UNIVERSITY OF SWAZILAND

DEPARTMENT OF ECONOMICS

SUPPLEMENTARY EXAMINATION 2011/12

TITLE OF PAPER: INTRODUCTION TO MICROECONOMICS

COURSE CODE: ECON 201

INSTRUCTIONS: ANSWER QUESTION <u>ONE</u> IN SECTION A
AND <u>TWO</u> QUESTIONS IN SECTION B

TIME ALLOWED: THREE(3) HOURS

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

SECTION A
COMPULSORY

Question 1

(a)   Graphically, decompose the impact of a price fall into a substitution and an income effect for an inferior good whose income effect outweighs the substitution effect. Comment on the shapes of the resultant compensated and ordinary demand curves.

[8 marks]

(b)   Given a competitive market where the demand function is expressed by

$Q_d = 52 - 2P$ and the supply function is expressed by

$5P - Q_s = 25$

Determine the equilibrium price and quantity levels for the market   [6 marks]

(c)   If the government now imposes a tax of E2 per unit sold, what will be the post-tax equilibrium price and quantity?   [6marks]

(c) How will the producer's revenue be affected by the tax? [6 marks]

(d)   Who bears the tax burden?   [4 marks]

SECTION B
ANSWER TWO QUESTIONS IN THIS SECTION

Question 2

a) Discuss the conditions necessary for the existence of perfect competition   [10 marks]

(b) The following revenue and cost information is for perfectly competitive firm:

$$P = MR = E\ 100$$

$$AC = 204 - 3Q + 0.02Q^2$$

Where P = Prduct price
MR = Marginal Revenue
AC = Average cost
Q = Units of output produced per month

Find the profit maximizing level of output and calculate the level of profit.
[10 marks]

Question 3

a)   Compare and contrast the welfare effects of a non discriminating monopolist and a second degree price discriminator.   [10 marks]

(b)   A Monopoly firm's demand function is given by:

$$Q = 330 - 60\ P$$

Given a constant marginal cost **MC = 0.5**

(i)   Calculate equilibrium price and quantity { 7 marks]
(ii)   Calculate the level of profit [3marks]

Question 4

Distinguish between the following:

(i)   Marshallian demand and Compensated demand. [6marks]
(ii)   Value of marginal product (VMP) and Marginal Revenue Product (MRP)   [7 marks]

(iii) Explain the difference between monopolistic exploitation and monopsonistic exploitation. [7 marks]

Question 5

a) Explain the rationale behind the kinked demand curve used to describe oligopoly.   [11 marks]

b)   Explain why the marginal revenue curve is discontinuous at the kink.   [9 marks]

Question 6

(a)   How does a change in an input's price affect the various short run cost curves? Consider the case of both a fixed and a variable input's price.

[10 marks]

(b)   Demonstrate, algebraically, that when the average cost curve is falling, the marginal cost curve lies below the AC curve.

[10 marks]

Question 7

(a)   Explain the usefulness of the concept of cross price elasticity of demand in an industry.

[7 marks]

(b)   With the aid of diagrams, for a linear demand curve, detail the kind of advice you would offer to a producer regarding the pricing of a product with a highly elastic demand and a large number of substitutes.

[13 marks]