UNIVERSITY OF SWAZILAND

FACULTY OF SOCIAL SCIENCE

DEPARTMENT OF ECONOMICS

MAIN EXAMINATION

DECEMBER 2014

TITLE OF PAPER: PRINCIPLES OF MICROECONOMICS

COURSE CODE: ECON 102

TIME ALLOWED: TWO (2) HOURS

INSTRUCTION: ANSWER ANY **FOUR** QUESTIONS.

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Question 1

a) List the reasons for having the State play a role in a country's economic system.

(5 marks)

b) Outline the two properties used to compare economic systems. (5 marks)

c) State five problems associated with a planned economic system. (5 marks)

d) Plot the data given in the table below. Show the bundles points (1 to 4) on the graph. State what the figure represents. (5 marks). **NB: Oranges must be on the horizontal axis.**

Bundle	Cars	Oranges
1	0	50
2	1	45
3	2	35
4	3	20
5	4	0

e) Suppose that more labour is introduced for the cars sector only. Show what would happen to the figure in e) above following this change. (5 marks)

Question 2

a) State three determinants of supply and two determinants of demand. (5 marks)

b) State the formulae for the following: cross-price elasticity of demand, price elasticity of demand, elasticity of supply, arc price elasticity of demand and the income elasticity of demand. (5 marks)

c) Suppose that Thabo's income falls from E2000 to E1500 per month, all else unchanged, and this leads to a fall in quantity demanded from 500 units to 300 units. Calculate the income elasticity of demand for Thabo and indicate if it is elastic or inelastic? (5 marks).

d) A decrease in a consumer's income from E2000 to E1000 per month, ceteris paribus, causes her quantity demanded to increase from 400 to 500 units per month. Calculate the elasticity of demand and classify the good (i.e. is it a normal, luxury or inferior good) (5 marks)

e) Stipulate the nature of the price elasticity of supply (Es) when it is equal to: **zero, One, 0< Es<1 and 0<Es<infinity.** (5 marks)

Question 3

a) Fill in the missing details on the table below: State the formulae for average product and marginal product. (10 marks)

Labour	Total Product	Average product	Marginal product
0	0		
1	400		
2	1000		
3	1300		
4	1500		
5	1600		

b) Use a graph to show the **short run equilibrium for a firm making losses** while operating under perfect competition. (5 marks)

c) State three characteristics of a monopoly. (5 marks)

d) State five assumptions made under perfect competition. (5 marks)

Question 4

a) Use graphs to show both the **short run and long run** equilibrium positions for a firm operating under monopolistic competition. (10 marks)

b) Use graphs to show increasing, decreasing and constant returns to scale.
(10 marks).

c) Fill in the missing detail on this table. (5 marks)

Total cost	Total variable cost
250	
500	
750	
1000	
1250	
1500	

NB: total fixed costs equal 200

NB: Do not explain any of the graphs. Just sketch and label them accordingly.

Question 5

Indicate if the following statements are true or false:

I. In a mixed economy resources are allocated by market forces and the state.

II. A PPF reflecting increasing opportunity cost is concave to the origin.

III. The area above the price and below the demand curve represents consumer's surplus.

IV. Indifference curves for perfect substitutes are L-shaped.

V. At equilibrium for the consumer the marginal rate of technical substitution is equal to the marginal utility.

VI. The income and substitution effects following a price increase for a normal good are positive.

VII. Inferior goods are goods have an income elasticity that is greater than 1.

VIII. An indifference curve is also referred to as an equal product curve.

IX. The cross price elasticity of demand for complement goods is positive.

X. The price elasticity of supply is always

XI. Necessities are likely to be perfectly price inelastic in demand.

XII. Average fixed costs will rise as the level of output produced increases.

XIII. The firm faces an elastic demand curve under perfect competition.

XIV. Under monopoly an extra unit of output can be sold without reducing price.

XV. The model of monopolistic competition is also referred to as competition among a few.

XVI. Marginal revenue is the gradient of the total revenue curve.

XVII. For profit maximisation firms will equate MC and MR only.

XVIII. The MRS rises as you slide down an indifference curve.

XIX. A perfectly price inelastic demand curve is a horizontal straight line.

XX. An oligopolist faces an inelastic demand curve throughout.

XXI. For first degree price discrimination the monopolist charges different prices for dissimilar blocks of consumption.

XXII. Under third degree price discrimination the monopoly firm needs to know each consumer's demand curve.

XXIII. Under perfect competition a firm can make losses in the long run.

XXIV. In the long run under monopolistic competition firms exhibit productive and allocative efficiency.

XXV. Economics is generally defined as a social science