MID-WEST UNIVERSITY
SCHOOL OF MANAGEMENT (MUSOM)
(An Autonomous Institution)
MUSOM EXAMINATIONS SECTION
FINAL EXAMINATION-2024 (2081)
MASTER OF BUSINESS ADMINISTRATION (MBA)
SEMESTER – II

Subject: Cost and Management Accounting — **Course Code: MGT524**
Full Marks: 100 — **Time: 4 Hrs.**

You are required to answer in your own words as far as applicable. The figures in the margin indicate full marks.

SECTION B: SHORT ANSWER QUESTIONS (5×6 = 30 MARKS)

Answer any five questions:

1. The Variety Shoe Company runs a chain of women's shoe shops across the nation. The shops carry many styles of shoes that are all sold at the same price. Sales staff in the shops receive a significant commission for each pair of shoes sold in addition to a small basic salary to encourage them to be aggressive in their sales efforts.
The following costs and revenue data relate to Shop 25 and are typical of one of the company's several outlets:

(i)	Variable costs:	
	Material	Rs. 21.50 per pair of shoes
	Sales commission	Rs. 8.50 per pair of shoes
	Total variable expenses	Rs. 30 per pair of shoes
(ii)	Annual fixed expenses:	
	Advertising	Rs. 45,000
	Rent	Rs. 30,000
	Salaries	Rs. 145,000
	Total fixed expenses	Rs. 220,000
(iii)	Sales revenue	Rs. 50 per pair of shoes

Required:

a) Annual break-even point in units and in rupees for shop 25.
b) If 15,000 pairs of shoes were sold in a year, what would be Shop 25's profit or loss?
c) What will be the margin of safety if the company sells its goods for Rs. 750,000? [1+1+2+2]

2. Variable costing and Absorption costing are both techniques for determining product costs, yet they can yield different profit figures. What factors contribute to the differences in the net profit between variable costing and absorption costing? Explain in your own words. [6]

3. ABC Manufacturing Company specializes in the production of a single product. The company aims to effectively plan its budget to optimize profitability and ensure operational efficiency. Data regarding the company's monthly revenue and costs is outlined below:
Monthly Revenue and Costs:

Selling price	Rs. 80 per unit
Material cost	Rs. 16 per unit
Labor cost	Rs. 13 per unit
Repair and maintenance	Rs. 22,000 + Rs. 3 per unit
Supervision	Rs. 13,000 + Rs. 2 per unit
Administrative expenses	Rs. 35,000 per month

The actual results for January are as follows:
Production and sales of 5,000 units

Sales revenue	Rs. 315,000
Material cost	Rs. 85,000
Labor	Rs. 62,250
Repair and maintenance	Rs. 35,750
Supervision	Rs. 25,000

Administrative expenses	Rs. 37,000

Required:

a) Prepare a flexible budget for the month of January based on producing and selling 5,000 units. [4]

b) Analyze the variances and provide insight into the performance of the company for the month of January. [2]

4. "A flexible budget adjusts according to changes in activity level, whereas a fixed budget remains unchanged regardless of fluctuations in activity." Support this statement and explain the distinctions between a flexible budget and a fixed budget. [2+4]

5. The information relating to overhead costs is as follows:

Budgeted overheads based on normal capacity 10,000 direct labor hours:

Fixed overheads	Rs. 60,000
Variable overheads	Rs. 100,000
Total overheads	Rs. 160,000
Hours allowed	8,500 hours
Actual hours worked and paid	8,900 hours
Actual overhead incurred:	
Fixed overhead	Rs. 60,000
Variable overhead	Rs. 80,000
Total overheads	Rs. 140,000

Required: Three overhead variances [2+2+2]

6. The following are the maintenance costs incurred in a machine shop per six months with corresponding machine hours:

Months	Machine Hours	Maintenance Costs (Rs.)
January	1,200	11,000
February	1,560	12,800
March	1,270	11,350
April	1,800	14,000
May	2,100	15,500
June	2,400	17,000

Required:

a) Ascertain variable cost per unit by using the high-low point method.

b) Find out monthly fixed costs.

c) Calculate expected total maintenance costs for 2,500 machine hours. [2+2+2]

7. Deuti Ltd. manufactures 50,000 units of a product with the following cost break up:

Heads of expenses:	**Cost (Rs.):**
Direct material	250,000
Direct wages	150,000
Direct expenses	75,000
Other variable costs	125,000
Fixed costs	200,000
Total cost	**Rs. 800,000**

The product with the same specification is available on the market at a price of Rs. 14.

