



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

**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) A market consists of three buyers X, Y, Z, whose individual demand functions are given as follows:  $P_x = 50 - 0.5Q_x$ ,  $P_y = 25 - 0.25Q_y$  and  $P_z = 30 - 2Q_z$ .

The industry supply function is given as  $Q_s = 50 + 4.5P$

i) Find the market price and market demand (12marks)

ii) Determine the share of each buyer in the market (4.5marks)

iii) If government imposed a specific tax of N11.00 per product on the producers how much would be charged per product? (8.5marks)

(b) Critically explains the Diamond-Water Paradox (5marks)

**QUESTION TWO**

Assume that the Market Demand of Joint-Profit Maximization Cartel is given as:

$$P = 400 - 0.5(Q_1 + Q_2)$$

While, the Costs of the two firms are as follows:

$$C_1 = 20Q_1$$

$$C_2 = 0.5Q_2$$

**Required:**

(a) What are the quantities of Commodities 1 and 2 that must be produced for the Joint Profit Maximization Cartel to be able to maximize profits? (11marks)

(b) Calculate the Total Profits of the Joint Maximization Cartel in the two firms. (4marks)

(c) What are the characteristics of monopsony? (5marks)

**QUESTION THREE**

a) Compare the questions of **what, how and for whom** decisions between the Command and Market economies system? (8marks)

b) Highlight the advantages and disadvantages of the economies system mentioned above. (12marks)

**QUESTION FOUR**

The measurement of social welfare requires some ethical standard and interpersonal comparison, both of which involve subjective value judgments. Discuss fully any two of the criteria of social welfare you know. (20 marks)