Paper – 10: Cost & Management Accountancy

The following table lists the learning objectives and the verbs that appear in the syllabus learning aims and examination questions:

	Learning objectives	Verbs used	Definition
	KNOWLEDGE	List	Make a list of
	What you are expected to	State	Express, fully or clearly, the details/facts
	know	Define	Give the exact meaning of
		Describe	Communicate the key features of
	COMPREHENSION	Distinguish	Highlight the differences between
		Explain	Make clear or intelligible/ state the meaning or purpose of
	What you are expected to understand	Identity	Recognize, establish or select after consideration
		Illustrate	Use an example to describe or explain something
LEVEL B		Apply	Put to practical use
		Calculate	Ascertain or reckon mathematically
	APPLICATION	Demonstrate	Prove with certainty or exhibit by practical means
	How you are expected to apply	Prepare	Make or get ready for use
	your knowledge	Reconcile	Make or prove consistent/ compatible
		Solve	Find an answer to
		Tabulate	Arrange in a table
		Analyse	Examine in detail the structure of
	ANALYSIS		Place into a defined class or division
		contrast	Show the similarities and/or differences between
	analyse the detail of what you	Construct	Build up or compile
	have learned	Prioritise	Place in order of priority or sequence for action
		Produce	Create or bring into existence

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Time Allowed: 3 Hours

Full Marks:100

[2]

[2]

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

Question.1

- (a) ABC Ltd. Company has Fixed cost of ₹ 90,000, Sales ₹ 3,00,000 and Profit of ₹60,000.
 Calculate the Sales Volume if in the next period, the ABC Ltd. Company suffered a loss of ₹20,000.
- (b) A truck capable of carrying 8 tonnes of goods normally carries 80% of the load in the outward journey and 40% of the load on inward journey. The journey is 100 kms for one side. 1-year= 360 days. Compute the tonne-kms. [2]

(c) 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).	

(d) The cost per unit of a product manufactured in a factory of ZENION LTD. amounts to ₹160 (75% variable) when production is 10,000 units. If the production increases by 25%, estimate the cost of production per unit.

- (e) List any two features of Non-Integrated Accounting System. [2]
- (f) ABC LTD. is a 100% EOU as per the policy announced under the Foreign Trade Policy but is not registered under the provisions of Foreign Trade Policy. Will this company be exempted from mandatory Cost Audit? [2]
- (g) TUR Ltd. has two divisions. Division I is involved in manufacturing of Railway and tramway locomotives & Division – II is involved in providing after sale service to their customer. His Aggregate annual turnover from manufacturing division is ₹ 70 crores and annual receipts from service division is ₹ 35 crores. State whether Companies (Cost Records and Audit) Rules, 2014 is applicable to the company? [2]
- (h) State the conditions for price discrimination.
- (i) Given C = $x^3 10x^2 + 5x$; R = $8x^2 + 11x 4$. Calculate the total profit and hence marginal profit. [2]
- (j) Priyanka advertises to sell cookies for ₹4 a dozen. She sells 50 dozen, and decides that she can charge more. She raises the price to ₹6 a dozen and sells 40 dozen. Calculate the elasticity of demand? [2]

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SECTION A Answer any two questions from this section.

Question.2 (a)

(i) Sintex Ltd. has prepared its expense budget for 25,000 units in its factory for the year 2014 as detailed below:

	₹ per unit
Direct Materials	45
Direct Labour	20
Variable overhead	15
Direct Expenses	6
Selling Expenses (80% Variable)	15
Factory Expenses (100% fixed)	7
Administration Expenses (100% fixed)	4
Distribution Expenses (25% fixed)	12
Total	₹124

Prepare Flexible budget for the production of 15,000 units and 20,000 units.

[8]

[4]

- (ii) Distinguish between Job Costing and Process Costing.
- (iii) An amount of ₹63,36,000 was incurred on a contract work upto 31.03.2015. Certificates have been received to date to the value of ₹76,80,000 against which ₹69,12,000 has been received in cash. The cost of work done but not certified amounted to ₹1,44,000. It is estimated that by spending an additional amount of ₹3,84,000 (including provision for contingencies) the work can be completed in all respects in another two months. The agreed contract price of the work is ₹80 lakhs. Compute a conservative estimate of the profit to be taken to the profit & Loss Account. Illustrate four method of computing the profit.

