Paper – 10: Cost & Management Accountancy

Time Allowed: 3 Hours **Full Marks: 100**

QUESTION 1, which is compulsory. Attempt all of them.
Section-A has three questions. Attempt any two of them.
Section-B has two questions. Attempt any one of them.
Section-C has three questions. Attempt any two of them.
(Working Notes should form part of the answer.)

Question.1

(a) Selling price of a product is ₹5 per unit, variable cost is ₹3 per unit and fixed cost is ₹12,000. Then what will be the break-even point in unit? **[2]**

(b) A factory operates a standard cost system, where 2,000 kgs of raw materials @₹12 per kg were used for a product, resulting in price variance of ₹6,000(F) and usage variance of ₹3,000(A). Then what will be the standard material cost of actual production? **[2]**

(c) State the two objective of Cost Accounting? **[2]**

(d) State out-of-pocket cost. **[2]**

(e) The budgeted annual sale of a firm is ₹80 lakh and 25% of the same is cash sales. If the average amount of debtors of the firm is ₹5 lakhs, what will be the average collection period of credit sales? **[2]**

(f) A Company has been in existence since 1990 and is covered under cost audit for the first time in 2011-12. Whether it is mandatory to indicate previous year figure while submitting the report. **[2]**

(g) Are the units located in SEZs/FTZs/EPZs or 100% EOU required to maintain Cost Accounting Records? **[2]**

(h) The following are the annual profits in thousands in a certain business:

Year	2007	2008	2009	2010	2011	2012	2013
Profit(thousands)	60	72	75	65	80	85	95

By the method of least squares fit a straight line using the estimate profit for 2017. **[3]**

(i) The cost function of a firm is given by $c=x^3-4x^2+9x$, find at what level of output Average Cost is minimum and Minimum Average Cost. **[3]**

SECTION A
Answer any two questions from this section.

Question.2

(a) The share of production and the cost-based fair price computed separately for a common product for each of the four companies in the same industry are as follows:

	A	**B**	**C**	**D**
Share of Production (%)	40	25	20	15
Costs:				

Direct materials (₹ /Unit)	75	90	85	95
Direct Labour (₹ /Unit)	50	60	70	80
Depreciation (₹ /Unit)	150	100	80	50
Other Overheads(₹ /Unit)	150	150	140	120
Total (₹ / Unit)	425	400	375	345
Fair Price (₹ /Unit)	740	615	550	460
Capital employed per Unit:				
(i) Net Fixed Assets(₹ /Unit)	1,500	1,000	800	500
(ii) Working Capital (₹ /Unit)	70	75	75	75
Total (₹ /Unit)	1,570	1,075	875	575

Required:

What should be the uniform price that should be fixed for the common product? **[10]**

(b) The following facts are extracted from the books of Alpha Radio Manufacturing Company for the year 2013.

(i) It produces two types of radio - Type A and Type B and sells these in two market - Kolkata and Siliguri.

(ii) The budgeted and actual sales for the year 2013 are as follows:

	Kolkata	Siliguri
Type A – Budgeted Actual	1000 units at ₹ 200 each 900 units at ₹ 200 each	800 units at ₹ 200 each 750 units at ₹ 200 each
Type B – Budgeted Actual	800 units at ₹ 300 each 1000 units at ₹ 300 each	600 units at ₹ 300 each 750 units at ₹ 300 each

Analysis of variance discloses that Type A is overpriced and Type B is under-priced. If the price of A Type radio set is reduced by 10% and price of B Type radio set is increased by 20% and if a modern and extensive advertisement campaign is introduced, then the following volume of sales could be made in the next year as expected by the Marketing Manager.

Expected increase/decrease over the current budget		**Kolkata Market**	**Siliguri Market**
Product A:	Due to change in pricing policy Due to introduction of modern advertisement campaign	+20% +5%	+20% +5%
Product B:	Due to change in pricing policy Due to introduction of modern advertisement campaign	+10% +5%	(-)2% +5%

On the basis of above you are required to prepare sales budget for the year 2014. **[10]**

Question.3

(a) Gupta Enterprise is operating at 60% capacity level producing and selling 60,000 units @ ₹ 50 per unit. Other relevant particulars are as follows:

	Cost per unit
Material	₹ 20
Conversion Cost (variable)	₹ 10
Dealer's margin (10% of sales)	₹ 5
Fixed cost for the period is ₹ 6,00,000	

As there is a stiff competition it is not possible to sell all the products at the existing cost price structure. The following alternative proposals are considered:

(i) Decrease selling price by 20%
(ii) Increase dealer's margin from 10% to 20%
Select the better alternative. Also calculate the sales volume required to maintain the same amount of profit under the alternative which is considered better assuming that volume of sales will not be a limiting factor under such alternative. Also assume that fixed cost will remain constant. **[3+3=6]**

(b) From the following particulars furnished by M/s. Starlight Co. Ltd. find out (i) Material cost variance; (ii) Material usage variance and (iii) Material price variance.

