PAN AFRICA CHRISTIAN UNIVERSITY

SCHOOL OF LEADERSHIP, BUSINESS AND TECHNOLOGY

END OF SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR OF COMMERCE

DECEMBER 2018 EXAMINATIONS

CAMPUS: ROYSAMBU

DEPARTMENT: BUSINESS STUDIES

COURSE CODE: BCM206

COURSE TITLE: Intermediate Micro Economics Theory

EXAM DATE: MONDAY 3RDDECEMBER 2018

DURATION: 3 HOURS

TIME: 9:00AM-12.00PM

INSTRUCTIONS

- Read the instructions and questions carefully before you write the answers.
- Write your **STUDENT NUMBER** in the Answer Booklet given
- **Answer question 1 and any other FOUR questions**
- *Write clearly and legibly.*
- *ALL PAC University's examination rules and regulations apply*

QUESTION ONE: COMPULSORY [40MKS]

(a) Differentiate between the following pairs of concepts: [6mks]

(i) Public choice and social choice

(ii) Market failure and externality

(b) Explain two features of public goods. [4mks]

(c) Discuss three assumptions of consumer preferences. [6mks]

(d) Suppose Juma and Hamisi are the only consumers in the market for beach saplings in the coastal town of Mombasa. Their demand curves are given by:

$$P=30-2Q_H$$

$$P=30-3Q_J$$

Where $Q_H \wedge Q_J$ are the quantities demanded by Hamisi and Juma respectively. Calculate the market demand curve for beach saplings in their town. [5mks]

(e) Explain three conditions that guarantee Pareto efficient outcome in an economy. [6nks]

(f) Consider a monopolist where the market demand curve for the produce is given by $P=520-2Q$. The monopolist has marginal costs given by $MC=100+2Q$and total costs given by $TC=100Q+Q^2+50$.

(i) Calculate the monopolist's profit maximizing price and output. [6mks]

(ii) Determine the monopolist's profit. [3mks]

(iii) Find the monopolist's average total cost of production? [2mks]

(iv) Calculate the profit per unit for this monopolist? [2mks]

QUESTION TWO [15MKS]

(a) Explain the term price discrimination. [2mks]

(b) State the first and the second fundamental theorems of welfare economics. [4mks]

(c) Explain three types of price discrimination practiced by firms in a market. [9mks]

QUESTION THREE [15MKS]

Using well-labeled diagrams differentiate between:

(a) Price consumption curve and income consumption curve. [7mks]

(b) Income effect and substitution effect of a fall in price of a normal good. [8mks]

QUESTION FOUR [15MKS]

The demand for pineapples is given by the following equation:

$$Q^d = 4000 - 100P + 500P_M$$

Where P is the price of pineapples and P_M is the price of mangoes.

(a) Graph the demand for pineapples when $P_M = 2$. [3mks]

(b) Suppose that the quantity of pineapples supplied is given by the following equation:

$$Q^s = 1500 - 60R$$

where R is the amount of rainfall.

(i) On the same graph in (a), graph the supply curve for pineapples when R=50. [3mks]

(ii) Calculate the equilibrium price and quantity for pineapples. [4mks]

(iii) At the equilibrium values, calculate the price elasticity of demand and interpret your results. [5mks]

QUESTION FIVE [15MKS]

(a) Use diagrams to explain the difference between negativeexternality and positive externality. [7mks]

(b) Discuss three types of externalities caused by sport utility vehicles (SUVs) [6mks]

(c) Explain how the government can solve the problems associated with negative externalities. [2mks]

QUESTION SIX [15MKS]

(a) Gruber consumes two commodities *w*and *y* and has the following total utility function;

$$U = 20w - 4y^2 + 40y - w^2.$$

His total income (Y) is Ksh.48. The price of commodity w denoted by P_w is Ksh.4 while the price of commodity y denoted by P_y is Ksh.2. Determine the equilibrium quantities of w and *y* that Gruber should consume to maximize his utility. [7mks]

(b) Explain four assumptions of cardinal utility approach. [8mks]