Required:

a) Should the company make or buy the product?

b) What would be your decision if the suppliers offered to sell the product at a price of Rs. 11 per unit? [3+3]

SECTION C: LONG ANSWER QUESTIONS (2×15 = 30 MARKS)

Answer any two questions:

8. ABC Company Ltd. is a chemical manufacturing company, it had a poor performance in the last years attributable to poor cost management. To address this issue, the Board of Directors has hired the expertise of a chartered accountant graduate to recommend a plan of action. One of the recommendations is to

implement a standard costing system to control the costs of materials and he has been furnished with detail regarding materials as follows:

Standard:

Chemicals	Quantity in kg	Price per kg (Rs.)	Total cost (Rs.)
X	300	5	1,500
Y	200	10	2,000
Input	500		3,500
Less: Standard loss	150		-----
Standard output	350	-----	3,500

Actual:

Chemicals	Quantity in kg	Price per kg (Rs.)	Total cost (Rs.)
X	400	4.50	1,800
Y	350	8	2,800
Input	750		4,600
Less: Standard loss	50		-----
Standard output	700	-----	4,600

Required:

a) Material Cost Variance
b) Material Price Variance
c) Material Usage Variance
d) Material Mix Variance
e) Material Yield Variance
f) Suggest one possible cause for each of the variances which you have calculated and outline any management action where may be necessary. [3+2+3+2+2+3]

9. National Appliance Company manufactures and sells washing machines throughout the country. The company is currently led by Mr. Rajesh Singh, the general manager, who expects to sell 40,000 washing machines at a price of Rs. 35 each. Mr Singh plans to produce 40,000 or more machines during this period. The relevant data for the period is provided below:

Beginning inventory	2,000 units
Normal production capacity	50,000 units
Actual production	45,000 units
Sales	40,000 units

Manufacturing costs at normal capacity are budgeted as follows:

Material cost per unit	Rs. 12
Labor cost per unit	Rs. 8
Variable manufacturing overhead cost per unit	Rs. 5
Fixed manufacturing overhead	Rs. 150,000.
Variable selling and distribution expenses	Rs. 3 per unit
Fixed selling and distribution expenses incurred	Rs. 60,000

Required:

a) Calculate the unit product cost under the absorption costing and variable costing approach. [2+2]
b) Prepare an absorption costing income statement. [8]
c) Reconcile the profit as per absorption costing without preparing an absorption income statement. [3]

10. Define cost accounting. Discuss in detail the objectives of management accounting. Explain the difference between cost financial accounting and management accounting. [3+6+6]

SECTION D: CASE STUDY (20 MARKS)

11. Read the given case and answer the questions asked at the end.

BC Wholesale Company Ltd. is a leading wholesaler in the electronics sector. Their primary focus is procuring a wide range of electronic goods such as consumer electronics, computer hardware, and accessories from international manufacturers. These products are distributed to retailers and businesses across the country. The company, in the process of preparing the master budget, gathered the following information about assets, liabilities and past and future sales.

a) **Balance sheet on 1st January**

Liabilities	Rs.	Assets		Rs.
Account Payable	142,500	Cash		20,000
Dividend Payable	50,000	Account Receivable:		
Profit and Loss A/c	67,500	November	60,000	
Share capital	300,000	December	135,000	195,000
		Merchandise Inventory		195,000
		Office equipment		150,000
	560,000			560,000

b) **Actual and forecasted sales:**

Months	Rs.
November	500,000
December	450,000
January	650,000
February	600,000
March	700,000
April	750,000

c) **Account Receivable:** The company has a policy of selling 40% in cash and balance on credit. Experience has shown that half of the credit sales would be collected in the month of sales and 30% in the following month of sales and balance in the next following month of sales.

d) **Gross Margin:** Gross margin on sales is 50%. Purchases are 50% in cash and 50% will be paid in next month.

e) **Inventory policy:** The company has maintained inventory equal to 60% of next month's cost of goods sold.

f) **Expenses:** Administrative and selling expenses of the company are:

Particulars	Rs.
Salary and wages	50,000 per month
Selling expenses	40,000 per month + 10% of sales
Rent and insurance	25,000 per month
Depreciation	27,000 per month

All these expenses are paid during the month of incurrence.

g) **Capital Expenditure:** The company is planning to purchase office equipment for Rs. 120,000 in the month of January.

h) **Dividend:** A dividend of Rs. 30,000 will be paid in the month of January.

Required:

(i) Sales Budget for the first three months
(ii) Account Receivable Budget
(iii) Merchandise Purchase Budget
(iv) Cash Budget
(v) Budgeted Income Statement
(vi) Budgeted Balance Sheet [2+4+4+6+2+2]