Paper – 10: Cost & Management Accountancy

Time Allowed: 3 Hours

This paper contains 4 questions. All questions are compulsory, subject to instruction provided against each question. All workings must form part of your answer. Assumptions, if any, must be clearly indicated.

1. Answer all questions

(a) The following information relates to budgeted operations of Division A of a manufacturing <u>Company</u>.

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
- (b) 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.)
- (c) What is Inter Firm Comparison?
- (d) 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

(e) 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).

- (f) Whether Separate Form 23C is required to be filed by a Company having two or more different types of products covered under Cost Audit?
- (g) A Company has been in existence since 1990 and is covered under cost audit for the first

Full Marks: 100

[2x10=20]

time in 2011-12. Whether it is mandatory to indicate previous year figure while submitting the report.

- (h) Given $C = x^3 10x^2 + 5x$; $R = 8x^2 + 11x 4$. Find the total profit and hence marginal profit.
- (i) What is Temporary Monopoly?
- (j) What are the essential conditions to obtain the equilibrium position of the industry under perfect competition?
- 2. Answer any two questions from a, b and c.

[2x20=40]

(a)

- (i) What do you understand by Operating Costs? Describe its essential features and state where it can be usefully implemented. [2+3]
- (ii) A group of workers consisting of 30 men above 30 years of age, 15 females above 30 years of age, and 10 youth of age between 20-30 are paid standard hourly rates as follows:

Males₹80/- per hour Females₹60/- per hour Youth.....₹40/-per hour

In a normal working week of 40 hours, the group is expected to produce 2,000 units of output. During a week, the group consisting of 40 males, 10 females and 5 youth produced 1,600 units. They were paid wages @ ₹70/- for males, ₹65/- for females and ₹30/- for youth per hour. 4 hours were lost due to abnormal idle time. The Actual and Standard Hrs are as follows:

	Standard Hrs Actual Hrs	
Male	1200	1600
Female	600	400
Youth	400	200
	2200	2200

Calculate;

- I. Wage variance
- II. Wages rate variance;
- III. Labour efficiency variance;
- IV. Labour mix variance;
- **V.** Labour idle time variance.

[2+3+3+4+3=15]

(b)

- (i) Enumerate the factors which are to be considered before installing a System of Cost Accounting. [7]
- (ii) The following are the figures relating to a factory for two successive years:

	YearI(₹)	Year II (₹)
Sales	10,00,000	16,80,000
Marginal Cost of Sales	6,00,000	8,00,000
Contribution	4,00,000	8,80,000

During Year II, the selling price increased by 20% and the company implemented a cost reduction programme very aggressively. You are required to analyse the increase in contribution due to:

- I. Increase in selling price
- II. Increase in sales volume

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III. Reduction in cost

[3+3+3]

[12]

(iii) State the treatment of By-product Cost in Cost Accounting, when they are of small total value. [4]

(c)

(i) From the following forecast of income and expenditure prepare a Cash Budget for three months ending on June, 2014:

Month	Sales (₹)	Purchase (₹)	Wages (₹)	Misc. (₹)
2014 February	1,20,000	84,000	10,000	7,000
March	1,30,000	1,00,000	12,000	8,000
April	80,000	1,04,000	8,000	6,000
May	1,16,000	1,06,000	10,000	12,000
June	88,000	80,000	8,000	6,000

Additional Information:

- Sales: 20% realised in the month of sales, discount allowed 2%, balance realised equally in two subsequent months.
- Purchases: These are paid in the month following the month of supply.
- Wages: 25% paid in arrears in the following month.
- Misc. Expenses: Paid a month in arrears.
- Rent: ₹ 1,000 per month paid quarterly in advance due in April.
- Income Tax: First installment of advance tax ₹ 25,000 due on or before 15th June to be paid within the month.
- Income from Investment: ₹5,000 received quarterly in April, July etc.
- Cash in Hand: ₹5,000 in April 1, 2014.
- (ii) A shop floor supervisor of a small factory presented the following cost for Job no.421 to determine selling price.

	Per unit
Material	₹70
Direct Wages 18 hrs. @ ₹ 2.50 (Deptt. X 8 hours; Dept. Y6 hours; Deptt. Z 4 hours) Charaeable Expenses (Special stores items)	45
	5
	120
Add: 33 1/3% for Overheads	40
Total Cost	160

Analysis of the Profit/Loss Account for 2014 shows the following:

Material used		₹1,50,000	Sales less Returns	₹2,50,000
Direct Wages:				
Dept. X	10,000			
Dept. Y	12,000			
Dept. Z	8,000	30,000		
Special stores items		4,000		
Overheads:				
Dept. X	5,000			
Dept. Y	9,000			
Dept. Z	2,000	16,000		
Total Cost		2,00,000		
Gross Profit c/d		50,000		
		2,50,000		2,50,000

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Selling Expenses Net Profit	20,000 30,000	Gross Profit b/c	50,000
	50,000		50,000

It is also noted that average hourly rates for the three departments X, Y, Z are similar. Required:

Draw up a job cost sheet.

Calculate the entire revised cost using 2014 actual figures as basis.

Add 20% to total cost to determine selling price.

3. Answer any two questions from a, b and c.

[2x8=16]

[8]

[8]

(a)

- (i) How is "Manufacturing Activity" defined under the Companies (Cost Accounting Record Rules), 2011? [4]
- (ii) Distinguish between "Notes" and "Qualifications" in Cost Audit Report. Give suitable examples. [4]

(b)

- (i) A company has produced all accounting records within the stipulated time for your audit. It however is unable to produce audited financial accounts, as financial audit is not yet completed. As a cost Auditor, how would you deal with? [2]
- (ii) Answer the following questions with respect to the Companies (Cost Accounting Records) Rules, 2011:
 - I. Whether product manufactured for 100% captive/ self -consumption shall be covered under these Rules?
 - II. What does turnover mean under these Rules? Is gross turnover inclusive of excise duty?
 - III. Whether film industry like film producing companies/ studios registered under Indian
Companies Act shall be covered under these Rules?[2x3=6]

(c) Describe the duties of Cost Auditor.

4. Answer any three questions from a, b, c and d.[3x8=24](a)
(i)What are the components of time series?[4](ii)What are the managerial uses of production function?[4](b)What are features of an Oligopolistic Market?[8](c)
(i)Explain the concept of Penetration pricing policy of a new product.[4](ii)What are the assumptions of COURNOT'S SOLUTION to Duopoly pricing?[4]

(d)

- (i) A firm has revenue function given by R=10Q where R=Gross Revenue and Q=Number of Units Sold, Production Cost function is given by C = 20000+ 50(Q / 800)2
 Find: the total Profit function, and the number of Units (Q) to be sold to get the maximum Profit.
- (ii) The demand function is $x = 80 + 2P + 5P^2$ where 'x' is the demand for the commodity at Price 'P'. Find the elasticity of demand at P = 5 [4]