

International Islamic University Chittagong (IIUC)
Department of Electronic and Telecommunication Engineering
Semester End Examination

Program: **B.Sc (Engg.)**
 Course Code: **ACC-2401**
 Total Marks: **50**

Semester: **Spring2025**
 Course Title: **Financial and Managerial Accounting**
 Time: **2 Hours 30 Minutes**

(i) Answer all the questions. The figures in the right-hand margin indicate full marks. (ii) Course Learning Outcomes (COs) and Bloom's Levels are mentioned in additional Columns.						
Course Learning Outcomes (CLOs) of the Questions						
CLO1	Understanding of the basic concepts of data communications and networking, also its applications in communication engineering.					
CLO2	Have the knowledge of data sharing and their protocols					
Bloom's Levels of the Questions						
Letter Symbols	R	U	Ap	An	E	C
Meaning	Remember	Understand	Apply	Analyze	Evaluate	Create

Part A								
Answer any <u>Two</u> of the following Questions.								
Q1.	a)	The Adjusted trial balance of XYZ Company at October 31, 2024.				CLO2	An	10
		Sl. No.	Name of Accounts	Debit	Credit			
		1	Cash	9,400	-			
		2	Accounts receivable	12,310	-			
		3	Supplies	1,840	-			
		4	Prepaid rent	2,700	-			
		5	Furniture	26,840	-			
		6	Accumulated depreciation-furniture	-	3,400			
		7	Building	68,300	-			
		8	Accumulated depreciation-building	-	8,100			
		9	Accounts payable	-	6,290			
		10	Salary payable	-	-			
		11	Unearned service revenue	-	8,600			
		12	Capital	-	85,500			
		13	Withdrawal	3,900	-			
		14	Service revenue	-	19,560			
		15	Salary expense	1,840	-			
		16	Rent expense	1,500	-			
		17	Utilities expense	530	-			
		18	Depreciation expense-furniture	1,000	-			
		19	Depreciation expense-building	500	-			
		20	Supplies expense	300	-			
		21	Advertisement expense	490	-			
			Total	131,450	131,450			
		Required: Prepare a worksheet of the XYZ Company.						

b) Define Trial Balance.

CLO1

U

2

Q2. a) The trial balance of **JOY International Company** at June 30 ,2019, the end of the company's fiscal year and adjustment data as follows:

CLO2

Ap

5

JOY International Company

Trial balance

June 30, 2022

	Dr (£)	Cr (£)
Cash	19130	
Accounts Receivable	5440	
Supplies	1520	
Insurance Prepayment	4600	
Land	Last Four digit of student ID	
Office equipment	3600	
Accounts payable		1800
Unearned interest revenue		480
Notes payable		Last Four digit of student ID
Capital		25000
Drawings	8000	
Interest revenue		33680
Salary expense	9050	
Rental expense	3200	
Utility expense	1970	
Supplies expense	4080	
Sundry expense	910	
Insurance expense	200	
Rental revenue		240
Salary payable		500
Total	<u>61,700</u>	<u>61,700</u>

Adjustment data:

- (i) Supplies on hand as at 30 June 2022 totalled £380.
- (ii) Insurance premium expired for the year totalled £315.
- (iii) Yearly depreciation for office equipment totalled £4,950.
- (iv) Salary accrued but yet to be paid as at 30 June is £440.
- (v) Service revenue accrued but yet to be recorded totalled £1,000.
- (vi) Unearned interest revenue as at 30 June totalled £350.

Required: Complete **JOY International Company** worksheet for the year ended June 30, 2022.

