

Paper 10- Cost & Management Accountancy

Full Marks: 100 Time allowed: 3 Hours

Section A

1. Answer Question No.1 which is compulsory carrying 25 Marks

(a) Answer the following

 $[5 \times 2 = 10]$

- (i) A company's Sales ₹ 3,00,000, Profit ₹ 60,000 Fixed Cost ₹ 90,000. What is the Contribution?
- (ii) If Actual Material consumed is 900 Kgs at the Rate of ₹ 8 and Standard Quantity of material to be used is 1000 Kgs at the rate of ₹ 6 Per Kg, what is the Material Price Variance?
- (iii) Output of a Process was 2,500 units. Normal loss is 10% of input and abnormal loss 200 units. How many units were introduced in the Process?
- (iv) A Transport company is running three buses having capacity of 50 passengers in each bus, covering a distance of 100 Kms daily. What is the number of passenger kilometers per day?
- (v) Profit as per Financial Books is ₹ 1,28,000 arrived after providing for depreciation of ₹ 18,000 and Interest on Capital ₹ 4,000. Compute the Profit as per Cost Books if the depreciation charged in Cost Accounting is ₹ 20,000?

(b) Match the following

 $[5 \times 1 = 5]$

	Column 'A'		Column 'B'
1.	Work Certified	Α	Process Costing
2.	Margin of Safety	В	Budgetary Control
3.	Efficiency Variance	C	Contract Costing
4.	Equivalent Production	D	CVP Analysis
5.	Zero Based Budgeting	E	Labour Cost Variance

- (c) As a Cost Auditor, list out the area which you will verify in the area of 'overheads and indirect expenditure'. [5]
- (d) The Average Cost of a firm is given by the function Average Cost = $x^3 + 12x^2 11x$, find the Total Cost, Average Variable Cost & Marginal cost [5]

Section B

(Cost & Management Accounting – Methods & Techniques and Cost Records and Cost Audit)

Answer any three questions from the following Each question carries 17 marks

2.(a) A manufacturer with overall (interchangeable among the products) capacity of 1,00,000 machine hours has been so far producing a standard mix of 15,000 units of

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product A, 10,000 units of product B and C each. On experience, the total expenditure exclusive of his fixed charges is found to be ₹ 2.09 lakhs and the cost ratio among the product approximately 1, 1.5, 1.75 respectively per unit. The fixed charges comes to ₹ 2 per unit. When the unit selling prices are ₹ 6.25 for A, ₹ 7.5 for B and 10.5 for C. He incurs a loss.

Mix-I Mix-		Mix-II	Mix-III
Α	18,000	15,000	22,000
В	12,000	6,000	8,000
С	7.000	13,000	8,000

As a management accountant what mix will you recommend?

[14]

(b) Write a short note on angle of incidence

[3]

3. (a) The standard material cost for 100 kg of chemical D is made up:

Chemical A 30 kg. @ ₹4 per kg

Chemical B 40 kg. @ ₹ 5 per kg

Chemical C 80 kg. @ ₹ 6 per kg

In a batch 500 kg. of chemical D were produced from a mix of

Chemical A 140 kg. @ ₹ 588

Chemical B 220 kg. @ ₹ 1,056

Chemical C 440 kg. @ ₹ 2,860

How do you yield mix and price of factors contribute to the variance in the actual cost per 100 kg. of chemical D over the standard cost? [12]

(b) A transport service company is running 4 buses between two towns which are 50 miles apart. Seating capacity of each bus is 40 passengers. The following particulars were obtained from their books for April, 2012.

Depreciation 2,6 Interest and other charges 2,0	000 000 0800 800
14,	,400

Actual passengers carried were 75% of the seating capacity. All the four buses ran on all days of the month. Each bus made one round trip per day. Find out the cost per passenger mile?

[5]

4. (a) A company produces four products, viz. P, Q, R and S. The data relating to production activity are as under:

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Product	Quantity of production	Material cost/unit₹	Direct labour hours/unit	Machine hours/unit	Direct Labour cost/unit ₹
Р	1,000	10	1	0.50	6
Q	10,000	10	1	0.50	6
R	1,200	32	4	2.00	24
S	14,000	34	3	3.00	18

Prod	duction overheads are as under:	₹
(i)	Overheads applicable to machine oriented activity:	1,49,700
(ii)	Overheads relating to ordering materials	7,680
(iii)	Set up costs	17,400
(iv)	Administration overheads for spare parts	34,380
(v)	Material handling costs	30,294

The following further information has been compiled:

Product	No. of set up	No. of materials orders	No. of times materials handled	No. of spare parts
Р	3	3	6	6
Q	18	12	30	15
R	5	3	9	3
S	24	12	36	12

Required:

- (i) Select a suitable cost driver for each item of overhead expense and calculate the cost per unit of cost driver.
- (ii) Using the concept of activity based costing, compute the factory cost per unit of each product. [17]
- **5.** (a) For production of 10000 units the following are budgeted expenses:

	Per Unit ₹
Direct materials	48
Direct Labour	24
Variable Overheads	20
Fixed Overheads (₹120000)	12
Variable expenses (Direct)	4
Selling expenses (10% fixed)	12
Administration expenses (₹40000 fixed)	4
Distribution expenses (20% fixed)	4
	128

Prepare a budget for production of 7000 units and 9000 units

[11]

(b) A factory engaged in the production of Chemical X and in the course of manufacture in a by-product-Y is produced which after a separate process has a commercial value. Following are the information for the month of March.

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JOINT EXPENSES	SEPARATE EXPENSES			
	X	Y		
Materials (₹)10,000	2,000	2,800		
Labour (₹) 4,000	2,500	2,500		
Overheads (₹) 2,500	1,400	1,000		

The output for the month was 150 quintals of X and 50 quintals of Y. The selling price of Product Y is ₹ 200 per quintal. The profit on product Y is 33 1/3% on cost price. Prepare an Account to show the cost of X per quintal [6]

- 6. (a) What is the significance of different forms in Companies (Cost Records & Audit) Rules 2014?
 - (b) What are duties and liabilities of a Cost Auditor of a company relating to reporting of Frauds identified during Audit? [9]

Section C

(Economics for managerial decision making) Answer any two from the following Each question carries 12 marks

7. (a) How products are Priced under Monopoly market?

[6]

(b) Write about Income Elasticity of demand?

[6]

8.(a) Given below are the figures of production (in thousand mounds) of a Sugar factory:

Year	2006	2007	2008	2009	2010	2011	2012
Production (000) mounds	40	45	46	42	47	50	46

Fit a Straight line trend by the Least Squares Method and tabulate the trend.

[8]

- **(b)** P = $\frac{150}{q^2+2}$ 4 represents the demand function for a product where 'p' is the price per unit per 'q' units; determine the marginal revenue function [4]
- 9.(a) A manufacturer can sell 'x' items per month, at price P = 300 2x. Manufacturer's cost of production ₹ Y of 'x' items is given by Y = 2x + 1000. Find no. of items to be produced to yield maximum profit p.m.
 [6]
 - **(b)** The total cost function of a manufacturing firm is given by $C = 2x^3 x^2 + 3x + 5$ and the Marginal Revenue = 8 3x, X =output, determine the most profitable output of the firm?

[6]