

UNIVERSITY OF SWAZILAND

DEPARTMENT OF ECONOMICS

FINAL EXAMINATION 2006

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

COURSE CODE: ECON 201 – 1& 2

INSTRUCTIONS:

- 1. ANSWER FOUR QUESTIONS: TWO FROM SECTION AND TWO 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) Discuss the determinants of price elasticity of demand [9 marks]
- (b) Explain the concept of cross price elasticity of demand [4 marks]
- (c) Why are short-run average cost curves U-shaped [6 marks]
- (d) Why are long-run average cost curves U-shaped [6 marks]

QUESTION 2

Let the demand function for maize be given by:

$$Q = 250Y^{1.3} P^{-1.6} R^{0.7}$$

Whereby:

- Q = quantity of maize demanded
- P = the mean retail price of the maize
- R = the mean retail price of all other commodities

Calculate:

- (i) The price elasticity of demand [6 marks]
- (ii) The income elasticity of demand [6 marks]
- (iii) The cross price elasticity of demand and determine whether the goods in question are compliments or substitutes [7 marks]
- (iv) Explain the usefulness of the price elasticity of demand concept [6 marks]

QUESTION 3

- (a) Utilizing diagrams and algebra, explicitly explain the relationship between unit costs (MC and AVC or ATC) and unit output curves (MP and AP) [15 marks]
- (b) Explain the difference in resource allocation between Capitalist and Socialist economic systems. Compare and contrast the two systems in solving 'economic problem'. [10 marks]

QUESTION 4

The supply and demand functions of a sugar cane farmer are given as follows;

$$1220P = 1129 + 4Q_s$$

$$Q_d + 40.5P = 3000$$

- (a) Determine the equilibrium price and quantity in the market [5 marks]
- (b) If government decides to impose a 15% tax on the farmer, calculate the new equilibrium price and quantity [10 marks]
- (c) If instead of a tax, the government pays a subsidy of E1.50 to the farmer for each tonne sold, determine the new equilibrium conditions and the total amount of the subsidy that has to be paid by the government. [10]

SECTION B

QUESTION 5

- (a) Explain the determinants of market structures [7 marks]
- (b) Explain how cartels may change the functioning of an oligopolistic market? [5 marks]
- (c) Discuss the kinked demand analysis in oligopoly [13 marks]

QUESTION 6

- (a) Utilizing diagrams, illustrate the concept of
 - (i) Monopolistic exploitation of a resource [9 marks]
 - (ii) Monopsonistic exploitation of a resource [9 marks]
 - (iii) How can a minimum wage reduce the exploitative capacity of a monopsonist. In your discussion, reveal the welfare effects [7 marks]

QUESTION 7

- (a) With the aid of diagrams, explain how the law of diminishing returns applies to the shape of the total variable cost curve [10]
- (b) The market demand function of a profit maximizing firm is given by;

$$4P + Q = 16$$

And the average cost (AC) function is given by:

$$AC = \frac{4 + 2 - 0.3 + 0.05Q^2}{Q}$$

Where: P = product price

Q = units of output produced per month

- (i) Calculate the firm's optimal level of output [7 marks]
- (ii) At what price does the level of output in (a) sell? [3 marks]
- (iii) Determine the profit earned by the firm at the optimal levels of price and output [5 marks]

QUESTION 8

Write explanatory notes on each of the following:-

- (a) Imperfect competition [5 marks]
- (b) First degree price discrimination [5 marks]
- (c) Cartel and gentlemen's agreements as applied to oligopoly [5 marks]
- (d) Monopoly vs oligopoly [5 marks]
- (e) Marshallian demand vs compensated demand [5 marks]