



A F R I C A

UNIVERSITY

COLLEGE OF BUSINESS AND MANAGEMENT SCIENCES

NMEC 201: INTERMEDIATE MICROECONOMICS

END OF SEMESTER EXAMINATIONS

NOVEMBER 2024

LECTURER: MR T MASESE

TIME: 3 HOURS

INSTRUCTIONS TO CANDIDATES

1. Answer any FOUR questions
2. All questions carry equal marks
3. Start each question on a new page.
4. Show all workings where applicable

QUESTION 1

- a. Given 2 products x_1 and x_2 a consumer can select from priced at p_1 and p_2 respectively and a budget m , derive and draw the consumer's budget line. On separate diagrams, illustrate the effect of an increase in the consumer's income, an increase in the price of x_1 and a decrease in the price of x_2 (15 marks)
- b. Discuss the principal differences between perfectly competitive market and monopoly with regards to output and price determination (10 marks)

[Total 25 marks]

QUESTION 2

- a. Construct a set of indifference curves which satisfy the following situations:
 - i. Risk and return (4 marks)
 - ii. Commodity X (a good) and commodity Y (a neuter) (4 marks)
 - iii. The consumer may reach a point where is satiated with both goods (bliss point) (4 marks)
 - iv. The goods are perfect substitutes (3 marks)
 - v. The goods are perfect complements (3 marks)
- b. For a linear production function $q = f(L, K) = 2L + K$, what is the short-run production function given that capital is fixed at $K = 100$? What is the marginal product of labour? (4 marks)
- c. Briefly explain each of the following assumptions about preferences: completeness, reflective and transitivity (3marks)

[Total 25 marks]

QUESTION 3

- a. Examine the relevance of monotonicity in the theory of consumer behaviour (6 marks)
- b. With the aid of a proper consumer behaviour (indifference curve and budget lines) diagrams illustrate and briefly explain:
 - a. Income and substitution effects for a normal good and inferior good (3 marks)
 - b. Income-consumption line (Engel curve) (3 marks)
 - c. Derivation of the demand curve (3 marks)
- c. What is collusion as it relates to oligopolistic markets. Explain how cartels can seek maximum prices if they establish an organisation which seeks to prevent prices falling below a certain price. (10 marks)

[Total 25 mark]

QUESTION 4

- a. What is technological progress? Distinguish among neutral technological progress, labour saving technological progress and labour saving technological progress (6 marks)
- b. Distinguish between economies of scope and economies of experience in production (4 marks)
- c. Explain each of the following types of oligopoly models: Cournot model, Stackelberg model and Bertrand model (15 marks)

[Total 25 marks]

QUESTION 5

- a. What is an oligopoly? With the aid appropriate diagrams explain how the kinked demand curve faced by oligopolistic firms is derived and why prices tend to be rigid in oligopolistic markets (15 marks)
- b. With reference to a monopoly firm of your choice, explain the three degrees of price discrimination (10 marks)

[Total 25 marks]

Question 6

- a. Briefly explain the following questions as they pertain to information economics
 - i. Hidden characteristics and hidden actions (3 marks)
 - ii. Adverse selection (3 marks)
 - iii. Moral hazard (3 marks)
 - iv. Signalling (3 marks)
 - v. Screening (3 marks)
- b. Discuss the main ways for solving the adverse selection problem (10 marks)

(Total marks)

END OF EXAMINATION