OR

Q2.	a)	<p>The following data are from the accounts of BSA Group:</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-bottom: 10px;"> <thead> <tr> <th style="width: 30%;">Inventories</th> <th style="width: 35%;">July 1, 2023</th> <th style="width: 35%;">June 30, 2024</th> </tr> </thead> <tbody> <tr> <td>Finished Goods</td> <td style="text-align: right;">Tk. 20,000</td> <td style="text-align: right;">Tk. 28,000</td> </tr> <tr> <td>Work in Process</td> <td style="text-align: right;">60,000</td> <td style="text-align: right;">36,000</td> </tr> <tr> <td>Materials</td> <td style="text-align: right;">40,000</td> <td style="text-align: right;">48,000</td> </tr> </tbody> </table> <table border="1" style="width: 100%; border-collapse: collapse;"> <tbody> <tr> <td style="width: 60%;">Sales Discounts</td> <td style="text-align: right;">Tk. 8,000</td> </tr> <tr> <td>Purchase Discounts</td> <td style="text-align: right;">3,200</td> </tr> <tr> <td>Sales</td> <td style="text-align: right;">1,800,000</td> </tr> <tr> <td>Purchase Returns and Allowances</td> <td style="text-align: right;">20,000</td> </tr> <tr> <td>Depreciation-Factory Machinery</td> <td style="text-align: right;">160,000</td> </tr> <tr> <td>Factory Insurance</td> <td style="text-align: right;">50,000</td> </tr> <tr> <td>Freight Out</td> <td style="text-align: right;">8,000</td> </tr> <tr> <td>Other Factory Expenses</td> <td style="text-align: right;">16,000</td> </tr> <tr> <td>Bond Interest Expense</td> <td style="text-align: right;">50,000</td> </tr> <tr> <td>Sales Salaries</td> <td style="text-align: right;">100,000</td> </tr> <tr> <td>Freight In</td> <td style="text-align: right;">12,000</td> </tr> <tr> <td>Direct Factory Labour</td> <td style="text-align: right;">800,000</td> </tr> </tbody> </table> <p>Required: Prepare a Cost of Goods Manufactured Statement for the year ended June 30, 2024.</p>	Inventories	July 1, 2023	June 30, 2024	Finished Goods	Tk. 20,000	Tk. 28,000	Work in Process	60,000	36,000	Materials	40,000	48,000	Sales Discounts	Tk. 8,000	Purchase Discounts	3,200	Sales	1,800,000	Purchase Returns and Allowances	20,000	Depreciation-Factory Machinery	160,000	Factory Insurance	50,000	Freight Out	8,000	Other Factory Expenses	16,000	Bond Interest Expense	50,000	Sales Salaries	100,000	Freight In	12,000	Direct Factory Labour	800,000	CLO2	Ap	10
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Part B

Answer any Three of the following Questions.

Q3.	a)	<p>Mynor Corporation manufactures and sells a seasonal product that has peak sales in the third quarter. The following information concerns operations for Year 2—the coming year—and for the first two-quarters of Year 3:</p> <p>a. The company's single product sells for \$8 per unit. Budgeted sales in units for the next six quarters are as follows (all sales are on credit):</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-bottom: 10px;"> <thead> <tr> <th rowspan="2"></th> <th colspan="4">Year 2 Quarter</th> <th colspan="2">Year 3 Quarter</th> </tr> <tr> <th>1</th> <th>2</th> <th>3</th> <th>4</th> <th>1</th> <th>2</th> </tr> </thead> <tbody> <tr> <td>Budgeted Unit Sales</td> <td style="text-align: center;">40,000</td> <td style="text-align: center;">60,000</td> <td style="text-align: center;">100,000</td> <td style="text-align: center;">50,000</td> <td style="text-align: center;">70,000</td> <td style="text-align: center;">80,000</td> </tr> </tbody> </table> <p>b. Sales are collected in the following pattern: 80% in the quarter of the sales are made, and the remaining 20% in the following quarter. On January 1, Year 2, the company's balance sheet showed \$65,000 in accounts receivable, all of which will be collected in the first quarter of the year. Bad debts are negligible and can be ignored.</p> <p>c. The company desires an ending finished goods inventory at the end of each quarter equal to 30% of the budgeted unit sales for the next quarter. On December 31, Year 1, the company had 12,000 units on hand.</p> <p>Requirement:</p> <p>a) A sales budget and a schedule of expected cash collections. b) A production budget</p>		Year 2 Quarter				Year 3 Quarter		1	2	3	4	1	2	Budgeted Unit Sales	40,000	60,000	100,000	50,000	70,000	80,000	CLO1	U	10
	Year 2 Quarter				Year 3 Quarter																				
	1	2	3	4	1	2																			
Budgeted Unit Sales	40,000	60,000	100,000	50,000	70,000	80,000																			

