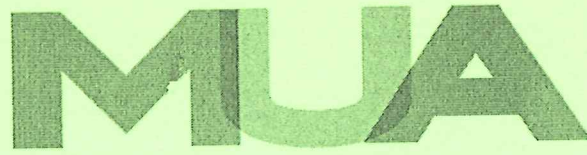


The
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UNDERGRADUATE UNIVERSITY EXAMINATIONS
SCHOOL OF MANAGEMENT AND LEADERSHIP
DEGREE OF BACHELOR OF COMMERCE/ BACHELOR OF
MANAGEMENT AND LEADERSHIP

BMT 300/BMT202: MANAGERIAL ECONOMICS

DATE: 8TH APRIL 2022

DURATION: 2 HOURS

MAXIMUM MARKS: 70

INSTRUCTIONS:

1. Write your registration number on the answer booklet.
2. **DO NOT** write on this question paper.
3. This paper contains **SIX (6)** questions.
4. Question **ONE** is compulsory.
5. Answer any other **THREE** questions.
6. Question **ONE** carries **25 MARKS** and the rest carry **15 MARKS** each.
7. Write all your answers in the Examination answer booklet provided.

QUESTION ONE

Read the Case Study below carefully and answer the questions that follow:

GAGAN PVT. LTD.

Gagan Pvt. Ltd. was established in 1995. The company started manufacturing Water Geysers with a brand name of 'Ganga'. During initial 10 years, the company made good profits. But, its profits gradually declined due to competition from national brands. The promoters of the company had a committed team of workers who were constantly working on Research and Development. Finally, they came out in the year 2006, with an innovative product, named Maha Ganga which runs at very low voltage and consumes less electricity. Thus, the company is monopoly manufacturer of 'Maha Ganga'. The company is currently supplying its products in geographically separated markets of Punjab and Haryana. The company is currently charging the same price in Punjab and Haryana. The Chief Economist of the company has informed the top management that price elasticity of demand at currently-charged price is 3 in Punjab and 5 in Haryana. The top management is planning to charge two different prices in Punjab and Haryana

Required:

- I. Will it be possible for the company discussed in the case study to charge two different prices in Punjab and Haryana? Explain your answer and conditions that would enable it. (3 Marks)
- II. Will it be profitable for the company to charge two different prices in Punjab and Haryana? Explain. (3 Marks)

- III. "During initial 10 years, the company made good profits. But, its profits gradually declined due to competition from national brands." Identify the type of market for Water Geysers and explain your answer. (4 Marks)
- IV. "Thus, the company is monopoly manufacturer of 'Maha Ganga'." Define a monopoly and graphically show and explain its short run equilibrium. (6 Marks)
- V. Differentiate between a monopoly and the market structure identified in part III above as elucidated in the case study. (3 Marks)
- VI. Technology is one of the factors that influence supply of a product. Explain the effect of technology in Gagan Pvt. Ltd. (2 Marks)
- VII. Explain how economics helps business managers in performing their functions? (4 Marks)

QUESTION TWO

- I. Mary's income is KS 25,000. Milk costs KS. 50 a packet, and cake costs KS. 100 a kg.
- a. Draw Mary's budget constraint (put cake on the horizontal axis). (2 Marks)
- b. Mention the slope of Mary's budget constraint? (1 Mark)
- c. Draw consumer's indifference curve for milk and cake and show the point of consumer equilibrium. (2 Marks)

- d. Demonstrate with the help of a graph to describe the four properties of the indifference curves. (2 Marks)
- e. Assume Mary's income increases from Ksh. 25,000 to Ksh. 26,000. Show what happens if both milk and cake are normal goods. (4 Marks)
- f. The price of cake rises from KSh. 100 to KSh.150 a cake, while the price of wine remains Ksh. 50 per packet. For a consumer with a constant income of Ksh. 25,000, show what happens to consumption of milk and cake. Decompose the change into income and substitution effect. (4 Marks)

QUESTION THREE

- I. Find the profit-maximizing output for a firm with the total cost function and the total revenue function. (5 Marks)

$$TC = 4 + 97Q - 8.5Q^2 + 1/3Q^3$$

$$TR = 58Q - 0.5Q^2.$$

- II. Explain five major macroeconomic issues related directly to business decision-making and for each state its significance in business decisions. (10 Marks)

QUESTION FOUR

- I. A firm has to choose between projects A and B. Project A involves an initial outlay of £18,000 and a return in 1 years' time of £20,000. Project B involves an

initial outlay of £2,000 and a return in 1 years' time of £2,500. The interest rate is 6%. Which would be the better investment? **(5 Marks)**

An investment project involves an initial outlay of £25,000 and net annual returns as follows:

£6,000 at the end of year 1

£8,000 at the end of year 2

£8,000 at the end of year 3

£10,000 at the end of year 4

£6,000 at the end of year 5

Interest rates are currently 15% but are forecast to fall to 12% next year and 10% the following year. They will then rise by 1 percentage point each year. Is the project worthwhile? **(6 Marks)**

- II. A firm has to pay a fixed annual cost of £90,000 for leasing its premises. Derive its average fixed cost function (AFC). **(2 Marks)**
- III. State two problems associated with regression analysis in demand estimation. **(2 Marks)**

QUESTION FIVE

- I. There are two ways a business can set themselves apart from the other players in the market: through cost leadership or through product differentiation. While

cost leadership attracts more price-conscious customers, product differentiation is a great technique to enforce brand positioning and word of mouth marketing strategies and get more loyal customers. Argue the case against product differentiation. **(10 Marks)**

- II. Two firms are making a decision on whether to price high or low and the resulting pay-offs are as below. Find equilibrium in mixed strategies. **(5 Marks)**

		FIRM 2	
		High (q)	Low (1 - q)
FIRM 1	High (p)	80,40	40,80
	Low (1- p)	40,80	80,40

QUESTION SIX

- I. Suppose that you have the following demand and supply curve for sneakers:

$$Q_d = 400 - 3P$$

$$Q_s = 200 + 2P$$

- Solve for the equilibrium price and quantity. **(3 Marks)**
- Calculate consumer expenditures on sneakers. **(1 Mark)**
- Calculate the elasticity of demand at the equilibrium found in (a) **(2 Mark)**
- Would a 5% increase in price cause consumer expenditures to rise or fall?

Explain. **(3 Marks)**

II. Although monopolies are usually have often been faulted for consumer exploitation; there are some aspects of monopolies which are favourable.

Discuss the arguments put forward in favour of monopolies. **(6 Marks)**

