

**W1-2-60-1-6**

**JOMO KENYATTA UNIVERSITY**

**OF**

**AGRICULTURE AND TECHNOLOGY**

**UNIVERSITY EXAMINATIONS 2014/2015**

**YEAR 2 SEMESTER I EXAMINATION FOR THE DEGREE OF BACHELOR OF COMMERCE**

**YEAR 1 SEMESTER II BACHELOR OF BUSINESS INFORMATION TECHNOLOGY**

**Supplementary/special**

**HBC 2205/HPS 2241: INTERMEDIATE MICROECONOMICS**

**DATE: August 2015 TIME: 2 HOURS**

**INSTRUCTIONS: Answer Question One and Any Other Two Questions**

**QUESTION ONE (30 marks) – compulsory**

1. You are given the following functions;

Q=100+10P and Q=400-6P

Where Q represents quantity and P is price of a commodity.

1. Which function represents a demand curve? A supply curve? Give reason for your answer (4marks)
2. Determine the equilibrium price, quantity, and hence use a diagram to show the equilibrium point. (5marks)
3. If the demand curve changes to Q=200-6P with no change in supply determine the new equilibrium price and quantity and hence the new equilibrium point. (5marks)
4. Explain any four factors that could have changed the demand above. (4marks)

b) Consumer behavior are the different reactions expressed by individuals in making choosing commodities, briefly explain the assumptions of the cardinalist approach to utility and hence discuss its shortcomings. (12marks)

**QUESTION TWO (20 marks)**

1. A monopolist faces the following average revenue (demand) function

P=140-2Q where P is price (average revenue) and Q is quantity.

His total cost is . Where TC is total cost and Q is output.

Required;

Determine the profit maximization output and price. Hence calculate the maximum profits (7marks)

1. Using a well labelled diagram explain the concept and assumptions of perfect competition in the longrun. (13marks)

**QUESTION THREE (20 marks)**

1. Define the term externalities and hence discuss negative externalities and clearly give the various forms of negative externalities. (10marks)
2. You are given the information below to study it;

Required

1. Determine the equilibrium quantities of z and x for a consumer whose total utility (U) and relevant information is given above. (7marks)
2. Using the values of z and x above calculate for the value of maximum utility (3marks)

**QUESTION FOUR (20 marks)**

1. Suppose you have a constrained profit problem as follows:

 Subject to:

Required:

Using a lagragian multiplier methods find the values of X, Y and λ hence find the maximum profit without the multiplier. (10marks)

b) Given the demand function Q=50-0.5P

 C=50+40Q

 Find the level of profits and the equilibrium price. (10marks)