



Daffodil International University

Department of Computer Science and Engineering

Faculty of Science & Information Technology

Final Examination, Fall-2025

Course Code: ACT327, Course Title: Financial and Managerial Accounting

Level: 3 Term: 1 Batch: 65

Time: 2 Hours

Marks: 40

Answer ALL Questions

[The figures in the right margin indicate the full marks and corresponding course outcomes. All portions of each question must be answered sequentially.]

1.	a)	"In making a short-term production decision, why is it important to distinguish between fixed and variable costs, and how do opportunity costs and sunk costs influence rational decision-making in this context?"	[3]	CO1																																																						
	b)	"Give an example of a transaction that would be recorded in the accrual basis but ignored in the cash basis at the same time. Why?"	[3]																																																							
2.		'The Collins Limq' was started on October 1 by Collins. The following events and transactions occurred during the month of October: October 1 Collins invested Tk. 2,50,000 in cash and Equipment worth Tk. 1,00,000 in the business. 4 Purchased Land for Tk. 50,000 in cash and Tk. 20,000 on account 8 Incurred Rent expenses of Tk. 5,000 on account. 11 Service performed for Tk. 90,000 & billed the customer for Tk. 7,000. 12 Hired a Park manager at a salary of Tk. 40,000 per month, effective from November 1. 17 Drawn Tk. 3,000 cash for personal use. 30 Paid Tk. 1,500 for Rent incurred on October 8.		CO3																																																						
	a)	Demonstrate the above transactions by journalizing them.	[3]																																																							
	b)	Show the ledger account for Accounts Payable.	[1]																																																							
3.		At the end of its first month of operations, Maisha Answering Service has the following unadjusted trial balance. MAISHA ANSWERING SERVICE May 31, 2025 <table><tr><th colspan="2">Trial Balance</th><th></th></tr><tr><th></th><th>Debit (TK.)</th><th>Credit (TK.)</th></tr><tr><td>Cash</td><td>50,000</td><td></td></tr><tr><td>Prepaid Insurance</td><td>3,800</td><td></td></tr><tr><td>Account Receivable</td><td>7,500</td><td></td></tr><tr><td>Supplies</td><td>14,000</td><td></td></tr><tr><td>Accumulated Depreciation- Equipment</td><td></td><td>2,200</td></tr><tr><td>Equipment</td><td>45,000</td><td></td></tr><tr><td>Unearned Service Revenue</td><td></td><td>5,800</td></tr><tr><td>Account Payable</td><td></td><td>2,500</td></tr><tr><td>Mortgage Payable</td><td></td><td>45,000</td></tr><tr><td>Rent Expense</td><td>10,000</td><td></td></tr><tr><td>Owner's Capital</td><td></td><td>66,000</td></tr><tr><td>Owner's Drawings</td><td>4,000</td><td></td></tr><tr><td>Service Revenue</td><td></td><td>17,800</td></tr><tr><td>Salaries and Wages Expense</td><td>3,500</td><td></td></tr><tr><td>Miscellaneous Expense</td><td>1,500</td><td></td></tr><tr><td>Total</td><td><u>1,39,300</u></td><td><u>1,39,300</u></td></tr></table> Other Data: 1. Equipment has 2-year life time with no salvage value. 2. Supplies TK.5000 is on hand at the end of the month. 3. Tk. 2,000 of unearned service revenue has been earned at the end of the month. 4. The insurance policy is for 30 months. 5. Rent expense accrued Tk. 2,000 but not paid yet.	Trial Balance				Debit (TK.)	Credit (TK.)	Cash	50,000		Prepaid Insurance	3,800		Account Receivable	7,500		Supplies	14,000		Accumulated Depreciation- Equipment		2,200	Equipment	45,000		Unearned Service Revenue		5,800	Account Payable		2,500	Mortgage Payable		45,000	Rent Expense	10,000		Owner's Capital		66,000	Owner's Drawings	4,000		Service Revenue		17,800	Salaries and Wages Expense	3,500		Miscellaneous Expense	1,500		Total	<u>1,39,300</u>	<u>1,39,300</u>		CO4
	Trial Balance																																																									
	Debit (TK.)	Credit (TK.)																																																								
Cash	50,000																																																									
Prepaid Insurance	3,800																																																									
Account Receivable	7,500																																																									
Supplies	14,000																																																									
Accumulated Depreciation- Equipment		2,200																																																								
Equipment	45,000																																																									
Unearned Service Revenue		5,800																																																								
Account Payable		2,500																																																								
Mortgage Payable		45,000																																																								
Rent Expense	10,000																																																									
Owner's Capital		66,000																																																								
Owner's Drawings	4,000																																																									
Service Revenue		17,800																																																								
Salaries and Wages Expense	3,500																																																									
Miscellaneous Expense	1,500																																																									
Total	<u>1,39,300</u>	<u>1,39,300</u>																																																								

