



**MASINDE MULIRO UNIVERSITY OF SCIENCE AND TECHNOLOGY**

**(MMUST)**

**UNIVERSITY EXAMINATIONS**

**2022 /2023 ACADEMIC YEAR**

**MAIN EXAMINATION**

**FIRST YEAR FIRST SEMESTER EXAMINATIONS**

**MAIN EXAMINATION (MAIN CAMPUS)**

**MASTERS OF BUSINESS ADMINISTRATION**

**COURSE CODE: MBA 810**

**COURSE TITLE: MANAGERIAL ECONOMICS**

**DATE: THURSDAY 13TH APRIL 2023**

**TIME: 2:00-5:00**

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**INSTRUCTIONS TO CANDIDATES**

**ATTEMPT QUESTION ONE AND ANY THREE QUESTIONS**

**TIME: 2 Hours**

**MMUST observes ZERO tolerance to examination cheating**

**This Paper Consists of 2 Printed Pages. Please Turn Over.**

### QUESTION ONE ( 40 MARKS )

- (a) Explain the conditions for maximum profit according to theory of the firm. [5 marks]
- (b) Why would a firm that incurs losses choose to produce rather than shut down? [5 marks]
- (c) Differentiate between:
- (i) Economic profit and producer surplus. [2 marks]
  - (ii) Nash equilibrium and equilibrium in dominant strategies. [2 marks]
  - (iii) Managerial economics and microeconomics. [2 marks]
- (d) Why is there need for demand forecasting? Explain any two methods of demand forecasting for the established product. [14 marks]
- (e) Consider the following pay-off tables for a one-shot game:

	FIRM B	
	Low price	High price
FIRM A		
Low price	(2,2)	(10, -8)
High price	(-8,10)	(15,15)

- (i) What are the dominant strategies for Firm A and Firm B, respectively? [6 marks]
- (ii) What are the Nash equilibrium strategies for this game? [4 marks]

### QUESTION TWO ( 20 MARKS)

- (a) Differentiate between the Cournot and Bertrand models of competition. Why are these models not true models of independent behaviour? [8 marks]
- (b) Given the total cost of a firm as  $TC=100+4Q+8Q^2$ . What is the marginal and average cost when output is 10 units? [6 marks]
- (c) Discuss the relationship between scarcity and opportunity cost and show how they influence the management decision making process. [6 marks]

### QUESTION THREE ( 20 MARKS)

- (a) Given the following information about the sales of company Z.

Year	Sales
2008	22734
2009	24731
2010	31489
2011	44685
2012	55319
2013	91021
2014	146234
2015	107887
2016	127483
2017	97275

- (i) Fit a liner regression equation. [6 marks]
- (ii) Estimate the sales for 2012 and 2015. [2 marks]
- (b) Explain various determinants of demand and exception to the law of demand. [8 marks]
- (c) How is the concept of price and income elasticity useful to managers and government [4 marks]

### QUESTION FOUR ( 20 MARKS)

Given the production and cost function as:

$$Q = 500L^{0.25}K^{0.75}, \quad C = WL + Rk$$

- a) Derive the demand curve for Labour and Capital with a view to maximize the output when  $C = \$1000$ . Would your answer change if the objective shifts to cost minimization with desired level of output. (10 marks)
- b) Determine the equilibrium level of employment of the factors in each case given  $W=10$  and  $r=75$  (10 marks)

### QUESTION FIVE ( 20 MARKS)

- (a) Explain six (5) determinants of price elasticity of demand. [10 marks]
- (b) Differentiate the following concepts as used in managerial economics:
- i. Consumer-producer rivalry and Consumer-consumer rivalry [2 marks]
- ii. Price ceiling and price floor [4 marks]

iii. Producer surplus and consumer surplus

[4 marks]

**QUESTION SIX ( 20 MARKS)**

- a) Managerial economics involves directing scarce resources in the way that most efficiently achieves the managerial goal. In line with this statement, discuss five basic principles that a manager should uphold for effective management [20 marks ]