Q4.	a)	<p>Voltar Company manufactures and sells a specialized cordless telephone for high electromagnetic radiation environments. The company's contribution format income statement for the most recent year is given below:</p> <table border="1" data-bbox="243 280 1199 548"> <thead> <tr> <th></th> <th>Total</th> <th>Per Unit</th> </tr> </thead> <tbody> <tr> <td>Sales (20,000 units)</td> <td>\$1,200,000</td> <td>\$60</td> </tr> <tr> <td>Variable Expenses</td> <td>\$900,000</td> <td>\$45</td> </tr> <tr> <td>Contribution Margin</td> <td>\$300,000</td> <td>\$15</td> </tr> <tr> <td>Fixed Expenses</td> <td>\$240,000</td> <td></td> </tr> <tr> <td>Net Operating Income</td> <td>\$60,000</td> <td></td> </tr> </tbody> </table> <p>Management is anxious to increase the company's profit and has asked for an analysis of a number of items. Required:</p> <ol style="list-style-type: none"> 1. Compute the company's CM ratio and variable expense ratio. 2. Compute the company's break-even point in both units and sales dollars. Use the equation method. 		Total	Per Unit	Sales (20,000 units)	\$1,200,000	\$60	Variable Expenses	\$900,000	\$45	Contribution Margin	\$300,000	\$15	Fixed Expenses	\$240,000		Net Operating Income	\$60,000		CLO1	R	5
	Total	Per Unit																					
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Contribution Margin	\$300,000	\$15																					
Fixed Expenses	\$240,000																						
Net Operating Income	\$60,000																						
	b)	<p>Using the above data from 4(a)</p> <ol style="list-style-type: none"> i) Assume that sales increase by \$400,000 next year. If cost behaviour patterns remain unchanged, by how much will the company's net operating income increase? Use the CM ratio to compute your answer. ii) Refer to the original data. Assume that management wants the company to earn a profit of at least \$90,000 next year. How many units will have to be sold to meet this target profit? 	CLO1	R	5																		
Q5.	a)	<p>Fair Electronics Company distributes a single product. The company's sales and expenses for last month follow:</p> <table border="1" data-bbox="243 1265 1183 1512"> <thead> <tr> <th></th> <th>Total (Tk.)</th> <th>Per Unit (Tk.)</th> </tr> </thead> <tbody> <tr> <td>Sales</td> <td>450,000</td> <td>30</td> </tr> <tr> <td>Variable Expenses</td> <td>180,000</td> <td>12</td> </tr> <tr> <td>Contribution Margin</td> <td>270,000</td> <td>18</td> </tr> <tr> <td>Fixed Expenses</td> <td>216,000</td> <td></td> </tr> <tr> <td>Net Operating Income</td> <td>54,000</td> <td></td> </tr> </tbody> </table> <p>Required: i) What is the monthly break-even point in units sold and in sales amount (Taka)? ii) Compute the company's CM ratio and variable expense ratio.</p>		Total (Tk.)	Per Unit (Tk.)	Sales	450,000	30	Variable Expenses	180,000	12	Contribution Margin	270,000	18	Fixed Expenses	216,000		Net Operating Income	54,000		CLO1	U	8
	Total (Tk.)	Per Unit (Tk.)																					
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	b)	Define Break-even Point.	CLO1	R	2																		
OR																							
Q5.	a)	What is Prime Cost & cost of goods Manufactured with Example?	CLO1	R	5																		
	b)	What is accrued Revenue & Advance Rent?	CLO2	U	5																		