## Paper - 8: Cost & Management Accounting

Time Allowed: 3 Hours Full Marks: 100

Question No 1 is Compulsory. Answers any five Questions from the rest.

Working Notes should form part of the answer.

#### **Question.1**

(a) Match the statement in Column I with the most appropriate statement in Column II:

 $[1 \times 5 = 5]$ 

Column I	Column II
(i) Flexible budget	(A) Item of reconciliation
(ii) Differential cost analysis	(B) Inventory management
(iii) Debenture interest	(C) Decision making
(iv) JIT system	(D) Considers cost by behaviour
(v) Uniform costing	(E) Technique to assist inter-firm comparison

(b) Fill in the blanks:  $[1 \times 5 = 5]$ 

- (i) The total of indirect expenses is known as ......
- (ii) Ordering cost and carrying cost are ..... in nature.
- (iii) The purpose of cost control accounts is to control the .....
- (iv) The scarce factor of production is known as ......
- (v) LIFO method of pricing issues is useful during periods of ......
- (c) State whether the following statements are TRUE or FALSE:

 $[1 \times 5 = 5]$ 

- (i) Incentive systems benefit only workers.
- (ii) Job costing is ideal where the products are dissimilar and non-repetitive in nature.
- (iii) Service departments usually do not render services to each other.
- (iv) Idle time variance is always adverse.
- (v) Fixed cost vary with volume rather than time.
- (d) In the following cases, You are required to indicate the correct answer and give workings:

[2x5 = 10]

 (i) The following information relates to budgeted operations of Division A of a manufacturing Company.

Particulars	Amount in ₹
Sales-50,000 units @ ₹ 8	4,00,000
Less: Variable costs @ ₹ 6 per unit	3,00,000
Contribution margin	1,00,000
Less: Fixed Costs	75,000
Divisional Profits	25,000

The amount of divisional investment is ₹1,50,000 and the minimum desired rate of return on the investment is the cost of capital of 10%.

## Calculate

- I. Divisional expected ROI and
- II. Divisional expected RI

(i)

A. 17.6% and ₹ 10,000

- B. 16.7% and ₹ 10,000
- C. 16.7% and ₹ 20,000
- D. None of the above
- (ii) In a factory of XYZ LTD., where Standard Costing is followed, the budgeted fixed overheads for a budgeted production of 4,800 units is ₹24,000. For a certain period actual (FOH) expenditure was ₹22,000 resulting in a fixed overhead volume variance of ₹ 3,000 (Adv.). What is the actual production for the period.
  - A. 4.800 units
  - B. 4,200 units
  - C. 4,500 units
  - D. None of the above
- (iii) SAMPARK LTD. operates a throughput accounting system. The details of product B-1 per unit are as under:

Selling Price	₹30
Material Cost	₹12
Conversion Cost	₹15

Time on bottleneck resources 6 minutes

Calculate the Return per hour for Product B-1

- A. ₹160
- B. ₹170
- C. ₹180
- D. ₹190
- (iv) A television Company manufactures several components in batches.

The following data relate to one component:

Annual demand	32,000 units
Set up cost/batch	₹120
Annual rate of interest	12%
Cost of production per unit	₹16

Calculate the Economic Batch Quantity (EBQ).

- A. 3,000 units
- B. 2,500 units
- C. 2,000 units
- D. None of the these
- (v) A company is currently operating at 80% capacity level. The production under normal capacity level is 1,50,000 units. The variable cost per unit is Rs. 14 and the total fixed costs are Rs. 8,00,000. If the company wants to earn a profit of Rs. 4,00,000, then the price of the product per unit should be......
  - A. ₹37.50
  - B. ₹ 24.00
  - C. ₹38.25
  - D. None of the above

#### **Question.2**

(a) The cost structure of an article the selling price of which is ₹45,000 is as follows:

Direct Materials 50%

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Direct Labour 20%
Overheads 30%

An increase of 15% in the case of materials and of 25% in the cost of labour is anticipated.

These increased costs in relation to the present selling price would cause a 25% decrease in the amount of profit per article.

You are required to prepare:

- (i) A statement of profit per article at present, and
- (ii) The revised selling price to produce the same percentage of profit to sales as before.
- (b) Distinguish between:
  - (i) 'Cost centre' and 'cost unit'.
  - (ii) Bill of material and material requisition note.

[9+(3+3)=15]

## Question. 3

(a) The following data are available in respect of material X for the year ended 31st March 2012.

	₹
Opening stock	90,000
Purchase during the year	2,70,000
Closing stock	1,10,000
Coloriado	

Calculate —

- (i) Inventory turnover ratio; and
- (ii) the number of days for which the average inventory is held.
- (b) At what price per unit would Part No. G 112 be entered in the Stores Ledger, if the following invoice was received from a supplier:

Invoice	₹
200 units Part No. G112 @ ₹5	1,000.00
Less: 20% discount	200.00
	800.00
Add: Excise Duty @ 10%	<u>80.00</u>
	880.00
Add Packing charges (5 non-returnable boxes)	<u>50.00</u>
	930.00

#### Notes:

- (i) A 2% discount will be given for payment in 30 days.
- (ii) Documents substantiating payment of excise duty is enclosed for claiming MODVAT credit.
- (c) From the details given below, calculate
- (i) Re-ordering level
- (ii) Maximum level
- (iii) Minimum level
- (iv) Danger level

Re-ordering quantity is to be calculated on the basis of following information:

Cost of placing a purchase order is ₹20

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Number of units to be purchased during the year is 5,000.

Purchase price per unit inclusive of transportation cost is ₹50.

