



(Knowledge for Development)

KIBABII UNIVERSITY
UNIVERSITY EXAMINATIONS
2022/2023 ACADEMIC YEAR
YEAR THREE SEMESTER ONE
MAIN EXAMS

FOR THE DEGREE OF BACHELOR OF COMMERCE

COURSE CODE: ECO311

COURSE TITLE: MANAGERIAL ECONOMICS

DATE: 19TH DECEMBER, 2022 **TIME: 2.00PM - 4.00PM**

INSTRUCTIONS TO CANDIDATES

1. Answer Question One in Section A and Any other TWO (2) Questions in Section B
2. Question **one** carries **30** marks and each of the other two questions carry **20** marks each.

TIME: 2 Hours

QUESTION ONE (30 MARKS, COMPULSORY)

- a) Discuss the role of business managers in attainment of a firm's objective (6 marks)
- b) Outline three common objectives of a business firm. (6 mark)
- c) Given that the unit selling price of a commodity is ksh 100, the variable cost (AVC) is estimated to be ksh.75 and the Total fixed cost (TFC) is estimated to be 5,000,000 Calculate the break even quantity (5 marks)

d) Given the following average revenue and total cost functions;

$$AR_1 = 8 - 2Q_1 - 10Q_2$$

$$AR_2 = 4 - 4Q_2 - 2Q_1$$

$$TC = 4Q_1^3 + 6Q_1Q_2 + 2Q_2$$

Determine the corresponding profit function

(5 Marks)

e) Assume that company XYZ has the following cost structure for its products and considering whether to export or not.

Cost per unit of production	Kshs
Labour	20
Materials	30
Overheads (per unit of product)	40
Total cost per unit	90

It also known that the net export price the company can earn is Kshs. 80 per unit, and the current production capacity of the firm is in excess of its local consumption by 10,000 units. With the assistance of the above information advise the management on whether to export or not and if it was to export work out the export revenues. (6 marks)

QUESTION TWO (20 marks)

a) A firms total cost function is $TC = 12 + 60Q - 15Q^2 + Q^3$ suppose the firm Produces 10 units of output.

Determine:

- i. Total Fixed Cost (TFC) [2 marks]
- ii. Total Variable Cost (TVC) [2 marks]

- iii. Average Total Cost (ATC) [2 marks]
 - iv. Average Variable Cost (AVC) [2 marks]
 - v. Marginal Cost (MC) [2 marks]
- b) Using demand-supply analysis, explain the effects of each of the following on the value of the firm
- i. A new advertising campaign increases the sales of the firm substantially. (5 marks)
 - ii. A new competitor enters the market. (5 marks)

QUESTION THREE (20MARKS)

- a) Discuss the managerial decision making process (5 Marks)
- b) A company is considering the manufacture of two mutually exclusive products, product A and product B. Product A is a watch band and is specifically designed to fit only on the company's watches. Product B is watch band that is designed to be adapted to a variety of watches including these produced by competitors. The expected investment for each product is ksh 10,000. The expected cash flows for project A are shs. 2,000,000 per year for 8 years. The coefficient of variation is expected annual cash flows are 10% for project A is 10% and 15% for B. the cost of capital for project A is 10% and it is 15% for B. If only one of the projects is to be selected, which project should we select? (10 Marks)
- c) Explain the purpose of demand analysis from standpoint of management (5marks)

QUESTION FOUR (20 MARKS)

- a) What is a demand forecasting ? How is it important to firm managers (7 marks)
- b) Discuss the determinants of demand for good (6 Marks)
- c) How is the concept of price and income elasticity useful to managers and government (7 Marks)

QUESTION FIVE (20 MARKS)

a) Suppose that an industry comprising two firms producing a homogenous product. Suppose that the demand functions for two profit maximizing firms in a duopolistic industry are:

$Q_1 = 0.5Q_1 + 0.25Q_2$ $Q_2 = 50 - 0.5Q_2 + 0.25Q_1$. Suppose, further that the firm's total cost function are $TC_1 = 4Q_1$ $TC_2 = 4Q_2$ Where P_1 and P_2 represent the prices charged by each firm producing Q_1 and Q_2 unit of output.

- i. What is the equilibrium price, profit maximizing output levels, and profits for each firm? (10 Marks)
- ii. Explain the difference between price elasticity and income elastic of demand and highlight their importance in managerial economics. (5 marks)
- iii. Outline five common objectives of a business firm (5 marks)