



**NATIONAL OPEN UNIVERSITY OF NIGERIA
FACULTY OF SOCIAL SCIENCES
DEPARTMENT OF ECONOMICS
2024_2 EXAMINATION**

COURSE CODE: ECO 824
COURSE TITLE: MANAGERIAL ECONOMICS
CREDIT UNIT: 3 UNITS
TIME ALLOWED: 3 HOURS
INSTRUCTION: ANSWER QUESTION 1 AND ANY OTHER THREE QUESTIONS

Question 1

- a. What are the properties of Cobb Douglass production function? 4 marks
b. An Economic Research Centre has published data on the Gross Domestic Product (GDP) and the Demand for refrigerators as presented below:

Year	2000	2001	2002	2003	2004	2005	2006
GDP (Billion)	21	23	26	28	31	34	36
Refrigerators (Millions)	6	7	9	9	10	11	12

- (i) Estimate the regression equation, $R = a + bY$ where R = refrigerators (in millions), and Y = GDP (in N'billions) **16 marks**
(ii) Forecast the demand for refrigerators for the years 2007, 2008, and 2009, if the Research Centre projected the GDP for 2007, 2008, and 2009 to be N40 billion, N52 billion, and N65 billion, respectively. **5 marks**

Question 2

- a. Besides profit maximization, list and explain 5 objectives that the manager will seek to maximize **10 marks**
b. Find the output level that will maximize revenue given that the price function of the firm is $P = 560 - 8Q$ **5 marks**

Question 3

- a. With examples, differentiate between price elasticity of demand and cross elasticity of demand **5 marks**
b. What factors influence the elasticity of demand for a product or service, and how can managers leverage this understanding to make informed business decisions? **10 marks**

Question 4

Explain the following concepts

- i. Private and social cost **3 marks**
ii. Opportunity cost and explicit cost **3 marks**
iii. Historical and replacement cost **3 marks**

- iv. Economist and accountant view of profit
- v. Incremental cost and sunk cost

3 marks
3 marks

Question 5.

Explain the following concept

- a. Exceptional demand curve **3 marks**
- b. Giffen Paradox **3 marks**
- c. Derived demand **3 marks**
- d. Autonomous demand **3 marks**
- e. Break-even point **3 marks**