Question.2 (b)

(i) The following are the figures relating to a factory for two successive years:

	Year I (₹)	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
- (iii) Reduction in cost

[3+3+3]

(ii) A factory has a key resource (bottleneck) of Facility X which is available for 15,650 minutes per week. Budgeted factory costs and data on two products, A and B, are shown below:

Product	Selling price/Units	Material cost/Unit	Time in Facility X
Α	₹30	₹15.00	2.5 minutes

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В	₹30	₹13.125	5 minutes
		-	₹
Direct labour			18,750
Indirect labour	9,375		
Power			1,312.5
Depreciation			16,875
Space Costs	6,000		
Engineering	2,625		
Administration			3,750

Actual production during the last week is 2,375 units of product A and 325 units of product B. Actual factory cost was ₹58,687.5.

Calculate:

(i) Total factory costs (TFC)

(ii) Cost per factory minute

(iii) Return per factory minute for both products

(iv) TA ratios for both product

(v) Throughput cost per the week

(vi) Efficiency ratio

 $[1^{1}/_{2}+1^{1}/_{2}+3+2+1^{1}/_{2}+1^{1}/_{2}]$

Question.2 (c)

(i) A company manufactures one main product (A) and two by-products X and Y. For the month of September 2014, following details are available: Total Cost up to Separation point ₹2,20,000.

	Α	Х	Y
Cost after separation	-	₹35,000	₹24,000
No. of units produced	4,000	1,800	3,000
Selling price per unit	₹100	₹40	₹30
Estimated net profit as percentage to sales value	-	20%	30%
Estimated selling expenses as percentage to sales value	25%	18%	20%

There is no beginning or closing inventories.

Prepare statement showing:

(i) Allocation of joint cost; and

(ii) Product wise and overall profitability of the company for September 2014. [5+5]

(ii) The budgeted sales for one month and the actual results achieved are as under:

Product	Budget			Actual		
	Quantity	Rate	Amount	Quantity	Rate	Amount
	Nos.	₹	₹	Nos.	₹	₹
Α	1,000	100	1,00,000	1,200	125	1,50,000
В	700	200	1,40,000	800	150	1,20,000
С	500	300	1,50,000	600	300	1,80,000
D	300	500	1,50,000	400	600	2,40,000
	2,500		5,40,000	3,000		6,90,000

Calculate in respect of each product, the sales variances.

Section **B**

Answer any two questions from this section.

Question.3 (a)

(i) XYZ Ltd is a manufacturer of Steel since 1st December, 2012. The aggregate turnover of the product during the immediately preceding financial year is ₹ 30 crore. During the current financial year 2014-15 his turnover is ₹ 120 crore. You as a Cost Accountant, suggest whether any Cost Records is required to be maintained by XYZ Ltd for the financial year 2014-15?

(ii) Sufficient details should be available in Cost Records, on Packing Materials. Explain. [4]

Question.3 (b)

- (i) As a Cost Auditor, describe different measures to rectify imbalance in production facilities. [5]
- (ii) A company is exporting 80% of its sales and 20% is domestic sale. Can this company be exempted from the mandatory cost audit? [3]

Question.3 (c)

State the significance of different forms in Companies (Cost Records and Audit) Rules, 2014? [8]

Section C

Answer any three questions from this section.

Question.4 (a)

Why does demand curve slopes downward? List the methods which can be used to measure the Elasticity of Demand. [5+3]

Question.4 (b)

- (i) Explain going rate pricing.
- (ii) The cost function 'c' for the commodity 'q' is given by C = q³ 4q² + 12q find Average Variable Cost and also find the value of q for which average variable cost is minimum.
 [3]

Question.4 (c)

Describe the pricing policies for introduction stage of a new product.

[8]

Question.4 (d)

- (i) The demand function for a particular brand of Pocket Calculators is P = 75 -0.3Q -0.05Q².
 Find the consumer's surplus at the quantity (Q) of 15 calculators. [4]
- (ii) Calculate the trend values by the method of least squares from the data given below and estimate the sales for the year 2014.

Year	2010	2011	2012	2013	2014
Sales	105	111	120	129	135
					[4]