs.555,775

The loss is fully covered by insurance so the insurance wants you to Calculate the historical costs of the following inventories:

- a) Finished goods inventory 31.10.2003.
- b) Work in Progress 31.10.2003.
- c) Direct Material inventory 31.10.2003.

Q4. The following data relates to a company for the month of March 2009:

- i. Direct material used Rs.847.
- ii. Opening stock of finished goods ?
- iii. Closing stock of finished goods Rs.94.
- iv. Direct Labour cost Rs.389.
- v. Manufacturing overheads ?
- vi. Cost of goods produced Rs.18,78.
- vii. Cost of goods sold ?
- viii. Cost of goods available for sale Rs.19,49.

Find the missing items.

(Ans. Mfg Ov. Rs.642, Op.FG Rs.71, COGS Rs.1,855)

Q5. Find out the selling price of an article where costs of production and sales of 100,000 units are as under:

Material	Rs.50,000
Labour	Rs.40,000
Overheads	Rs.160,000

The fixed portion of capital employed is Rs.50,000 and the varying portion is 40% of sales turnover. A profit of 8% net on capital employed after payment of taxes @ 40% of the earnings is desired.

(Ans. Rs.2.71)

Q6. The following information relates to a company for the half year ending 31st December 2009 is available to you:

Purchase of raw material	Rs.120,000
Rent, rates, Insurance of factory	Rs.40,000
Direct wages	Rs.100,000
Carriage inwards	Rs.1,440

Stocks (01,july 2009)

Raw Material	Rs.20,000
Finished product (1,000 tons)	Rs.16,000
WIP	Rs.4,800

Stocks (31,Dec. 2009)

Raw Material	Rs.22,240
Finished product (2,000 tons)	Rs.32,000
WIP	Rs.16,000
Sales of finished product	Rs.300,000
Cost of factory supervision	Rs.8,000

The advertising discount allowed and selling costs are Rs.1 per ton sold. 16,000 tons of the product were produced during the period. Calculate the total profit and the cost of sales of the product for the period by preparing a cost sheet.

(Ans. Rs.45,000 and Rs.255,000)

Q7. Nilgiri Ltd. produces fridges and sells each for Rs.20,000 during a year. The DM, DL and OVERHEADS costs are 60%, 20% and 20% respectively of the cost of sales. Next year, the DM costs has increased by 15% and DL costs by 17.5% and so the profit has declined by 50% if the same selling price is maintained. Compute the new selling price to enable the company to maintain the same %age of profit as that earned during the preceding year.

(Ans. Old cost Rs.1,600, Old SP Rs.2,000, New cost Rs.1,800, New SP Rs.2,250)

Q8. A factory has received order for two types of alloy sheets weighing 45 tons and 72 tons respectively. 10% of raw materials input is wasted and is sold at 25% of the cost price of raw materials. The cost of raw materials is Rs.800 per ton. The wages for two types of alloy wheels are paid @ Rs.300 and Rs.250 per ton of material input respectively. The cost of moulds for the two types of sheets are Rs.4,000 and Rs.7,500 respectively.

If factory overheads are absorbed @ 40% of wages in each case then what is the production cost per ton for each type of alloy sheet.

(Ans.Rs.1422.22 and Rs.1,359.72)

Q9. A firm has purchased a plant to manufacture a new product, the cost data for which is given below:

Estimated annual sales 24,000 units

Estimated Costs:

Materials	Rs.4 per unit
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Labour Rs.0.60 per unit

Overheads Rs.24,000 per year

Admn. Expenses Rs.28,800 per year

Selling expenses 15% of sales

Calculate the selling price if profit per unit is Rs.1.02.

(Ans.Rs.9.20)

Q10. The following information relates to a company:

Stock	Opening	Closing
Finished goods	110,000	95,000
WIP	70,000	80,000
Raw Material	90,000	95,000

- a) Cost of goods produced Rs.684,000.
- b) Factory cost Rs.654,000.
- c) Factory overheads Rs.167,000.
- d) Direct Material consumed Rs.193,000.

Calculate:

- 1) Raw material purchased.
- 2) Direct labour cost.
- 3) Cost of goods sold.

(Ans. Rs.198,000, Rs.304,000, Rs.699,000)

DIRECT MATERIAL

Q1. Find out the Economic Order Quantity and order schedule for Raw materials and packing materials with the following data given to you:

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|------------------------------|---------------------------|---------------------------|
| 1. Cost of Ordering | : Raw Material | Rs.1,000 per order |
| | Packing materials | Rs.5,000 per order |
| 2. Cost of holding inventory | : Raw Material | 1paise per unit per month |
| | Packing materials | 5paise per unit per month |
| 3. Production Rate | : 200,000 units per month | |

Q2. Calculate the material turnover ratio for the year 1999 from the following details:

Particulars	Material X	Material Y
Opening Stock	25,000	87,500
Closing Stock	15,000	62,500
Purchases	190,000	125,000

Determine the faster moving material.