NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY

FACULTY OF BUILT ENVIRONMENT

BACHELOR OF QUANTITY SURVEYING (HONOURS) DEGREE

PART IV FIRST SEMESTER EXAMINATIONS MAY 2009

<u>PRINCIPLES OF MICROECONOMICS AQS1104</u>

PART I EXAMINATIONS APRIL 2009

<u>TIME:</u> 3 Hours   **<u>TOTAL MARKS:</u>** 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)

1

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