



MACHAKOS UNIVERSITY

University Examinations for 2020/2021 Academic Year

SCHOOL OF BUSINESS AND ECONOMICS

DEPARTMENT OF ECONOMICS

FIRST YEAR SECOND SEMESTER EXAMINATION FOR

BACHELOR OF ARTS (PUBLIC ADMINISTRATION)

EET 102: PRINCIPLES OF ECONOMICS

DATE: 16/6/2021

TIME: 2.00-4.00 PM

INSTRUCTIONS:

- (i) Answer question one (Compulsory) and any other two questions
- (ii) Do not write on the question paper
- (iii) Show your workings clearly

QUESTION ONE (COMPULSORY) (30 MARKS)

- a) Distinguish between the following microeconomics terms (10 marks)
- i. Veblen and inferior goods
 - ii. Positive and Normative economic analysis
 - iii. Supply schedule and supply curve
 - iv. Stable and unstable equilibrium
 - v. Isoquant and indifference curves
- b) Suppose you are given the following demand function of a certain commodity

$$Q = 1000 - 5P + 10P_x - 2P_z + 0.1Y,$$

Where, $P=80$, $P_x=50$, $P_z=150$ and $Y=20,000$

Required:

- i. Own price elasticity of demand. Comment on your answer (3 marks)
- ii. Cross elasticity of demand with respect to commodity and comment on your answer. (3 marks)
- iii. Income elasticity of demand. Comment on your answer (3 marks)

- c) Using a well labelled diagram, describe how a production possibility frontier curve (PPF) is used to illustrate the concept of scarcity, choice and opportunity cost (5 marks)
- d) With the help of a diagram, clearly explain short run equilibrium in a perfect competitive market (6 marks)

QUESTION TWO (20 MARKS)

- a) Critically examine the following economic laws. Use graphical illustration and give an appropriate example in each case
- i. Law of demand (2 marks)
 - ii. Law of diminishing marginal utility (3 marks)
 - iii. Law of diminishing marginal return (3 marks)
- b) Using relevant examples, explain **four** determinants of the demand for university education in Kenya. (12 marks)

QUESTION THREE (20 MARKS)

- a) Suppose a firm uses labour in the production of its output. The table below gives the number of workers hired (L) and the total product (TP) of the corresponding labour units

L	0	1	2	3	4	5	6	7	8	9	10
TP	0	5	16	36	68	95	114	119	120	117	100

Required

- i. Average product of labour (AP_L) and Marginal product of Labour (MP_L) for corresponding levels of labour used (4 marks)
 - ii. Draw on the same graph TPL, APL and MPL curves (4 marks)
 - iii. Use your graph to explain the stages of production in the short-run (6 marks)
- b) Explain **three** factors that that lead to existence of a monopoly in the market. (6 marks)

QUESTION FOUR (20 MARKS)

- a) State if the following statement are **true** or **False** with explanation.
- i. A change in income leads to a shift in the budget line (2 marks)
 - ii. The change in price of a related good causes the movement along the demand curve (2 marks)
 - iii. A high positive cross elasticity means that commodities are complementary (2 marks)

- iv. A Giffen good is not different from an inferior good (2 marks)
- b) Compare and contrast the characteristics of a perfectly competitive market and monopolistic competition market structure (6 marks)
- c) Determine the equilibrium quantities of commodities x and z for a consumer whose total utility (U) and other relevant variables are given below. (6 marks)

$$U = 20x - 4z^2 + 40z - x^2$$

$$\text{Income level } Y = \text{Ksh.}48$$

$$\text{Price of } x(p_x) = \text{ksh.}2$$

$$\text{Price of } z(p_z) = \text{ksh.}4$$

QUESTION FIVE (20 MARKS)

- a) A normal demand curve is negatively sloped. Explain **three** reasons why this is the case. (6 marks)
- b) Using diagrams, distinguish between a price ceiling and a price floor as well as their effects (8 marks)
- c) Explain **three** applications of the concept of elasticity. (6 marks)