		Instructions: Develop a Worksheet.	[10]																																																					
4.		Neptune Company manufactures basketballs. The company has a ball that sells for \$25. At present, the ball is manufactured in a small plant that relies heavily on direct labor workers. Thus, variable expenses are high, totaling \$15 per ball, of which 60% is direct labor cost. Last year, the company sold 30,000 of these balls, with the following results: <table><tr><td>Sales (30,000 balls)</td><td>\$ 750,000</td></tr><tr><td>Variable expenses</td><td>450,000</td></tr><tr><td>Contribution margin</td><td>300,000</td></tr><tr><td>Fixed expenses</td><td>210,000</td></tr><tr><td>Net operating income</td><td>\$ 90,000</td></tr></table>	Sales (30,000 balls)	\$ 750,000	Variable expenses	450,000	Contribution margin	300,000	Fixed expenses	210,000	Net operating income	\$ 90,000		CO4																																										
Sales (30,000 balls)	\$ 750,000																																																							
Variable expenses	450,000																																																							
Contribution margin	300,000																																																							
Fixed expenses	210,000																																																							
Net operating income	\$ 90,000																																																							
	a.	Required: Compute last year's break-even point in balls, Margin of Safety, and degree of operating leverage.	3																																																					
	b.	Due to an increase in labor rates, the company estimates that next year's variable expenses will increase by \$3 per ball. If this change takes place and the selling price per ball remains constant at \$25, what will be next year's CM ratio and the break-even point in balls?	2																																																					
	c.	Refer to the data in (b) above. If the expected change in variable expenses takes place, how many balls will have to be sold next year to earn the same net operating income, \$90,000, as last year?	2																																																					
	d.	Refer to the original data. The company is discussing the construction of a new, automated manufacturing plant. The new plant would slash variable expenses per ball by 40%, but it would cause fixed expenses per year to double. If the new plant is built, what would be the company's New Contribution Margin Format Income Statement?	3																																																					
5.		The following selected account balances for the year ended December 31 are provided for ABC Company: <table><tr><td>Sales</td><td>TK 20,00,000</td></tr><tr><td>Freight in</td><td>2,000</td></tr><tr><td>Freight out</td><td>2,500</td></tr><tr><td>Purchase discounts</td><td>10,000</td></tr><tr><td>Sales discounts</td><td>15,000</td></tr><tr><td>Purchase returns & allowances</td><td>6,000</td></tr><tr><td>Sales returns & allowances</td><td>17,000</td></tr><tr><td>Clearing supplies (factory)</td><td>8,000</td></tr><tr><td>Depreciation (factory equipment)</td><td>1,20,000</td></tr><tr><td>Plant Managers' Salaries</td><td>40,000</td></tr><tr><td>Administrative salaries</td><td>45,000</td></tr><tr><td>Maintenance factory</td><td>74,000</td></tr><tr><td>Direct labor</td><td>8,40,000</td></tr><tr><td>Purchases of raw materials</td><td>2,60,000</td></tr><tr><td>Depreciation (office- 80%, Sales-20%)</td><td>50,000</td></tr><tr><td>Advertising expense</td><td>20,000</td></tr><tr><td>Insurance, factory equipment</td><td>8,000</td></tr><tr><td>Rent expense (factory-75%)</td><td>90,000</td></tr><tr><td>Utilities expense (Administrative-30%)</td><td>52,000</td></tr><tr><td>Sales commissions</td><td>35,000</td></tr></table> Inventory balances at the beginning and end of the year were as follows: <table><tr><td></td><td>January 1, 2023</td><td>December 31, 2023</td></tr><tr><td>Raw materials.....</td><td>Tk. 80,000.....</td><td>Tk. 20,000</td></tr><tr><td>Work in process.....</td><td>30,000</td><td>20,000</td></tr><tr><td>Finished goods.....</td><td>20,000.....</td><td>15,000</td></tr></table> Instruction: Build a schedule of cost of goods sold and an income statement for the year ended.	Sales	TK 20,00,000	Freight in	2,000	Freight out	2,500	Purchase discounts	10,000	Sales discounts	15,000	Purchase returns & allowances	6,000	Sales returns & allowances	17,000	Clearing supplies (factory)	8,000	Depreciation (factory equipment)	1,20,000	Plant Managers' Salaries	40,000	Administrative salaries	45,000	Maintenance factory	74,000	Direct labor	8,40,000	Purchases of raw materials	2,60,000	Depreciation (office- 80%, Sales-20%)	50,000	Advertising expense	20,000	Insurance, factory equipment	8,000	Rent expense (factory-75%)	90,000	Utilities expense (Administrative-30%)	52,000	Sales commissions	35,000		January 1, 2023	December 31, 2023	Raw materials.....	Tk. 80,000.....	Tk. 20,000	Work in process.....	30,000	20,000	Finished goods.....	20,000.....	15,000		CO4
Sales	TK 20,00,000																																																							
Freight in	2,000																																																							
Freight out	2,500																																																							
Purchase discounts	10,000																																																							
Sales discounts	15,000																																																							
Purchase returns & allowances	6,000																																																							
Sales returns & allowances	17,000																																																							
Clearing supplies (factory)	8,000																																																							
Depreciation (factory equipment)	1,20,000																																																							
Plant Managers' Salaries	40,000																																																							
Administrative salaries	45,000																																																							
Maintenance factory	74,000																																																							
Direct labor	8,40,000																																																							
Purchases of raw materials	2,60,000																																																							
Depreciation (office- 80%, Sales-20%)	50,000																																																							
Advertising expense	20,000																																																							
Insurance, factory equipment	8,000																																																							
Rent expense (factory-75%)	90,000																																																							
Utilities expense (Administrative-30%)	52,000																																																							
Sales commissions	35,000																																																							
	January 1, 2023	December 31, 2023																																																						
Raw materials.....	Tk. 80,000.....	Tk. 20,000																																																						
Work in process.....	30,000	20,000																																																						
Finished goods.....	20,000.....	15,000																																																						
			[7]																																																					
			[3]																																																					