North East University Bangladesh

Department of Computer Science and Engineering
BSc. (Engg.) in CSE Program
Semester Final Examination, Fall-2021
Course Code: BBA-201, Course Title: Cost and Management Accounting
Time: 2 Hours, Full Marks: 40

Answer any four 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) What are the advantages of budgeting? 5
   b) The cash budget typically consists of four major sections. What are these? Explain. 5

2. a) The cost formulas for Emory company's manufacturing overhead costs are given below. These cost formulas cover a relevant range of 15,000 to 25,000 machine hours each year. 4

Overhead Costs	Cost Formula
Utilities	\$0.30 per machine hour
Indirect labor..............	\$52,000 plus \$1.40 per machine hour
Supplies	\$0.20 per machine hour
Maintenance	\$18,000 plus \$0.10 per machine hour
Depreciation	\$90,000

Required: Prepare a flexible budget in increments of 5,000 machine hours. Include all costs in your flexible budget.

   b) Jamuna Company would like to reduce the amount of time between when a customer places an order and when the order is shipped. For the first quarter of operations the following data were reported:

	Days
Wait time	15.0
Inspection time	0.3
Process time	2.7
Move time	2.0
Queue time	6.0

Required:
i. Estimate the throughput time. 1
ii. Estimate the manufacturing cycle efficiency (MCE). 1
iii. What percentage of the production time is spent in non-value-added activities? 1
iv. Estimate the delivery cycle time. 1
v. If by using lean production all queue time during production is eliminated, what will be the new MCE? 2

3. a) Define the term 'Relevant Costs'. 2
   b) Xavier Company produces a single product. Variable manufacturing overhead is applied to products on the basis of direct labor-hours. The standard costs for one unit of product are as follows: 8

Direct material: 6 ounces at $0.50 per ounce $ 3
Direct labor: 1.8 hours at $10 per hour 18
Variable manufacturing overhead: 1.8 hours at $5 per hour 9
Total standard variable cost per unit 30

During June, 2,000 units were produced. The costs associated with June's operations were as follows:

Material purchased: 18,000 ounces at $0.60 per ounce $10,800
Material used in production: 14,000 ounce —
Direct labor: 4,000 hours at $9.75 per hour $39,000
Variable manufacturing overhead costs incurred $20,800

Required: Compute the direct materials, direct labor, and variable manufacturing overhead variances.

4. a) Are standards same as budget? 2
b) Four grams of musk oil are required for each bottle of Mink Caress, a very popular perfume made by a small company in western Siberia. The cost of the musk oil is 150 roubles per kilogram. Budgeted production of Mink Caress is given below by quarters for Year 2 and for the first quarter of Year 3: 8

Particulars	Year-2				Year-3
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	1st Quarter
Budgeted production in bottles	60,000	90,000	1,50,000	1,00,000	70,000

The inventory musk oil at the end of a quarter must be equal to 20% of the following quarter's production needs. Some 36,000 grams of musk oil will be on hand to start the first quarter of Year-2.

Required: Prepare a direct materials budget for musk oil, by quarter and in total, for Year 2. At the bottom of your budget, show the amount of purchases in roubles for each quarter and for the year in total.

5. a) Does fixed cost as same as semi-variable cost? 2
b) Minden corporation is considering a new labor-saving machine that rents for $5,000 per year. The machine will be used on production line. Data concerning the company's annual sales and costs with and without the new machine are shown below: 8

Particulars	Current Situation	Situation with new machine
Units produced and sold	5,600	5,600
Selling price per unit	$40	$40
Direct materials cost per unit	$14	$14
Direct labor cost per unit	$8	$5
Variable overhead cost per unit	$3	$3

Fixed costs, other	$62,000	$62,000
Fixed costs, rental of new machine	----	$5,000

Required: Which situation should be recommended by the company and why?

6. Write short notes **(Any five)**: 5*2=10
   a) Budget Period.
   b) Budget Income Statement.
   c) Selling & Administrative Expense.
   d) Material Price Variance.
   e) Responsibility Accounting.
   f) Traceable Costs.