

5/H-76 (xii) (Syllabus-2019)

2022

(November)

COMMERCE

(Honours)

(BC-502)

(Cost Accounting)

(Under Revised Syllabus)

Marks : 75

Time : 3 hours

*The figures in the margin indicate full marks
for the questions*

UNIT—I

1. (a) How do a product cost and a period cost differ? 4
- (b) What are the relationships among financial, management and cost accounting? 5
- (c) What is meant by classifying costs (i) functionally and (ii) behaviourally? Why would a company be concerned about functional and behavioural classifications? 6

(2)

Or

From the data given below, answer the following questions : 2+3+5+5

- (a) What is the simple average price of the four weeks' receipts of material A?
- (b) What is the weighted average price of the four weeks' receipts of material B?
- (c) What is the value of the balance of material A in stock at the close of the fourth week if issues are priced on LIFO basis?
- (d) What is the value of the stock at the end of fourth week with respect to material B if they are priced on FIFO basis?

Raw Materials

Weeks	Received				Issues (kg)	
	A		B			
	kg	₹	kg	₹	A	B
1st	250	1,000	1250	1,690	175	1500
2nd	300	1,260	1400	1,960	250	1200
3rd	200	880	750	1,050	300	1300
4th	250	960	1600	2,400	300	1100
Opening Stock : A	200	720				
B	2000	2,900				

UNIT—II

2. (a) Compare and contrast the direct, step and algebraic methods of allocating support department costs.

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(3)

- (b) A company had 500 workers on its roll-on 1st April, 2007 and 600 workers on 30th June, 2007. During the quarter, 5 workers were left, 20 workers were discharged and 75 workers were recruited. Of these, 10 workers were recruited as replacements for people leaving, while the rest were for expansion. Calculate the Labour Turnover Rate under—

- (i) flux method;
- (ii) replacement method;
- (iii) separation method.

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Or

- (a) What are conversion costs? Why are they so called?

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- (b) A company has two production departments and two service departments. The data relating to a period are as under :

Particulars	Production Departments		Service Departments	
	PD ₁	PD ₂	SD ₁	SD ₂
Direct Materials (₹)	80,000	40,000	10,000	20,000
Direct Wages (₹)	95,000	50,000	20,000	10,000
Overheads (₹)	80,000	50,000	30,000	20,000
Power Requirement at Normal Capacity Operations (kWh)	20000	35000	12500	17500
Actual Power Consumption during the Period (kWh)	13000	23000	10250	10000

(4)

The power requirement of these departments is met by a power generation plant. The said plant has incurred an expenditure of ₹ 1,21,875 (₹ 84,375 being variable and the rest is fixed) which is not included in the above.

After apportionment of power generation plant costs to the four departments, the service department overheads are to be redistributed on the following basis :

	PD ₁	PD ₂	SD ₁	SD ₂
SD ₁	50%	40%	—	10%
SD ₂	60%	20%	20%	—

You are required to—

- (i) apportion the power generation plant costs to the four departments;
- (ii) reapportion service department cost to production departments;
- (iii) calculate the overhead rates per direct labour hour of production departments, given that the direct wages rate of PD₁ and PD₂ are ₹ 5 and ₹ 4 per hour respectively.

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(Continued)

(5)

UNIT—III

3. From the following information, prepare Cost Sheet for the year ended 31st March, 2022 and Projected Cost Sheet for the year ending 31st March, 2023 showing cost per unit and total cost for both the years : 15

Trading and Profit & Loss Accounts of MK Ltd.
for the year ended 31st March, 2022

Particulars	₹ (in lakhs)	Particulars	₹ (in lakhs)
To Materials Consumed	3,75,000	By Sales (15000 units)	15,00,000
▪ Direct Wages	2,25,000		
▪ Factory Overheads	3,00,000		
▪ Gross Profit c/d	6,00,000		
	<u>15,00,000</u>		<u>15,00,000</u>
To Office Rent	90,000	By Gross Profit b/d	6,00,000
▪ General Expenses	75,000	▪ Dividend Received	13,500
▪ Management Expenses	60,000	▪ Interest on Investment	6,500
▪ Goodwill written-off	22,500		
▪ Advertisement	1,31,250		
▪ Salesmen Commission	1,50,000		
▪ Interest on Loan	14,500		
▪ Net Profit c/d	76,750		
	<u>6,20,000</u>		<u>6,20,000</u>

For the year ending 31st March, 2023, following estimates have been made :

- (i) Production and sales units will be doubled
- (ii) Direct material cost per unit will rise by 20%
- (iii) Direct wages per unit will increase by 40%

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(Turn Over)

- (iv) Of the factory overheads ₹ 1,50,000 are fixed and would remain at the same level but variable thereof would be in same proportion to direct wages as in 2021-22
- (v) Total office and administrative overheads would increase by 40%
- (vi) Selling and distribution overheads per unit will increase by 20%
- (vii) Selling price per unit would rise by 10%

