Management Accounting

MBS 2nd Semester

Model Question

Full Marks: 100

Pass Marks: 50

Time: 4 hours

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

Group A

Case/Situation Analysis Questions

Attempt All Questions **(1x30=30)**

1. A. ABC Co. is engaged in buying readymade garment in wholesale and selling them to retail customers. Mr. Amar Upadhyay, who has been working as an executive of the company and draws an annual salary of Rs.500,000. Being unsatisfied with his current compensation, he wants to relinquish his current job and take up his own business. He wants to takeover XYZ Co., a readymade garment company, which is going out of business. He has been able to obtain the following financial and other information relating to XYZ Co.

Particulars	Units	Rs
Sales		
Product A	10,000	3,500,000
Product B	12,000	4,800,000
Product C	10,000	4,500,000
Total		12,800,000
Costs		
Direct Material		4,700,000
Direct Labour		2,700,000
Factory Supervision		1,200,000
Stores and Supplies		800,000
Power and Fuel		1,000,000
Administration Expenses		1,200,000
Selling Expenses		1,100,000
Rent		600,000
Miscellaneous		400,000
Total		13,700,000
Loss		900,000

XYZ Co. manufactures three varieties of readymade shirts. Although costs of direct material, direct labor, stores and supplies, power and 50% of factory supervision vary with the production output, the sales mix is expected to remain same for any level of sales volume.

Mr. Upadhyay has considerable experience in this line of business and has been working seriously on the project for acquiring the readymade garment business. Mr. Upadhyay's estimate of funds required for acquiring XYZ Co. is Rs.6,000,000. He will contribute a sum of Rs.4,000,000 from his own resources, which has now been invested in fixed deposit with a bank carrying 10% interest per annum and remaining Rs.2,000,000 has been managed by taking loan at 12% interest per year.

The manager who is looking after the affairs of XYZ Co. has left. As a result, Mr. Upadhyay proposes that he will himself look after the affairs and that no new manager will be appointed after the acquisition. The manager who left the firm was drawing a salary of Rs.400,000 per annum.

Required:

You have been appointed as a financial consultant to advice Mr. Upadhyay on the following points:

a. What is the value of contribution margin per unit and contribution margin ratio (2)
b. How many shirts should be sold to eliminate the loss presently incurred by XYZ Co (2)
c. What will be the value of sales required to eliminate the loss presently incurred by the firm (2)
d. How many shirts should be sold to earn profit of Rs,60,000 (2)
e. What will be the value of sales to earn after tax profit of Rs.45,000 and tax rate is 25% (2)
f. What is the amount of profit if the total sales of shirts is 15,000,000 (2)
g. What is the value of margin of safety if the profit is Rs.70,000 (2)
h. Identify opportunity costs and calculate the amount of contribution that the firm should earn after takeover so that opportunity costs are covered. (4)
i. What information will be required if Mr. Upadhyay is required to select an optimal product mix (4)

B. "A cost volume profit analysis is helpful in profit planning & control, management decision, cost control and budgeting etc." Discuss. (8)

Group B

Long Answer Questions (attempt any three questions) (3x15=45)

2. "Management accounting system is useful to both large-scale and small-scale business organizations." Elucidate this statement. (15)

3. "Zero-base budgeting is an operating and budgeting process which requires each manager to justify his or her entire budget request in details from scratch and shifts the burden of proof to each manager to justify why any money should be spent at all, as well as how the job can be done better", discuss. (15)

4. A Company has decided to do variance analysis of overhead. Because of the diverse nature of expenses in an organization, several approaches have been used to develop the fixed and variable component of each expense, which are as follows:

a. the direct material and direct labour cost per unit for the output are Rs.3 and Rs.2 respectively.
b. Least Square Analysis of monthly expenses rate for various expenses are:
i. Supervision: Y = 10,000 + Rs.1.5 X
ii. Depreciation: Y = Rs.50,000 + 0 X
iii. Power Expenses: Y = 12,000 + 0.5 X
c. Indirect Supplies are Rs.20,000, of which 60% variable.
d. Insurance expenses are estimated to be of Rs.20,000.
All above information is estimation for the coming month for output of 20,000 units, other information are:
a. Normal Capacity = 50,000 DLH
b. each unit requires 2 DLH
c. Actual hours paid = 42,000 hours
d. Actual overhead rate = Rs.5
Required:
a. Fixed and Variable Cost
b. Costs for 18,000 units using formula method
c. Overhead Three Variances
d. Comment on the result (4+2+6+3=15)

5. You have just been hired as a new Account Controller by XYZ Company, a distributor of Groceries products across the country. In the past, the company has done very little in the way of budgeting. Since you are well trained in budgeting, you have decided to prepare comprehensive budgets for the coming year from the following information given below:

