



**NATIONAL OPEN UNIVERSITY OF NIGERIA**  
**Plot 91 Cadastral Zone NnamdiAzikiwe Express Way, Jabi-Abuja**  
**FACULTY OF MANAGEMENT SCIENCES**  
**DEPARTMENT OF FINANCIAL STUDIES**  
**2022\_2 EXAMINATION**

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**Course Code: ACC 306**

**Credit Unit: 3**

**Course Title: Cost Accounting**

**Time Allowed: TWO AND HALF HOURS**

**Instructions:**

- 1. Attempt Question 1 and any other three (3) Questions.**
  - 2. Question 1 is compulsory and carries 25 marks while the other 3 Questions carry 15 marks each.**
  - 3. Present all your workings in a coherent and orderly manner.**
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**QUESTION ONE**

- a. Henry ltd uses 30,000 realms of paper each year for production of books. Ordering costs per order is ₦75, holding cost per unit of inventory for a year is ₦4.50. Currently the company places 6 orders of 5,000 units. Use the formula to compute.
- i. The economic order quantity
  - ii. Total cost of order
  - iii. How much will Henry ltd save if it adopts the EOQ instead of the present policy of purchasing 5,000 realms per order

b. Ned manufacturing ltd produces umbrella for the year ended 31<sup>st</sup> December, 2020. Ned produced 10,000 umbrellas with the following total costs

|                         |          |
|-------------------------|----------|
| Direct material cost    | ₦40, 000 |
| Direct labour cost      | 70, 000  |
| Factory overhead        | 20, 000  |
| Selling expenses        | 12, 500  |
| Administrative expenses | 28, 800  |

During the year, Ned sold 9800 units at ₦24 each. Opening stock of finished goods was 630 units with a total cost of ₦8,190. There was no opening and closing stock of raw materials and work in progress.

You are required to:

- i. Calculate the unit cost of the following:
  - Direct material cost
  - Direct labour
  - Factory overhead
  - Prime cost
  - Conversion cost
- ii. Determine the cost of goods manufactured and cost of goods sold
- iii. Prepare an income statement for Ned manufacturing company for the year ended 31<sup>st</sup> December, 2020. (25 marks)

### QUESTION TWO

- a. State any **five** factors to be considered when determining the remuneration method to be adopted in an organization.
- b. The wage rate of BCD Ltd is ₦50 per hour. Number of hours worked are 60,000 per annum. The overhead per annum amounts to ₦500,000. Total unit produced is 150,000 units of product Z per annum.
- (i) Determine the unit cost of product Z
- (ii) In order to obtain greater productivity, BCD has decided to increase the wage rate to ₦60 and unit produced to 200,000 units. What will be the reduction in unit cost?
- c. The performance method of Mr Dauda in Agro Ltd shows the following:
- |                         |                        |
|-------------------------|------------------------|
| Standard output allowed | 250 units in 1 hour    |
| Actual production       | 5000 units in 15 hours |
| Normal day rate         | ₦2000 per hour         |
- Required:  
Calculate the (i) bonus and (ii) total earnings of Mr Dauda using Rowan bonus scheme  
**(15 marks)**

### QUESTION THREE

- a. Distinguish between cost allocation and cost apportionment.
- b. Calculate the depreciation in the following cases:
- A machine which has a useful life of 10 years costs ₦2M. It is estimated that salvage value of the machine at end of the 10<sup>th</sup> year will be ₦350,000. Calculate the yearly depreciation using straight line method.
  - A building costing ₦3.5M is to be depreciated at the rate of 15% per annum. Calculate the depreciation for the first five years using reducing balance method.
  - An ice block making machine costing ₦2.5M was installed to mould ice block in cubes. Each operation produces 100 cubes. It is estimated that the machine will produce 2,000,000 cubes before it is replaced. Calculate the depreciation for the month using production unit method assuming 5000 operations were carried out.
- (15 marks)**

### QUESTION FOUR

- a. Briefly define the terms ‘Marginal costing’ and ‘Absorption costing’.
- b. The following are the cost and revenue of Dele Ltd for period 1. Total unit of M produced and sold was 50,000 units.
- |                           |          |
|---------------------------|----------|
| ₦                         |          |
| Sales                     | 400, 000 |
| Production cost -variable | 140, 000 |

|                        |         |          |
|------------------------|---------|----------|
| Production cost- fixed | 60, 000 |          |
| General overhead fixed |         | 100, 000 |

Prepare two operating statements using marginal and absorption costing method

- c. Assume the same data in (a) except that unit sold is 45,000. Prepare the operating statement using marginal costing and absorption costing  
**(15 marks)**

#### QUESTION FIVE

- Distinguish between activity based costing and secondary apportionment of overhead
- Explain the steps involved in the implementation of activity based costing
- The performance of the managers of profit centre is measured by profit generated. List and explain five different measures of profitability for divisional performance evaluation.