Or

A Ltd. undertook a contract on 1st January, 2022 and the contract price was ₹ 5,00,000. Of the plant and materials charged to the contract, plant costing—₹ 5,000 and materials costing—₹ 4,000 were lost in an accident. On 31st December, 2022, plant costing—₹ 5,000 was returned to store. The cost of work uncertified was ₹ 12,000 and materials costing—₹ 14,000 were in hand on site. Charge 10% depreciation on plant. Compute Contract Account and the Balance Sheet from the following :

Trial Balance as on 31.12.2022

	₹	₹
Share Capital		1,20,000
Creditors		10,000
Cash received (being 80% of work certified)		2,00,000

	₹	₹
Land and Building	50,000	
Bank	18,000	
Expenses charged to contract :		
Materials	90,000	
Plant	25,000	
Wages	1,40,000	
Expenses	7,000	
	<u>3,30,000</u>	<u>3,30,000</u>

UNIT—IV

4. (a) What are the underlying assumptions of CVP analysis? 5
- (b) Why does regression analysis provide a more accurate cost formula than the high-low method for a mixed cost? 5
- (c) Why is CVP analysis generally used as a short-run tool? Would CVP ever be appropriate as a long-run model? 5

Or

Unique Sweets has introduced a new product 'Milk Cake' consisting of square bars which are wrapped in aluminium foil and packed in attractive cartoons containing 50 bars which is considered as sales unit. Revenue statements for the last two quarters which are assumed to be representative of the efficiency expected in the next few quarters, reflect the following

position assuming no closing stocks at the end of each quarter :

Particulars	First Quarter (in ₹)	Second Quarter (in ₹)
Sales :		
50000 Cartoons @ ₹ 24	12,00,000	—
70000 Cartoons @ ₹ 24	—	16,80,000
Cost of Goods Sold	7,00,000	8,80,000
Gross Margin	5,00,000	8,00,000
Selling and Administration Costs	6,50,000	6,90,000
Net Profit (Loss) before Taxes	(1,50,000)	1,10,000
Tax (Negative)	(45,000)	33,000
Net Profit (Loss)	(1,05,000)	77,000

The firm's overall marginal and average income tax rate is 30% which has been used to estimate the tax liability arising from sweet operations :

Calculate—

- (i) The quarterly break-even point both in terms of quantity and value for sweets' cartoon sales
- (ii) The quarterly cartoon sales and total revenue that is required in each quarter to earn an after-tax return of 20% p.a. on an investment of ₹ 30 lakhs in this product line.

Also advise the management, if it is estimated that sales quantity will increase by 20% over the second quarter sales if the selling price is reduced by ₹ 1.50 per cartoon and ₹ 1,50,000 is incurred on advertising.

Should the plan be implemented? 15

UNIT—V

5. (a) What is the starting point of a master budget and why? 3

(b) The following standards have been set to manufacture a product :

Particulars	₹	₹
Direct Materials :		
4 units of X @ ₹ 4 per unit	16	
6 units of Y @ ₹ 3 per unit	18	
Standard Material Cost		34
Direct Labour :		
3 hours @ ₹ 2 per unit		6
Standard Cost per unit		40

The company manufactured and sold 6000 units of the product during the year, details of direct materials and labour cost being :

Particulars	₹	₹
Direct Materials :		
25000 units of X @ ₹ 4.20 per unit	1,05,000	
5 units of Y @ ₹ 3.22 per unit	96,600	2,01,600
Direct Labour :		
17000 hours per @ ₹ 2.20 per hour		37,400
Total		<u>2,39,000</u>

Calculate—

- (i) Material Cost Variance;
- (ii) Material Usage Variance;
- (iii) Material Price Variance;
- (iv) Labour Cost Variance;
- (v) Labour Efficiency Variance;
- (vi) Labour Rate Variance. 12

Or

- (a) A company expects to have ₹ 37,500 cash in hand on 1st April, 2022 and requires you to prepare an estimate of cash position during the three months, April to June, 2022. 12

Following information is supplied to you :

Month	Sales (₹)	Purchases (₹)	Wages (₹)	Factory Expenses (₹)	Selling Expenses (₹)
February	75,000	45,000	9,000	13,500	4,500
March	84,000	48,000	9,750	14,250	4,500
April	90,000	52,500	10,500	15,000	5,250
May	1,20,000	60,000	13,500	17,250	6,570
June	1,35,000	60,000	14,250	21,000	7,000

Other Information :

- (i) Period of credit allows by suppliers—2 months
- (ii) 10% of sales is for cash and period of credit allowed to customers for credit sales is 1 month
- (iii) Delay in payment of all expenses—1 month
- (iv) Income tax of ₹ 7,500 is due to be paid on 15th June, 2022

- (v) The company is to pay dividends to shareholders and bonus to workers of ₹ 15,000 and ₹ 12,000 respectively in the month of April 2022
- (vi) A machinery has been installed in May 2022 for ₹ 1,20,000 and the payment was to be made in 12 equal monthly installments starting from the month of installation
- (b) What is meant by the term 'standard hours'? Does the term refer to inputs or outputs?

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