

North East University Bangladesh
Department of Computer Science and Engineering
BSc. (Engg.) in CSE Program
Mid Semester Examination, Fall-2021

Course Code: BBA-201, Course Title: Cost and Management Accounting.

Time: 1 Hour 30 Minutes, Full Marks: 30

Answer any three of the following questions. Figures in the right margin indicate the marks for each question. Parts of a question should be answered chronologically

1. a) Business functions making up the value chain". Explain. 4
b) Differentiate cost accounting with financial accounting. 4
c) Classify the following costs as period costs or product costs: 2
 - i. Depreciation on salesperson's car.
 - ii. Rent on equipment used in the factory.
 - iii. Salaries of finished goods warehouse personnel.
 - iv. Gas, water and light consumed in the office.
2. Write short notes (any five): 5*2=10
 - a) Opportunity Costs.
 - b) Mixed Costs.
 - c) CVP Analysis.
 - d) Nonmanufacturing Costs.
 - e) High-low Method.
 - f) Break-Even-Point
3. a) "How do fixed costs create difficulties in costing units of products? 2
b) The following information has been taken from the accounting records of Sun-moon Corporation for year 2019:

Particulars	Amount(\$)
Selling expenses	1,40,000
Raw materials inventory, January 1	90,000
Raw materials inventory, December 31	60,000
Utilities, factory	38,000
Direct labor cost	1,57,000
Depreciation, factory	1,62,000
Purchase of raw materials	7,60,000
Sales	27,50,000
Insurance, factory	42,000
Supplies, factory	20,000

Administrative expenses	2,79,000
Indirect labor	3,00,000
Maintenance, factory	87,000
Work in process inventory, January 1	1,70,000
Work in process inventory, December 31	1,00,000
Finished goods inventory, January 1	2,55,000
Finished goods inventory, December 31	2,10,000

Management wants these data organized in a better format so that financial statements can be prepared for the year.

Required:

- i. Prepare a schedule of cost of goods manufactured 4
 - ii. Compute the cost of goods sold. 2
 - iii. Prepare an income statement. 2
4. a) Define sunk cost with example. 2
- b) Exon Company manufactures a single product. The company keeps careful records of manufacturing activities from which the following information has been extracted:

Particulars	Level of Activity	
	April-Low	August-High
Number of units produced	7,000	9,500
Cost of goods manufactured	\$1,65,000	\$2,59,000
Work in process inventory, beginning	\$10,000	\$35,000
Work in process inventory, ending	\$16,000	\$23,000
Direct materials cost per unit	\$5	\$5
Direct labor cost per unit	\$9	\$9
Manufacturing overhead cost, total	?	?

The company's manufacturing overhead cost consists of both variable and fixed cost elements. To have data available for planning, management wants to determine how much of the overhead cost is variable with units produced and how much of it is fixed per month.

Required:

- i. For both April and August, estimate the manufacturing overhead cost added to production. The company had no under or over-applied overhead costs. 4
 - ii. Using the high-low method, estimate a cost formula for manufacturing overhead. Express the variable portion of the formula in terms of a variable rate per unit of product. 2
 - iii. If 8,500 units are produced during a month, what would be the cost of goods manufactured? (Assume that work in process inventories do not change and there is no under or over-applied overhead cost for the month.) 2
5. Vex company manufactures and sells a specialized cordless telephone. The Company's Contribution format income statement for most recent year is given

below:

Particulars	Total	Per unit	Percent of Sales
Sales (20,000 units)	\$12,00,000	\$60	100%
(-) Variable expenses	<u>8,00,000</u>	<u>40</u>	<u>?</u> %
Contribution Margin	4,00,000	<u>\$20</u>	<u>?</u> %
(-) Fixed expenses	<u>3,50,000</u>		
Net operating income	<u>\$50,000</u>		

Management is anxious to increase the company's profit and has asked for an analysis of a number of units.

Required:

- i. Compute the company's CM ratio and variable expense ratio. 2
- ii. Compute the company's break-even-point in both units and sales taka. Use the equation method. 2
- iii. Compute the company's degree of operating leverage at the present sales level. 2
- iv. Assume that through a more intense effort the sales staff, the company's sales increase by 8% next year. By what percentage would you expect net operating income to increase? Use the degree of operating leverage to obtain your answer? 2
- v. Verify your answer to (d) by preparing a new contribution format income statement showing an 8% increase in sales. 2