UNIVERSITY OF SWAZILAND

DEPARTMENT OF ECONOMICS

FINAL EXAMINATION 2008

TITLE OF PAPER: INTRODUCTION TO MICROECONOMICS - IDE

COURSE CODE: ECON 201

INSTRUCTIONS: 1.   SECTION A: ANSWER QUESTION 1 AND
                        ONE OTHER QUESTION

                  2.   SECTION B: ANSWER QUESTION 5 AND
                        ONE OTHER QUESTION

TIME ALLOWED :   THREE (3) HOURS

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

Question 1 (Compulsory)

a) Suppose you have 12 hours of study time in which to prepare for three exams. For each hour of study you can expect your mark to be as given in the accompanying table. Suppose you want to allocate your time to maximize your total numerical score on all three exams. (Each is weighted equally in your final result):

Hour	Exam A	MP_A	Exam B	MP_B	Exam C	MP_C
1	40		60		39	
2	65		90		46	
3	80		100		60	
4	90		100		72	
5	95		90		82	
6	99		75		90	
7	100		55		96	
8	100		33		100	
9	99		8		100	
10	95		0		100	

(i) Complete the table above with the marginal product (score) of each hour of study for each exam. (Show work)
                    [6 marks]

(ii)State a general rule for dividing your time to maximize the total score on all three exams. How many hours should be devoted to the preparation of exams A, B, and C. [show work]
                                        [9 marks]

b) (i) Mathematically derive the relationship between elasticity of demand, price and marginal revenue.   [8 marks]

(ii) 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.
[7 marks]

Question 2

"Utility of the consumer is constant along a Compensated demand curve" Discuss.   [20 marks]

Question 3
With the aid of appropriate diagrams, evaluate the following statement:
"A price change for an inferior good with an upward sloping demand curve has an income effect that is stronger than the substitution effect."   **[20 marks]**

Question 4

"A change in the scale of production does not imply varying proportions in the usage of factor inputs even the impact on output produced is different." Discuss.   [20 marks]

SECTION B

Question 5 (Compulsory)

a) With the aid of a diagram, describe how monopolization of a perfectly competitive industry results in welfare loss.
[10 marks]
b) Suppose the industry demand function is given by:

X = 100 - 10P$_x$

and the long run marginal cost is constant at E2.

i) Find the profit maximizing output and price under conditions of Perfect Competition in this industry   [4 marks]

ii) Find the profit maximizing output and price under conditions of Pure Monopoly in this industry   [5 marks]

iii) Calculate the loss in Consumer surplus due to monopolization of the industry   [5 marks]

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iv) How much of the lost consumer surplus is transferred to monopoly profits and how much becomes deadweight loss? (show work) [6 marks]

Question 6

Using the kinked demand analysis, explain how price rigidity occurs in an oligopolistic industry. [20 marks]

Question 7

"Imperfect competition in industry results in exploitation of factor inputs." Discuss, with the aid of diagrams. [20 marks]

Question 8

Using appropriate diagrams, evaluate the following statement " **In a monopoly industry, although consumer welfare is reduced under conditions of first degree price discrimination, society is better off compared to situations where there is no price discrimination"** [20 marks]