Value of Material purchased	₹ 9,000 units
Quantity of Material purchased	3,000 units
Standard quantity of materials required per tonne of Finished product	25 units
Standard rate of material	₹ 2 per units
Opening Stock	Nil
Closing stock of material	500 units
Finished production during the period	80 tonnes.

[4+3+3=10]

(c) Pass the journal entries for the following transactions in a double entry cost accounting system:

Particulars	₹
(a) Issued of material:	
Direct	55,000
Indirect	15,000
(b) Allocation of wages and salaries:	
Direct	20,000
Indirect	4,000
(c) Overheads absorbed in jobs:	
Factory	15,000
Administration	5,000
Selling	3,000
(d) Under/ over absorbed overheads:	
Factory (over)	2,000
Admn. (under)	1,000

[4]

Question.4

(a) Explain briefly benefits of Integrated Accounting System. **[5]**

(b) ABC Ltd. is following Activity Based Costing. Budgeted Overhead: and cost driver volumes are as follows:

Cost Pool	Budgeted Overheads	Cost Driver	Budgeted Volume
Material Procurement	11.60 lakhs	No. of orders	2,200
Material handling	5.00 lakhs	No. of movement	1,300
Maintenance	19.40 lakhs	Maintenance hours	16,800
Set-up	8.30 lakhs	No. of set-ups	1,040
Quality Control	3.52 lakhs	No. of inspection	1,800

Machinery	14.40 lakhs	No. of machine hours	48,000

The company has produced a batch of 5,200 components, its material cost was ₹2.60 lakhs and labour cost ₹4.90 lakhs. Usage activities of the said batch are as follows:
Material order - 52, Material movements - 36, Maintenance hours - 1,380, Set ups - 50, Quality Control Inspection - 56 and Machine hours - 3,600.

Calculate:

(i) Cost driver rates that are used for tracing appropriate amount of over heads to the said batch.

(ii) The cost of batch of component. **[3+4=7]**

(c) XYZ Co. Ltd. has two divisions A and B. A sells half of its output on the open market and transfers the rest to Division B. Costs and revenue during 2011 are:

	A (₹)	B (₹)	Total (₹)
Sales	18,000	50,000	68,000
Cost of production in the division	26,000	22,000	48,000
Profit during the period			20,000

There are no opening and closing stocks.
You are required to find out the profit of each division and profit of the company using transfer prices:

(i) At cost

(ii) At cost plus20%

(iii) At cost plus 20% but there is over spending in Division A ₹4,000. **[2+3+3=8]**

Section-B

Answer any one question from this section.

Question.5

(a) Discuss Compliance Report. **[3]**

(b) Describe the requirements of compliance report. **[7]**

(c) List the duties of cost Auditor. **[6]**

Question.6

(a) State the power of cost auditor. **[5]**

(b) How total number of companies for which a cost auditor can accept appointment is to be computed keeping in mind restrictions imposed under Section 224(1B) of the Companies Act 1956? **[5]**

(c) Describe Period of holding of office of a Cost Auditor of a company. **[2]**

(d) A company was covered under Chemical Industries Rules which listed about 44 types of chemicals under its coverage. The company was covered under cost audit also, which was being conducted for the chemicals listed in the schedule and other chemicals not listed were kept under the purview of cost audit. What would be the status of the cost audit coverage after introduction of Companies (Cost Accounting Records) Rules 2011? **[2]**

(e) The maximum period prescribed for presenting Compliance Report and / or Cost Audit Report is 180 days from date of close of the financial year. If Financial Accounts of a

Company is not ready before the stipulated time period, how cost audit report will be completed reconciled with the financial books of the company? **[2]**

SECTION C

Answer any two questions from this section.

Question.7

(a) Write short note on "Regression Analysis". **[5]**

(b) Demonstrate that the elasticity of demand for the following is constant $x = 3(p^{-2})$, where P and X are the price & quantity demanded respectively. **[5]**

(c) A Ltd. is operating in a perfectly competitive market. The price elasticity of demand and supply of the product estimated to be 3 and 2 respectively. The equilibrium price of the product is ₹100. If the government imposes a specific tax of ₹10 per unit, what will be the new equilibrium price? **[2]**

Question.8

(a) Cost = $400x - 10x^2 + \frac{1}{3}x^3$, Calculate

(i) Output at which Marginal Cost is minimum

(ii) Output at which Average Cost is minimum

(iii) Output at which Marginal Cost = Average Cost. **[2+2+2=6]**

(b) A manufacturer can sell 'x' items per month, at price P = 200 – 2x. Manufacturer's cost of production ₹ Y of 'x' items is given by Y = 2x + 2000. Find no. of items to be produced to yield maximum profit p.m. **[3]**

(c) What are the exceptions of Law of Demand? **[3]**

Question.9

(a) Define Elasticity of Demand? Explain the different types of elasticity of demand? **[2+4]**

(b) Show the relationship between AR, MR and Elasticity? **[6]**