



**NATIONAL OPEN UNIVERSITY OF NIGERIA
FACULTY OF SOCIAL SCIENCES
DEPARTMENT OF ECONOMICS
2019_1 EXAMINATION**

COURSE TITLE: MANAGERIAL ECONOMICS

COURSE CODE: ECO 332

UNITS: 2

TIME ALLOWED: 2 HOURS

INSTRUCTION: ANSWER ANY THREE (3) QUESTIONS. ALL QUESTIONS CARRY EQUAL MARKS. 1 MARK FOR CLARITY AND GOOD PRESENTATION.

1. (a) State the two major conditions that must be fulfilled for profit to be maximized. **(5 marks)**
(b) Assuming the unit price of a commodity is defined by: $P = 90 - 2q$, and the cost function is given as: $C = 10 + 0.5 q^2$,
Determine the profit-maximising level of output and the unit price. **(18 marks)**
2. (a) List three objectives of a business firm **(3 marks)**
(b) A company that produces two products, X and Y has a profit function given as: $10X - X^2 - XY + 18Y - 2Y^2$; minimum output = 40 units. Use the Lagrangian multiplier to estimate the units of X and Y that maximizes profit. **(20 marks)**
3. (a) Differentiate short term demand from long term demand **(6marks)**
(b) Enumerate five determinants of demand. **(5marks)**
(c) Explain the determinants of price-elasticity of demand for a product. **(12marks)**
4. (a) Explain how survey and statistical methods can be used in demand forecasting. **(10 marks)**
(b) List the necessary steps in the application of the multivariate regression technique of forecasting. **(8 marks)**
(c) Assume a linear cost function and a linear revenue function as follows:
Cost function: $C = 100 + 10Q$
Revenue function: $R = 150Q$. Compute the break-even output **(5 marks)**
5. (a) What is a production function? **(3marks)**
(b) Write short notes on these:
(i) Internal economies of scale
(ii) External economies of scale. **(14 marks)**
(c) State the laws of returns to scale **(6 marks)**.