Annual cost of storage per unit is ₹5.

Details of lead time:

- Average 10 days,
- Maximum 15 days,
- Minimum 6 days.
- For emergency purchases 4 days.

### Rate of consumption:

Average: 15 units per day,Maximum: 20 units per day

[6+3+6=18]

#### Question. 4

(a) The monthly budgets for manufacturing overhead of a concern for two levels of activity were as follows:

Capacity	60%	100%
Budgeted production (units)	<u>600</u>	<u>1,000</u>
Wages	₹ 1, <mark>200</mark>	₹ 2,000
Consumable stores	900	1,500
Maintenance	1,100	1,500
Power and fuel	1,600	2,000
Depreciation	4,000	4,000
Insurance	1,000	1,000
	9,800	12,000

You are required to:

- (i) Indicate which of the items are fixed, variable and semi variable
- (ii) Prepare a budget for 80% capacity; and
- (iii) Find the total cost, both fixed and variable, per unit of output at 60%, 80% and 100% capacity.
- b) What are the steps of Zero Based Budgeting?

[9+6 = 15]

#### Question. 5

(a) The following standards have been set to manufacture a product:

(a) the following standards have been set to manoracione a producer:	
Direct material	₹
2 units of A @ ₹ 4 per unit	8.00
3 units of B @ ₹ 3 per unit	9.00
15 units of C @ Re. 1 per unit	<u>15.00</u>
	32.00
Direct labour 3 hrs. @ ₹ 8 per hour	<u>24.00</u>
Total standard prime cost	56.00

The company manufactured and sold 6,000 units of the product during the year. Direct material costs were as follows:

12,500 units of A at ₹ 4.40 per unit

18,000 units of B at ₹ 2.80 per unit

88,500 units of C at ₹ 1.20 per unit

The company worked 17,500 direct labour hours during the year. For 2,500 of these hours the company paid at ₹ 12 per hour while for the remaining the wages were paid at standard rate. Calculate materials price variances and usage variances and labour rate and efficiency variances.

(b) What are the objectives of Standard Costing Technique?

[9+6=15]

#### Question. 6

(a) A factory has three production departments: The policy of the factory is to recover the production overheads of the entire factory by adopting a single blanket rate based on the percentage of total factory overheads to total factory wages. The relevant data for a month are given below:

Department	Direct Materials ₹	Direct Wages ₹	Factory Overheads ₹	Director Labour Hour	Machine Hours
Budget					
Machining	6,50,000	80,000	3,60,000	20,000	80,000
Assembly	1,70,000	3,50,000	1,40,000	1,00,000	10,000
Packing	1,00,000	70,000	1,25,000	50,000	-
Actual					
Machining	7,80,000	96, 000	3,90,000	24,000	96,000
Assembly	1,36,000	2,70,000	84,000	90,000	11,000
Packing	1,20,000	90,000	1,35,000	60,000	

The details of one of the representative jobs produced during the month are as under: Job No. 100

Department	Direct Materials ₹	Direct Wages ₹	Director Labour Hour	Machine Hours
Machining	1,200	240	60	180
Assembly	600	360	120	30
Packing	300	60	40	-

The factory adds 30% on the factory cost to cover administration and selling overheads and profit.

## Required:

- (i) Calculate the overhead absorption rate as per the current policy of the company and determine the selling price of the Job No. 100.
- (ii) Suggest any suitable alternative method(s) of absorption of the factory overheads and calculate the overhead recovery rates based on the method(s) so recommended by you.
- (iii) Determine the selling price of Job 100 based on the overhead application rates calculated in (ii) above.
- (iv) Calculate the department wise and total under or over recovery of overheads based on the company's current policy and the method(s) recommended by you.

## (b) What is Inter Firm Comparison?

[(2+4+2+5) + 2 = 15]

### Question. 7

- (a) A lorry starts with a load of 25 tonnes of goods from station A. It unloads 5 tonnes at station B and rest of goods at station C. It reaches back directly to station A after getting reloaded with 18 tonnes of goods at station C. The distance between A to B, B to C and then from C to A are 60 kms. 100, and 150 kms respectively. Compute 'Absolute tones kms' and 'Commercial tones kms'.
- (b) A Company operates separate cost accounting and financial accounting systems. The following is the list of Opening balances as on 1.04.2014 in the Cost Ledger.

	Debit	Credit
	₹	₹
Stores Ledger Control Account	64,050	
WIP Control Account	1,25,514	
Finished Goods Control Account	36,936	
General Ledger Adjustment Account		2,26,500
Transactions for the quarter ended 30.0	6.2014 are as under:	
		₹
Materials purchased		32,040
Materials issued to production		48,000
Materials issued for factory repairs		1,080
Factory wages paid (including indirect	wages ₹ 23,000)	93,000
Production overheads incurred		1,14,240
Production overheads under-absorbed	and written-off	3,840
Sales		3,07,200

The Company's gross profit is 25% on Factory Cost. At the end of the quarter, WIP stocks increased by  $\ref{eq}$  9,000.

Prepare the relevant Control Accounts, Costing Profit and Loss Account and General Ledger Adjustment Account to record the above transactions for the quarter ended 30.06.2014.

[5+10 = 15]

## Question. 8

Write short note on any three

 $[3 \times 5 = 15]$ 

- (a) The points on which uniformity is essential before introducing uniform costing system
- (b) The essential pre-requisites of integrated accounting system
- (c) The treatment in cost accounts of the cost of small tools of short effective life
- (d) Treatment of 'Research and development costs' in Cost Accounts
- (e) Negotiated Transfer Pricing