

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

**EXAMINATION FOR THE AWARD OF DEGREE OF MASTER OF BUSINESS
ADMINISTRATION**

MBAD 802: MANAGERIAL ECONOMICS

STREAMS: MBAD

TIME: 3 HOURS

DAY/DATE: TUESDAY 06/08/2019

11.30 A.M. – 2.30 P.M.

INSTRUCTIONS:

- Answer question one and any other two

QUESTION ONE

- (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	
FIRM A	Low price	High price
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

- (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)

QUESTION THREE

- (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 FOUR

- (a) Describe the nature, scope and practical significance of managerial economics. (10 marks)
- (b) You are the manager of a monopoly that faces a demand curve described by $P=90-6Q$. The cost is $C=10Q + 2Q^2$. Calculate
 - (i) Profit maximizing output. (2 marks)

- (ii) Equilibrium price. (2 marks)
 - (iii) Maximum profit. (2 marks)
 - (c) Suppose a firm faces a production function $Q = 2kL^3 - k^2L^2$
 - (i) Derive the Average product and marginal product functions. (2 marks)
 - (ii) Show that the marginal product curves crosses the average product curve at its maximum. (2 marks)
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