



NATIONAL OPEN UNIVERSITY OF NIGERIA  
FACULTY OF SOCIAL SCIENCES  
DEPARTMENT OF ECONOMICS  
2023\_1 POP EXAMINATION.

**COURSE TITLE: MANAGERIAL ECONOMICS**

**COURSE CODE: ECO 332**

**UNITS: 2**

**TIME ALLOWED: 2 HOURS**

**INSTRUCTION: ANSWER THREE (3) QUESTIONS. QUESTION ONE IS COMPULSORY.**

**1(a)** Given the demand function:  $Q_d = 24 - P$ , find the marginal revenue when  $P = 24, 20, 12,$  and  $8$ . **(15 Marks)**

**1(b)** Explain the five (5) factors that determine the price elasticity of demand ( **10 marks**)

**1(c)** In the business world, firms are faced with diverse constraints to profit maximization. As such, there are different techniques used to optimise the business objective(s) under these constraints. List these techniques.**(3 marks)**

**1(d)** What is the difference between Direct Demand and Derived Demand?**(2marks)**

**2(a)** Suppose the demand function for a product is given as:  $Q_d = 3000 - 20P$ , calculate the:

(i) quantity demanded at the unit price of N20, (ii) price to sell 100 units, (iii) demand when price is zero(0), and (iv) price when quantity demanded is zero. **(4marks each)**

**2(b)** If price the of a commodity increased from N50 to N120, and the quantity demanded decreased from 40 to 20, calculate the price elasticity of demand.**(4marks)**.

**3(a)** Explain what you understand by the Opinion Poll Methods and explain the various types you know. **(10marks)**

**3(b)** Briefly explain the following concepts (i)Point Elasticity (ii) Cross-Elasticity of Demand (iii) Endogenous variables (iv) Exogenous variables (v) Incremental Costs. **(2marks each)**

**4(a)** Given a linear cost and revenue function as follows:

Cost function:  $C = 200 + 20Q$ .....(1)

Revenue function:  $R = 30Q$ .....(2)

Compute the break-even level of output algebraically. **(10marks)**

**4(b)** With the aid of a diagrams, describe the pricing and output decisions under monopoly both in the long-run. **(10marks)**