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

Paper – 10: Cost & Management Accountancy

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

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: **[2x10=20]**

(a) List the basic features of Batch Costing.

(b) Distinguish between Absolute ton-kms and Commercial ton-kms.

(c) The cost per unit of a product manufactured in a factory of SUPERHIT LTD. amounts to ₹240 (70% variable) when production is 10,000 units. If the production increases by 25% what would be the cost of production per unit?

(d) C Ltd. Manufactures a single product. The estimated cost data and other information relating to the product are as follows:

Sale price per unit	:	₹60
Total variable production cost per unit	:	₹33
Sale commission (on sales)	:	5%
Fixed costs:		
Production overheads	:	₹4,32,200
Administrative and selling overheads	:	₹1,06,400
Effective income tax rate	:	40%

Calculate the number of units to be sold by the company in order to reach its break-even point.

(e) A television Company manufactures several components in batches. The following data relate to one component:

Annual Demand	32,000 units
Setup cost/batch	₹120
Annual rate of interest	12%
Cost of Production per unit	₹16

Calculate the Economic Batch Quantity (EBQ).

(f) List the limitations of Zero Based Budget (ZBB).

(g) List the criteria to determine Installed Capacity.

(h) Discuss "books of account" as per section 2(13) of Companies Act, 2013.

(i) State the types of demand schedule.

(j) List the methods of determining Price Elasticity of Demand.

Section A
Answer any two questions from this section

2. (a)(i) A product passes through three process — A,B and C. 10,000 units at a cost ₹1.10 were issued to process A. The other direct expenses were as follows:

Particulars	Process A	Process B	Process C
Sundry Materials	₹1,500	₹1,500	₹1,500
Direct Labour	₹4,500	₹8,000	₹6,500
Direct Expenses	₹1,000	₹1,000	₹1,503

The wastage of process A was 5% and in process B 4%. The wastage of process A sold at ₹0.25 per unit and that of B at ₹0.50 per unit and that of C at ₹1.00 per unit.
The overhead charges were 160% of direct labour. The final product was sold at ₹10 per unit fetching a profit of 20% on sales. Find out the percentage of wastage in process C. **[9]**

(ii) State any four the differences between Job costing and Process costing. **[4]**

(iii) A company is manufacturing building bricks and fire bricks. Both the products require two processes: Brick-forming and Heat-treating.
Time requirements for the two bricks are:

Particulars	**Building Bricks**	**Fire Bricks**
Forming per 100 Bricks	3 Hrs.	2 Hrs.
Heat-treatment per 100 Bricks	2 Hrs.	5 Hrs.
Total cost of the two departments in one month were:		
Forming		₹21,200
Hear-treatment		₹48,800
Production during the month was:		
Building Bricks		1,30,000 Nos.
Fire Bricks		70,000 Nos.

Prepare a statement of manufacturing cost for two varieties of bricks. **[7]**

(b)(i) A company processes a raw material in its Department 1 to produce three products. viz, A B and X at the same split-off stage. During a period 1,80,000kg of raw materials were processed in Department 1 at a total cost of ₹12,88,000 and the resultant output of A, B and X were 18,000 kg, 10,000 kg and 54,000 kg respectively. A and B were further processed in Department 2 at a cost of ₹1,80,000 and ₹1,50,000 respectively.
X was further processed in department 3 at a cost of ₹1,08,000. There is no waste in further processing. The details of sales effected during the period were as under:

Particulars	**A**	**B**	**C**
Quantity Sold (kg.)	17,000	5,000	44,000
Sales Value (₹)	12,24,000	2,50,000	7,92,000

There were no opening stocks. If these products were sold at split-off stage, the selling price of A, B and X would have been ₹50, ₹40 and ₹10 per kg respectively.

Required:

(i) Prepare a statement showing the apportionment of joint costs to A,B and X.

(ii) Present a statement showing the cost per kg of each product indicating joint cost, further processing cost and total cost separately.

(iii) Prepare a statement showing the product wise and total profit for the period.

(iv) State with supporting calculations as to whether any or all the products should be further processed or not. **[10]**

(ii) A company fixes the inter-divisional transfer price for its products on the basis of cost plus and estimated return on investment in its divisions. The relevant portion of the budget for division A for the year 2014-15 is given below:

Particulars	₹
Fixed Assets	5,00,000
Current Assets (other than debtors)	3,00,000
Debtors	2,00,000
Annual fixed cost of the division	8,00,000
Variable cost per unit of product	10
Budgeted volume of production per year (units)	4,00,000
Desired return on investment	28%

You are required to determine the transfer price for Division A. **[3]**

(iii) A single product sells its products at ₹60 per unit. In 2014, the company operated at a margin of safety of 40%. The fixed costs amounted to ₹3,60,000 and the variable cost ratio to sales was 80%.

In 2015, it is estimated that the variable costs will go up by 10% and the fixed costs will increase by 5%.
Find the selling price required to be fixed in 2015 to earn the same P/V ratio as in 2014.
Assume the same selling price of ₹60 per unit in 2015, find the number of units required to be produced and sold to earn the same profit as in 2014. **[7]**

(c) (i) Write a note on - " Master Budget". **[6]**

(ii) EXPART LTD. operates a system of standard costing throughout its division. The company produces an alloy by mixing and processing three materials P, Q and R as per standard data given below:

Materials	**Ratio of Input**	**Cost per kg.(₹)**
P	**2**	**40**
Q	**2**	**60**
R	**1**	**85**

Note: Loss during processing is 5% of input and this has no realizable value. During the month of June, 2015, 5,80,000 kg of finished alloy was obtained from inputs as per details given below:

Materials	**Quantity Consumed (Kg.)**	**Cost per kg. (₹)**
P	**2,40,000**	**38**
Q	**2,50,000**	**59**
R	**1,10,000**	**88**

You are required to calculate the following variances: (i) Material Cost Variance; (ii) Material Price Variance; (iii) Material Mix Variance; (iv) Material Yield Variance; (v) Material Usage Variance. **[11]**

(iii) State the general principles of Standard Costing. **[3]**

Section B
Answer any two questions from this section

3.(a)(i) Write short note on –True and Fair Cost of Production. **[4]**

(ii) Many Companies have filed Form 23C as well as Form CRA-2 for 2014-15 in respect of different products and/or multiple cost auditors, if applicable. State the SRN Number has to be reported in the cost audit report while filing the same in XBRL Mode? **[4]**

(b)(i) Cost records under Rule 2(e) of Companies (Cost Records and Audit) Rules,2014 — discuss. **[5]**

(ii)" Only a Cost Accountant can be appointed as a cost auditor" — discuss . **[3]**

(c) "It is not possible to merge Cost Audit with Financial Audit to have a Composite Audit." Discuss. **[8]**

Section C
Answer any three questions from this section

4. (a) (i) Mention any four factors involved in Demand Forecasting. **[4]**

(ii) The cost function 'c' of a firm = $\frac{1}{3}x^3 - x^2 + 5x + 3$, find the level at which the marginal cost and the average variable cost attain their respective minimum. **[4]**

(b) (i) State the conditions for price discrimination under monopoly? **[2]**

(ii) State what is Income Elasticity of Demand? Discuss the types of Income Elasticity of Demand? **[6]**

(c) (i) 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. **[3]**
(ii) Write short note on —Regression Analysis. **[5]**

(d) (i) Discuss the concept of Penetration pricing policy of a new product. **[5]**

(ii) List any three exceptions of Law of Demand. **[3]**