



**NATIONAL OPEN UNIVERSITY OF NIGERIA
FACULTY OF SOCIAL SCIENCES
DEPARTMENT OF ECONOMICS
2023 2 EXAMINATIONS_**

**COURSE TITLE: ADVANCED MICROECONOMIC THEORY
COURSE CODE: ECO 431
UNITS: 2
TIME ALLOWED: 2 HOURS**

INSTRUCTION: ANSWER QUESTION ONE AND ANY OTHER TWO QUESTIONS

QUESTION ONE

(a) The demand and supply functions of a commodity are given as follows:

$$Q_d = 500 - 30P$$

$$Q_s = 240 + 70P$$

Required:

- (i) Determine the equilibrium price and quantity bought and sold (12marks)
 - (ii) If the price of the commodity is fixed at N10, what is the magnitude of excess supply (4 marks)
 - (iii) If the price of the commodity is fixed at N5, what is the magnitude of excess demand (4 marks)
- (b) Every economic system has goals such as financial security and freedom to carry out economic choices. What are the goals of every economic system? (10 marks)

QUESTION TWO

Differentiate between the following:

- (a) Increasing returns to scale and decreasing returns to scale (5 marks)
- (b) Implicit and Explicit Costs (5 marks)
- (c) Accounting and Economic profit (5 marks)
- (d) Cost and Outlay (5 marks)

QUESTION THREE

a) Assume the short-run cost function of a particular firm is given as:

$$C = 0.1q^3 - 2q^2 + 15q + 10$$

Required:

- i. Obtain the Marginal Cost (3 marks)
- ii. Get the Average cost of production (3 marks)
- iii. Derive the Average Variable Cost of production (3 marks)