Opening Balance Sheet of 1st Baishakh, 2075

Shareholder's equity	500,000	Fixed Assets	400,000
Accounts payable	60,000	Inventory of finished goods 10,000 units	160,000
Bank Loan (payable every month Rs.10,000 with interest @ 12%)	200,000	Raw material inventory 30,000 units	120,000
		Accounts receivable	60,000
		Cash	20,000
	760,000		760,000

Sales forecast for 1st four months 2075

Months	Baishakh	Jestha	Ashad	Shrawan
Sales in unit	10,000	12,000	12,000	15,000
Sales revenue (Rs.)	200,000	240,000	240,000	300,000

Production Budget

Months	Baishakh	Jestha	Ashad	Total
Units produced	12,000	12,000	15,000	39,000

Material Purchase Budget

Months	**Baishakh**	**Jestha**	**Ashad**	**Total**
Units Purchased	30,000	37,500	30,000	97,500
Purchase price (Rs.)	120,000	150,000	120,000	390,000

Wages and other manufacturing expenses are Rs.6 per unit, and operating expenses are 10% of gross sales figure. 80 percent of sales are in cash and remaining 20 percent on credit of 30 days. 50% of the purchases are paid in the month of purchase and balance in the next month. Wages and other expenses are paid for at the time when they are due. Each unit of finished product needs 2.5 units of raw materials. One fourth of the fixed assets will be sold for Rs.80,000 on 1st Baishakh and on the same date a new machine will be purchased for Rs.100,000. During Ashad company issue shares of Rs.50,000. The fixed assets will be depreciated by 15% per annum. Minimum cash balance should be Rs.20,000 for every month. The prevailing line of credit facility with the commercial bank multiplies by Rs.10,000 and repayment multiplies by Rs.5,000 with 12% p.a. interest on repayment amount

Required:

a. Cash collection and disbursement budget for three months ending Ashad. (6)
b. Budgeted income statement at the end of Ashad. (3)
c. Budgeted balance sheet at the end of Ashad (3)
d. Fixed Cost and Variable Cost (1)
e. Comment on the results (2)

Group C

Short Answer Questions (attempt any five questions) **(5x5=25)**

6. What is forensic accounting and why it is needed? (2+3=5)

7. Explain the different components that should be considered by the designer of management accounting and control systems when addressing the relevance of the system's information?

8. The following two Income Statements for the year ended 2075 are provided:

	Statements A (Rs.)	Statements B (Rs.)
Sales (40,000 units)	4,000,000	4,000,000
Less: COGS Beginning Inventory add: Production Cost	 - 2,500,000	 - 3,500,000

less: Ending Inventory	500,000	700,000
Cost of Goods Sold	2,000,000	2,800,000
Gross Profit Less: Other Expenses	2,000,000 1,500,000	1,200,000 500,000
Net profit	**500,000**	**700,000**

Variable cost of production is Rs.50

Both statements used data from same operations; one was prepared by the controller and the other by the sales manager.

Required: As the chief financial analyst of a company, you have been asked by the chief executive to explain the differences between two income statements prepared for his consideration

9. The sales data for a period in respect of two products are given below:

	Standard			Actual		
Product	Quantity	Price	Value	Quantity	Price	Value
X	4,000	2	8,000	3,000	2.5	7,500
Y	3,000	1	3,000	2,000	2	4,000

Required: Sales Value, Sales Price and Sales Volume Variances

10. Shangri-La Hotel contains 50 beds. The average occupancy rate is 80% per month i.e on average, 80% of the hotel's beds are occupied by customers. At this level of occupancy, the hotel's operating costs are Rs.3,000 per occupied bed per day, assuming a 30 days a month. This Rs.30 figure contains both variable and fixed cost elements.

During Baishakh, the hotel's occupancy rate was only 60%. A total of Rs.3,300,000 in operating cost was incurred during the month.

Required: Variable Cost and Fixed Cost using High Low method

11. The following information for a manufacturing company is as follows:

Overheads	Cost (Rs.)	Cost Drivers
Material handling expenses	96,000	Quantity of material
Quality control expenses	144,000	Inspections
Manufacturing expenses	72,000	Production runs
Machine operation expenses	168,000	Machine hours

Other information is:

Products	Outputs (units)	Materials in kg per unit	Cost per kg material Rs.	Machine hour per unit	Labour hour per unit
A	3,800	4.25	2	3.7	0.3
B	4,600	3.8	1	1.9	0.2
C	6,000	2.395	2	3.2	0.15

Wages rate per hour = Rs.10

- The three products were produced in production run of 100 units each
- One production run needs 4 inspections

Required: Cost per unit of each product using Activity Based Costing (5)