UNIVERSITY OF SWAZILAND

DEPARTMENT OF ECONOMICS

FINAL EXAMINATION 2007

TITLE OF PAPER: INTRODUCTION TO MICROECONOMICS (1 & 2) – IDE

COURSE CODE: ECON 201 – 1& 2

INSTRUCTIONS: 1.   ANSWER <u>FOUR</u> QUESTIONS: <u>TWO</u> FROM
                          SECTION A AND <u>TWO</u> QUESTIONS FROM
                          SECTION B.
                    2.   ALL QUESTIONS CARRY 25
                          MARKS EACH

TIME ALLOWED: THREE (3) HOURS

THIS PAPER IS NOT TO BE OPENED UNTIL PERMISSION HAS
BEEN GRANTED BY THE INVIGILATOR.

SECTION A

QUESTION 1

(a) The following represents a firm's production scenario

Production function; $Q = L^{0.4}K^{0.6}$, where Q represents the output level with L and K representing factor inputs, labour and capital respectively.

Prices of factor inputs; $P_L = 2$, $P_K = 5$

Where P_L = Price of labour
P_L = Price of capital

Utilizing the Lagrangian method, calculate the following
   (i)   The levels of labour and capital that minimizes costs in order to produce an output level of 12 ($Q = 12$)   [12 marks]
   (ii) The minimum level of costs at the same output level   [5 marks]

(b) Utilizing isoquants analysis, illustrate and explain the concept of   increasing returns to scale   [8 marks]

QUESTION 2

With aid of two diagrams explain and demonstrate that a subsidy is most preferred to taxation as a means of controlling a market. In the case of taxation, use excise tax to argue your case.   [25 marks]

QUESTION 3

(a) Under what conditions will the income effect have an offsetting effect? With an aid of diagram, demonstrate when an income effect more than offset the substitution effect. What kind of a good does this scenario represent?   [13 marks]

(b) With the aid of diagram(s) explain why the compensated demand curve is always downward sloping?   [12 marks]

QUESTION 4

(a)   Inductive and deductive in economic reasoning has been criticized by some economists, discuss these criticisms.   [10 marks]

(b)   Write explanatory notes on each of the following
        (i)   Marginal revenue product   [5 marks]
        (ii)   Deadweight loss   [5 marks]
        (iii)   Marginal rate of technical substitution [5 marks]

SECTION B

QUESTION 5

(a) 'Whether short run or long run, a monopolist will always make profits'. Is this statement true or false? Discuss with an aid of a diagram   [15 marks]

(b) A profit – maximizing monopolist has the following demand functions

$$P = 20 - 0.5Q$$

Cost function $AC = \dfrac{20}{Q} + 4$

     (i) What is the firm's profit maximizing output level   [8 marks]
     (ii) How much profit will the firm earn?   [4 marks]

QUESTION 6

(a) When comparing a perfect competitive firm and monopoly, society is well off under perfect competition. Discuss   [12 marks]

(b) Suppose that a profit-maximizing firm operating under perfect competition condition is faced with the following

     Price = 80

Short run total costs
$$TC = 50 - 10Q + 3Q^2 + 0.1Q^3$$

     (i) Find the firm's profit maximizing output level?   [8 marks]
     (ii) How much profit will the firm earn?   [5 marks]

QUESTION 7

(a) Monopoly always needs regulation. With an aid of a diagram, discuss this rationale   [15 marks]

(b) Distinguish between oligopoly and monopolistic firms   [10 marks]

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QUESTION 8

With an aid of diagrams and relevant economic terms, explain the three stages of production experienced in the short run. Which stage would the producer prefer and why? [25 marks]