

UNIVERSITY OF SWAZILAND
FACULTY OF SOCIAL SCIENCE
DEPARTMENT OF ECONOMICS

MAIN EXAMINATION
NOVEMBER 2010

TITLE OF PAPER : PRINCIPLES OF MICROECONOMICS

COURSE CODE : ECON 102/IDE-ECON 102

TIME ALLOWED : TWO (2) HOURS

INSTRUCTIONS: 1) ANSWER ANY THREE (3) QUESTIONS.

2) INDICATE ON THE COVER OF YOUR
ANSWER BOOKLET WHETHER YOU ARE
FULL-TIME OR PART-TIME.

3) ALL QUESTIONS CARRY EQUAL MARKS
OF 25 EACH.

DO NOT OPEN THIS PAPER UNTIL PERMISSION HAS BEEN
GRANTED BY THE INVIGILATOR

QUESTION 1

Assuming that you are given the following information in the table below:

Product	Price elasticity value	Income elasticity value
Bread	0.30	-0.60
Fuel and light	0.60	0.40
Entertainment	1.36	2.00

- a) State the nature of the price and income elasticity for the three products. (6 marks).
- b) Explain each of the elasticity coefficients given in the table above. (12 marks)
- c) Stating the formula, define the cross elasticity of demand. (2 marks).
- d) List any five determinants of a consumer's demand for say good B. Using functional notation, state the demand function. (5 marks)

QUESTION 2

- a) Discuss the assumptions of the model of perfect competition. (5 marks).
- b) Disequilibria can exist in markets due to artificial restrictions on price and quantity and the existence of unstable equilibrium. Discuss, using graphs. (10 marks).
- c) Define effective and formal incidence of a tax. Show and explain that the effective incidence of a tax depends on the elasticities of demand and supply. (10 marks).

Question 3

Suppose you are given the following data on Nkabindze's total costs of production:

Quantity produced	Total costs (E)
1	10
2	16
3	18
4	28
5	45
6	66

Total fixed costs are E8.

- Calculate average total cost, average variable costs, average fixed cost and marginal cost. State the formula used in each of your calculations. (14 marks).
- Using the calculations in part (a) above, plot the cost curves on the same graph. (5 marks)
- Outline the relationships between the curves in part (b) above. (6 marks)

Question 4

- Using a graph, show and explain how a profit maximising monopolist will set price and output. Why does a monopoly lead to Pareto sub-optimal allocation of resources? (15 marks)
- Distinguish between first, second and third degree price discrimination. (5 marks)
- Define an oligopoly. Explain the oligopoly's kinked demand curve. (5 marks)

Question 1

Write short explanatory notes on the following:

- a) The four main factors of production
- b) Isocost and budget lines
- c) Production possibility frontier and opportunity cost
- d) The relationship between total, average and marginal products.
- e) Collusive oligopoly

(5 marks each)

Question 2

- a) Outline the determinants of price elasticity of demand. (5 marks)
- b) Use a graph to explain why a fall in the price of a good results in an increase in its consumer demand. (10 marks)
- c) Distinguish between consumer and producer surplus. Use diagrams to illustrate your answer. (10 marks)

Question 3

- a) Distinguish between a stable and an unstable equilibrium. Use graphs. (10 marks).
- b) Analyse the effect of a specific sales tax, using demand and supply curves. Show the total tax revenue as well as how it is shared between the consumer and the producer. (10 marks).
- c) How do the elasticities of demand and supply affect the effective incidence of the tax analysed in part (b) above. (5 marks)

Question 4

- a) One of the criticisms levelled against monopoly is that it results in a misallocation of resources. Explain, using a diagram. (10 marks)
- b) Define oligopoly and collusive oligopoly. (5 marks)
- c) Entry barriers may prevent the emergence of competitive firms. List such barriers. (5 marks)
- d) Under perfect competition, equilibrium requires that the MC curve cuts the MR curve from below. Explain. (5 marks)