UNIVERSITY OF SWAZILAND
FACULTY OF SOCIAL SCIENCES
DEPARTMENT OF ECONOMICS
RE-SIT EXAMINATION PAPER: JULY 2018

TITLE OF PAPER :   MICROECONOMICS I

COURSE CODE   :   ECO 201

TIME ALLOWED :   TWO (2) HOURS

INSTRUCTIONS   :
  1. ANSWER QUESTION ONE (1) AND ANY TWO (2) QUESTIONS OF YOUR CHOICE.
  2. QUESTION ONE (1) CARRIES FORTY (40) MARKS AND THE OTHER QUESTIONS YOU WILL CHOOSE CARRY THIRTY (30) MARKS EACH.
  3. NON PROGRAMMABLE CALCULATORS ARE ALLOWED.
  4. WHERE NECESSARY, FIGURES ARE TO BE ROUNDED UP TO TWO (2) DECIMAL POINTS.

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

QUESTION 1 – COMPULSORY   (Total =40 Marks)

a) Illustrate and explain why the Marginal Rate of Substitution (MRS) is different along an indifference curve.   [10 Marks]

b) Prove mathematically that the following demand function $Q = \alpha - \beta P$ has a constant slope, but different price elasticities of demand for different price levels.   [15 Marks]

c) A consumer derives utility by consuming two goods, namely Bread and Pizza. The price per unit of the goods are $E10$ for Bread, and $E30$ for Pizza. If the consumer has an income of $E600$, present this information in a budget line.   [5 Marks]

d) **State** what will happen to the slope of the graph in (c) above, when the following happens:

   i.   The price of both goods fall by 30%   [5 Marks]

   ii. The price of Pizza decreases to $E20$ per unit whilst that of Bread remains unchanged.   [5 Marks]

ANSWER ANY TWO (2) QUESTIONS FROM THE FOLLOWING:

QUESTION 2

The output of Prime Bakeries can be determined by the following production function:

$$Q = 30K^{1/2}L^{1/2}$$

Where Q is the quantity of loaves of bread produced per day, K is the number of ovens used and L is the amount of labour employed. If the price of an oven is P_K and the price of labour is P_L, and the total cost on ovens and labour is Y, then:

a) Determine the functions for the optimum input combinations.   [15 Marks]

b) If P_K = E20, P_L = E10, and Y= E600, calculate the firm's optimum input combination.

[10 Marks]

c) What is the optimum production level?   [5 Marks]

QUESTION 3

a) Suppose that Dudu's income increases while all the prices of the commodities she consumes remain constant.

   i)   Show graphically and explain fully the kind of curve that would result from only the increase in income.   [15 Marks]
   ii)   What is the name of the curve that results from an increase in Dudu's income?
                                                                                [3 Marks]
   iii)   Judging from the slope of this curve, what type of good does it represent?
                                                                                [2 Marks]

b) Differentiate between a price-consumption curve and an income-consumption curve.
                                                                                [10 Marks]

QUESTION 4

a) "Long run costs of production will be lower than short run costs of production as output level is increased". Explain and illustrate that this statement is true.   [20 Marks]

b) Differentiate between the concepts of economies of scale and economies of scope.
                                                                                [10 Marks]

*****************************GOOD LUCK*****************************