

# CA - COST & MANAGEMENT ACCOUNTING

Total Marks – 60 marks

Time allowed – 2 hour

## SECTION A (Answer MCQ 1 to 4)

(4 X 2 = 8 marks)

A Ltd. produces a product 'Exe' using a raw material Dee. To produce one unit of Exe, 2 kg of Dee is required. As per the sales forecast conducted by the company, it will able to sale 20,000 units of Exe in the coming year. The following is the information regarding the raw material Dee:

- (i) The Re-order quantity is 200 kg. less than the Economic Order Quantity (EOQ).
- (ii) Maximum consumption per day is 20 kg. more than the average consumption per day.
- (iii) There is an opening stock of raw material of 2,000 kg.
- (iv) Time required to get the raw materials from the suppliers is 4 to 8 days.
- (v) The purchase price is Rs.125 per kg.

There is an opening stock of 1,800 units of the finished product Exe. The rate of interest charged by bank on Cash Credit facility is 13.76%.

To place an order company has to incur Rs. 720 on paper and documentation work. [Take 364 days for a year]

1. Calculate ROQ  
 (a) 1,697 kg                      (b) 1,497 kg                      (c) 1,500 kg                      (d) None of the above
2. Calculate ROL  
 (a) 690 kg                      (b) 800 kg                      (c) 960 kg                      (d) None of the above
3. Calculate Maximum Stock Level  
 (a) 2,137 kg                      (b) 2,371 kg                      (c) 2,731 kg                      (d) None of the above
4. Calculate Minimum Stock Level  
 (a) 600 kg                      (b) 360 kg                      (c) 731 kg                      (d) None of the above

## SECTION B (Answer MCQ 5 to 7)

(3 X 2 = 6 marks)

X Ltd. manufactures two types of pens 'Super Pen' and 'Normal Pen'. The cost data for the year ended 30th September, 2019 is as follows:

	(`)
Direct Materials	8,00,000
Direct Wages	4,48,000
Production Overhead	1,92,000
Total	14,40,000

It is further ascertained that cost per unit ratios are as under :

- (1) Direct materials cost in Super Pen was twice as much of direct material in Normal Pen.
- (2) Direct wages for Normal Pen were 60% of those for Super Pen.
- (3) Production overhead per unit was at same rate for both the types.
- (4) Production during the year were as follow :
 

Super Pen	40,000 units
Normal Pen	1,20,000 units

5. Calculate Direct Material cost attributable for Super Pen  
 (a) Rs 533,333                      (b) Rs 2,00,000                      (c) Rs 3,20,000                      (d) None of the above
6. Calculate Direct Wages cost attributable for Super Pen  
 (a) Rs 280,000                      (b) Rs 1,12,000                      (c) Rs 1,60,000                      (d) None of the above
7. Calculate Production overhead attributable for Super Pen  
 (a) Rs 96000                      (b) Rs 48,000                      (c) Rs 96000                      (d) None of the above

**SECTION C (Answer MCQ 8 to 10)**

**(3 X 2 = 6 marks)**

K Ltd. produces and markets a very popular product called 'X'. The company is interested in presenting its budget for the second quarter of 2020.

The following information are made available for this purpose:

- (i) It expects to sell 1,50,000 bags of 'X' during the second quarter of 2020 at the selling price of `1,200 per bag.
- (ii) Each bag of 'X' requires 2.5 mtr. of raw-material 'Y' and 7.5 mtr. of raw – material 'Z'.
- (iii) Stock levels are planned as follows:

Particulars	Beginning of Quarter	End of Quarter
Finished Bags of 'X' (Nos.)	45,000	33,000
Raw – Material 'Y' (mtr)	96,000	78,000
Raw – Material 'Z' (mtr)	1,71,000	1,41,000
Empty Bag (Nos.)	1,11,000	84,000

8. Calculate Production of FG X  
 (a) 162,000 bags                      (b) 138,000 bags                      (c) 150,000 bags                      (d) None of the above
9. Calculate Raw material consumed of Y  
 (a) 345,000 kg                      (b) 10,35,000 kg                      (c) 327,000 kg                      (d) 10,05,000 kg
10. Calculate Raw material purchases of Z  
 (a) 345,000 kg                      (b) 10,35,000 kg                      (c) 327,000 kg                      (d) 10,05,000 kg

**SECTION D**

**(5 X 2 = 10 marks)**

11. Calculate value of closing stock (Use FIFO) from the following:  
 Opening stock of finished goods (500 units) : Rs. 2,000  
 Cost of production (10000 units) : Rs. 50,000  
 Closing stock (1000 units):?  
 (a) Rs. 4,000                      (b) Rs. 4,500                      (c) Rs. 5,000                      (d) Rs. 6,000
12. AT Co makes a single product and is preparing its material usage budget for next year. Each unit of product requires 2kg of material, and 5,000 units of product are to be produced next year.  
 Opening inventory of material is budgeted to be 800 kg and AT co budgets to increase material inventory at the end of next year by 20%

