



**NATIONAL OPEN UNIVERSITY OF NIGERIA
FACULTY OF MANAGEMENT SCIENCES
DEPARTMENT OF BUSINESS ADMINISTRATION
2024_2 EXAMINATION**

COURSE CODE: MBA801

COURSE TITLE: PRODUCTION AND OPERATIONS MANAGEMENT

CREDIT UNIT: 3

INSTRUCTIONS: 1. Indicate your Matriculation Number Clearly
2. Attempt question one (1) and any other three (3) questions
3. Question one (1) is compulsory and carries 25 marks, while the other questions carry 15marks.
4. Present all your points in a coherent and orderly manner

TIME: 2hrs 30mins

QUESTION ONE

- a. Discuss the impact of the Industrial Revolution on Production and Operations Management?
(10MARKS)
- b. A local distributor for a popular electronics brand expects to sell approximately 12,000 units of a specific model of smartphones next year. The annual carrying cost per unit is N24, and the ordering cost is N150. The distributor operates 320 days a year.
- (i) What is the Economic Order Quantity (EOQ)? (5MARKS)
- (ii) How many times per year does the distributor need to reorder? (5MARKS)
- (iii) What is the length of an order cycle? (5MARKS)

QUESTION TWO

- a. Define Forecasting (5MARKS)
- b. Discuss 5 importance of Forecasting in POM (10MARKS)

QUESTION THREE

- a. What is Job Design (5MARKS)
- b. What is the efficiency approach and how does it differ from the behavioural approach?
(10MARKS)

QUESTION FOUR

A small bakery sells approximately 8,000 loaves of bread each year. The ordering cost for bread is N25, and the carrying cost per unit per year is N2. The bakery operates 250 days a year.

- (a) What is the economic order quantity (EOQ) for bread? **(5MARKS)**
- (b) How many times per year should the bakery reorder bread? **(5MARKS)**
- (c) What is the length of an order cycle? **(5MARKS)**

QUESTION FIVE

- a. What is Operations Strategy? **(5MARKS)**
- b. Briefly describe the historical evolution of POM **(10MARKS)**