

NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY

FACULTY OF BUILT ENVIRONMENT

BACHELOR OF QUANTITY SURVEYING (HONOURS) DEGREE

PART IV FIRST SEMESTER EXAMINATIONS MAY 2009

PRINCIPLES OF MICROECONOMICS AQS1104

PART I EXAMINATIONS APRIL 2009

TIME: 3 Hours

TOTAL MARKS: 100

Question 1

The demand for a product is represented by the equation $Q_d = 12 - 2P$ and supply by the equation $Q_s = 2P$, where Q_d and Q_s are quantity demanded and quantity supplied respectively and P is price.

- a) Using the equilibrium condition, calculate the equilibrium price and equilibrium quantity. Illustrate your answers on a graph. (10marks)
- b) Suppose that the government establishes a ceiling price of \$2.
 - i. Explain, with the aid of a graph, the effects of this price ceiling. (10 marks)
 - ii. What might prompt government to establish a price ceiling? (5 marks)

Question 2

- a) Explain the concept of consumer equilibrium under Indifference Analysis. (10 marks)
- b) Using the income and substitution effects, analyse the effect of an increase and decrease in the price of:
 - i. A normal good (5 marks)
 - ii. An inferior good (5 marks)
 - iii. A Giffen good. (5 marks)

Question 3

- a) Analyse and comment on the pricing and output decisions for a firm operating under perfect competition and monopoly both in the short-run and in the long-run. (18 marks)
- b) How efficient are perfectly competitive firms? (7 marks)

Question 4

- a) Define the term “elasticity of demand”. (4 marks)
- b) The demand for the products of a dairy firm are as shown below:

Product Details	Milk	Cheese	Butter
Initial Quantity	5 000	3 400	4 000
New Quantity	4 800	2 000	3 200
Initial Price	\$120	\$170	\$850
New Price	\$220	\$195	\$920

- i. Calculate the price elasticity of demand for each commodity and suggest reasons for the size of the obtained coefficients. (15 marks)
- ii. How would you advise the firm on its pricing policies on the three commodities? (6 marks)

Question 5

- a) Explain and illustrate with the aid of diagrams, the relationship between average, marginal and total product curves, and show the region of economic activity. (5 marks)
- b) Derive the long-run total cost curve under traditional theory. (10 marks)

Question 6

- a) Explain how Adam Smith’s “Invisible Hand” performs its signaling and allocative functions. (13 marks)
- b) Use the Marginal Revenue Productivity theory to discuss the possible effects, on wages and employment, of the introduction of a national minimum wage. (12 marks)

END OF EXAMINATION