- The material purchase budget for next year is  
 (a) 8,000 Kg                      (b) 9,840 kg                      (c) 10,000 Kg                      (d) 10,160 Kg
13. The cost per unit of a product manufactured in a factory amounts to Rs. 160 (75% variable) when the production is 10,000 units. When production increases by 25%, the cost of production will be Rs. Per unit.  
 (a) Rs. 145                      (b) Rs. 150                      (c) Rs. 152                      (d) Rs. 140
14. A company manufactures a product from a raw material, which is purchased at ` 80 per kg. The company incurs a handling cost of ` 370 plus freight of ` 380 per order. The incremental carrying cost of inventory of raw materials is ` 0.25 per kg. per mensem. In addition, the cost of working capital finance on the investment in inventory of raw materials is ` 12 per kg. per annum. The annual production of the product is 1,00,000 units and 2.5 units are obtained from one kg of raw materials. Calculate the economic order quantity of raw materials.  
 (a) 2000                      (b) 10,000                      (c) 20,000                      (d) None
15. Which off the following item will be included in landed cost of material  
 (a) Cost of returnable container    (b) GST (ITC available)    (c) GST (ITC not available) (d) None

## SECTION E

### Question No 1

The following data are available from the books and records of Q Ltd. for the month of April  
 Direct Labour Cost = ₹ 1,20,000 (120% of Factory Overheads)

Cost of Sales = ₹ 4,00,000

Sales = ₹ 5,00,000

	1st April, 2020 (₹)	30th April, 2020 (₹)
<b>Inventory:</b>		
Raw material	20,000	25,000
Work-in-progress	20,000	30,000
Finished goods	50,000	60,000
<b>Other details:</b>		
Selling expenses		22,000
Admin. Expenses (Marketing nature)		18,000

Prepare a cost sheet for the month of April 2020

(6 marks)

### Question No 2

SKY Company Ltd., not registered under GST, purchased material 'RPP' from a company, registered under GST. The following information is available for one lot of 5,000 units of material purchased:

Listed price of one lot	` 7,50,000
Trade discount	@ 10% on Listed price.
CGST and SGST (Credit Not available)	12% (6% CGST + 6% SGST)
Road Tax paid	` 15,000
Freight and Insurance	` 51,000
Detention Charges	` 15,000

Commission and brokerage on purchases	₹ 30,000
Amount deposited for returnable containers	₹ 90,000
Amount of refund on returning the container	₹ 60,000
Other Expenses	@ 2% of total cost

20% of material shortage is due to normal reasons.

You are required to CALCULATE cost per unit of material purchased to SKY Company Ltd. **(5 marks)**

### Question No 3

R Limited is presently operating at 50% capacity and producing 60,000 units. The cost structure at the 50% level of activity is as under:

Direct Material	75 per unit
Direct Wages	25 per unit
Variable Overheads	25 per unit
Direct Expenses	15 per unit
Factory Expenses (25% fixed)	20 per unit
Selling and Distribution Exp. (80% variable)	10 per unit
Office and Administrative Exp. (100% fixed)	5 per unit

PREPARE an Expense budget for the company at 50% and 60% level of activity. **(6 marks)**

### Question No 4

Stock of Raw material as on 01-02-2022	1,20,000
Work in Progress as on 01-02-2022	75,000
Purchase of Raw material	3,00,000
Carriage Inwards	30,000
Direct Wages	1,80,000
Cost of special drawing	45,000
Hire charges paid for Plant (Direct)	36,000
Return of Raw Material	60,000
Carriage on return	9,000
Expenses for participation in Industrial exhibition	12,000
Maintenance of office building	3,000
Salary to office staff	37,500
Legal charges	3,750
Depreciation on Delivery van	9,000
Warehousing charges	2,250
Stock of Raw material as on 28-02-2022	45,000
Stock of Work in Progress as on 28-02-2022	36,000

- Store overheads on materials are 10% of material consumed.
- Factory overheads are 20% of the Prime cost.
- 10% of the output was rejected and a sum of ₹ 7,500 was realized on sale of scrap.
- 10% of the finished product was found to be defective and the defective products were rectified at an additional expenditure which is equivalent to 20% of proportionate direct wages.
- The total output was 8,000 units during the month.

You are required to PREPARE a Cost Sheet **(7 marks)**

**Question No 5**

A company uses four raw materials A, B, C and D for a particular product for which the following data apply:-

Raw Material	Usage per unit of product (Kg.)	Re-order Quantity (Kg.)	Price per Kg. (₹)	Delivery period (in weeks)			Re-order level (Kg.)	Minimum level (Kg.)
				Minimum	Average	Maximum		
A	12	12,000	12	2	3	4	60,000	?
B	8	8,000	22	5	6	7	70,000	?
C	6	10,000	18	3	5	7	?	25,500
D	5	9,000	20	1	2	3	?	?

Weekly production varies from 550 to 1,250 units, averaging 900 units of the said product. Calculate :-

- (i) Minimum Stock of A?
- (ii) Maximum Stock of B?
- (iii) Re-order level of C?
- (iv) Average stock level of A?
- (v) Re-order level of D?
- (vi) Minimum Stock level of D?

**(6 marks)**