

2024

## COMMERCE

Paper : CC-402

[Strategic Cost and Management Accounting (SCM)]

Full Marks : 40

*The figures in the margin indicate full marks.**Candidates are required to give their answers in their own words as far as practicable.*

## Module - I

Answer *any two* questions.

1. (a) X Ltd. manufactures a single product 'M' primarily using direct labours and incurring a small amount of overhead. On the other hand, Y Ltd. manufactures a large number of products including a product similar to Product 'M' manufactured by X Ltd., using automated system involving a huge amount of overhead and a small amount of direct wages. Suggest, with reasons, the appropriate Costing System for apportionment of overhead in X Ltd. and Y Ltd.
- (b) A firm wants to launch a new product in the market. The estimated production and sales, costs and required profit over the expected life of four years relating to the product are given below.

Variable Costs per unit (assumed to be same for all the years) : ₹ 50

Fixed Costs per annum (assumed to be same for all the years) : ₹ 1,00,000

Research and Development Costs : ₹ 50,000.

End of Life Costs : ₹ 20,000

	Production and Sales	Required Profit
Year 1 :	1,000 units	50% on Cost
Year 2 :	5,000 units	30% on Cost
Year 3 :	10,000 units	20% on Cost
Year 4 :	1,000 units	10% on Cost

What should be the selling price per unit of the product for different years based on Life Cycle Costing System?

3+7

Please Turn Over

2. (a) Return on Investment is widely used as a measure of financial performance of an organisation, but it has many limitations. Do you agree? Justify your answer.
- (b) From the following information, calculate Return on Investment, Residual Income and Economic Value Added of P Ltd. : 4+6

Profit after Tax	₹ 5,60,000
12% Debenture	₹ 5,00,000
Current Liabilities	₹ 2,00,000
Current Assets	₹ 8,00,000
Non-current Assets	₹ 14,00,000
Corporate Income Tax Rate	30%
Risk-free Rate of Return	6%
Market Rate of Return	15%
Beta Value of A Ltd.'s Stock	0.90

3. D<sub>1</sub> and D<sub>2</sub> are two divisions of a company. D<sub>1</sub> manufactures a component 'C' which is required by D<sub>2</sub>. The component 'C' has also an external market. The relevant data for the component 'C' is given below for the year ended 31.03.2024.

Production during the year (80% capacity) : 60,000 units

Variable cost per unit : ₹ 50

Total Fixed Cost for the year : ₹ 3,00,000

External demand for the component 'C' : 45,000 units

External Selling price per unit : ₹ 70.

D<sub>2</sub> wants 36,000 units of the component 'C' for manufacture of a product which can be sold in the market at ₹ 110 per unit. D<sub>2</sub> has to incur variable cost of ₹ 20 for processing every unit of component 'C' into a finished product. The fixed cost per annum of D<sub>2</sub> is ₹ 3,75,000. Manager of D<sub>2</sub> has identified an external source wherefrom it can procure the component 'C' at ₹ 65 per unit.

Determine the minimum transfer price per unit of the component 'C' at which D<sub>1</sub> may transfer the same to D<sub>2</sub>. Also suggest the appropriate course of action of managers of D<sub>1</sub> and D<sub>2</sub> in order to maximise the total profit of the company. 5+5

4. Write short notes on : 4+3+3
- (a) Balanced Scorecard
- (b) Responsibility Centre
- (c) JIT Approach to Inventory Management.

**Module - II**Answer *any two* questions.

5. X Ltd. is preparing its annual budget for the coming year. The company has a metal pressing capacity of 20,000 hours, which will be insufficient for manufacture of all requirements of components A, B, C and D. The company has the following choices :

- (a) Buy the components entirely from outside suppliers;  
 (b) Buy from outside suppliers and/or use a partial second shift.

The data for the current year are given below :

**Standard production cost per unit**

Component	A (₹)	B (₹)	C (₹)	D (₹)
<b>Variable Cost :</b>				
• Direct materials	37	27	25	44
• Direct wages	10	8	22	40
• Direct expenses	10	20	10	60
• Fixed overhead	5	4	11	20
<b>Total production cost p.u.</b>	62	59	68	164
<b>Requirements in units</b>	2,000	3,500	1,500	2,800

Direct expenses relate to the use of the metal presses which cost ₹ 10 per hour, to operate. Fixed overheads are absorbed as a percentage of direct wages. Supply of all or any part of the total requirement can be obtained at following prices, each delivered to the factory :

Component	(₹)
A	60
B	59
C	52
D	168

Second shift operations would increase direct wages by 25 per cent over the normal shift and fixed overhead by ₹ 500 for each 1,000 (or part thereof) second shift hours worked.

You are required to describe, with calculations :

- (i) Which component, and in how much quantities should it be manufactured in the 20,000 hours of press time available?  
 (ii) Whether it would be profitable to make any of the balance of components required on a second shift basis instead of buying them from outside suppliers?

5+5

Please Turn Over

6. From the following particulars of XYZ Ltd. given below, you are requested to prepare Budgeted Profit and Loss Account for the year ended 31st March, 2024 and a Cash Budget for that period :

**Profit and Loss Account for the year ended 31st March, 2023**

Particulars	(₹)	Particulars	(₹)
To, Material Consumed	30,000	By, Sales (2,000 units @ ₹ 50)	1,00,000
” Direct Wages	15,000		
” Production Overhead (50% Variable)	25,000		
” Administrative Overhead (Fixed)	5,000		
” Selling and Distribution Overhead (50% Fixed)	10,000		
” Profit	15,000		
	<b>1,00,000</b>		<b>1,00,000</b>

**Balance Sheet as at 31st March, 2023**

Liabilities	(₹)	Assets	(₹)
Share Capital	70,000	Fixed Assets	60,000
Reserve & Surplus	13,000	(Cost less depreciation)	
Sundry Creditors	10,000	Closing Stock of Raw Materials	10,000
Proposed Dividend	7,000	Sundry Debtors	20,000
		Cash and Bank	10,000
	<b>1,00,000</b>		<b>1,00,000</b>

**Additional Information** (estimates for the budget period) :

- (i) It is estimated that sales volume will increase by 25%. This would necessitate a 5% reduction in selling price.
- (ii) Estimated increase in costs : Materials 5%, Wages 3%, Variable Overheads 2% and Fixed Overheads 1%.
- (iii) Terms of Payments : Debtors—2 months, Creditors—2 months, Wages and Expenses – within the month in which they are due.
- (iv) Inventory carrying policy : 3 months' production requirement.
- (v) Income tax at 50% may be reckoned and to be paid in advance. A dividend at 15% may be proposed to be paid in the subsequent year.
- (vi) Production overhead includes depreciation, which is a fixed instalment of ₹ 5,000 p.a.

Assume that production and sales will coincide and there will be no closing work-in-progress.

7. (a) The following information has been obtained from the records of a manufacturing unit using standard costing system :

Particulars	Standard	Actual
Production	4,000 units	3,800 units
Working days	20	21
Fixed overhead	₹ 40,000	₹ 39,000
Variable overhead	₹ 12,000	₹ 12,000

Calculate :

- (i) Variable overhead variance.
  - (ii) Fixed overhead expenditure variance.
  - (iii) Fixed overhead volume variance.
  - (iv) Fixed overhead efficiency variance.
  - (v) Fixed overhead calendar variance.
- You are also requested to prepare a reconciliation statement.
- (b) How do you compute different types of sales variances? 6+4
8. (a) Why is Value Engineering significant for cost management? Explain.
- (b) Distinguish between Cost Control and Cost Reduction. 4+6
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