PAN AFRICA CHRISTIAN UNIVERSITY

SCHOOL OF LEADERSHIP, BUSINESS & TECHNOLOGY

END OF SEMESTER EXAMINATION FOR THE DEGREE OF

BACHELOR OF COMMERCE

MAY-AUGUST 2019

CAMPUS: ROYSAMBU

DEPARTMENT: BUSINESS STUDIES

COURSE CODE: BCM206

COURSE TITLE: INTERMEDIATE MICRO ECONOMICS

EXAM DATE:TUESDAY 13th AUGUST 2019

DURATION: 2 HOURS

TIME: 9:00AM-11:00AM

INSTRUCTIONS

- Read the instructions and questions carefully before you write the answers.
- Write your **STUDENT NUMBER** in the Answer Booklet given
- *Write clearly and legibly.*
- This exam script consists of **Six (6)** questions.
- Answer ALL q**uestions in SECTION A(Compulsory)** and A**ny other THREE (3)** questions from **SECTION B**
- *ALL PAC University's examination rules and regulations apply*

SECTION A: ANSWER ALL QUESTIONS FROM THIS SECTION

QUESTION ONE: COMPULSORY [30MKS]

(a) Use indifference curves to differentiate between perfect substitutes and perfect complements. [6mks]

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

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

(ii) The monopolist's profit. [4mks]

(iii) The monopolist's average total cost of production [3mks]

(iv) The profit per unit for the monopolist [3mks]

(c) A small scale mango juice production company has the following demand function

$$P = 30 - \frac{1}{3}Q$$

(i) Calculate the price elasticity of demand when $p = 10$ [6mks]

(ii) Interpret your results [2mks]

SECTION B: ANSWER ANY THREE QUESTIONS

QUESTION TWO [10MKS]

Using well-labelled diagrams explain the following:

(a) Price consumption curve [5mks]

(b) Income consumption curve. [5mks]

QUESTION THREE [10MKS]

(a) Explain three differences between consumer behavior and production theory. [3mks]

(b) Skippy lives on an island where she produces two goods, *x* and y. Her budget constraint and utility is given as $x + y = 56$. And $u = 4x^2 + 3xy + 6y^2$. Determine

(i) The amount ofbundles *x* and *y* that she should consume to maximize her utility. [5mks]

(ii) The total utility. [2mks]

QUESTION FOUR [10MKS]

(a) Using diagrams differentiate between negativeproduction externality and negative consumption externality. [5mks]

(b) Explain two remedies the government can use to solve the problems associated with externalities. [5mks]

QUESTION FIVE[10MKS]

(a) Use diagram to explain why the demand curve of oligopolistic producer is kinked. [5mks]

(b) Two firms in industrial area are ordered by the Government of Kenya to reduce their pollution levels. Firm *A*'s marginal costs associated with pollution reduction is $MC = 20+4Q$. Firm *B*'s marginal costs associated with pollution reduction is $MC = 10+8Q$. The marginal benefit of pollution reduction is $MB = 400-4Q$. Calculate the socially optimal level of each firm's pollution reduction. [5mks]

QUESTION SIX [10MKS]

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

(b) Explain three types of price discrimination practiced by firms in a market. [6mks]