UNIVERSITY OF ESWATINI

FIRST SEMESTER MAIN EXAMINATION PAPER, NOVEMBER 2019

FACULTY OF SOCIAL SCIENCES

DEPARTMENT OF ECONOMICS

COURSE CODE: ECO 301

TITLE OF PAPER: INTERMEDIATE MICROECONOMICS

TIME ALLOWED: 2 HOURS

Instructions
 1. This paper consists of Section (A) and (B).
 2. Section A is compulsory.
 3. Answer any two questions from Section B.

Special Requirements
 Scientific calculator

DO NOT turn examination paper over until instructed to do so.

SECTION A

QUESTION 1 (Compulsory)   **(40 Marks)**

a) Write short explanatory notes on the following consumer theory concepts: **(5 Marks each)**

   i)   Hoteling's theorem.

   ii)   Differentiate between the weak and the strong axioms of the theory of revealed preferences.

b) Given the following utility function: $U = x_1^2 x_2^2$

   i)   Derive the compensated demand functions for the two commodities.   **(10)**

   ii)   Derive the expenditure function.   **(4)**

   iii) Using the appropriate theorem find the compensated demand function for the second commodity.   **(6)**

   iv)   Derive the ordinary demand functions for the two commodities.   **(10)**

SECTION B

Answer Any Two (2) of the Following Questions: **(30 Marks Each)**

QUESTION 2

a) What is the economic interpretation of the second order necessary condition for profit maximization under the monopsony market?   **(5)**

b) Graphical show how profits are maximized under the monopsony market.   **(5)**

c) In a monopsony market the monopsonist production function is a function of only labour and it is given as follows: $Q = 10L - 0.05L^2$

   The wage rate function is given as: $W = 155 + 35L$. If the monopsonist sells his output at price of $P = E300$.

   i)   What will be the profit maximizing output level?   **(10)**

   ii)   What will be the profit maximizing wage rate?   **(2)**

   iii) How much profit will the monopsonist make?   **(3)**

   iv)   Prove that the profit maximizing condition; VMP = MC holds in this case
                                                                               (5)

2

QUESTION 3

a) Argue the case why a contract curve in a standard two-person, two-commodity pure exchange economy represents a pareto efficient allocation. **(15)**

b) According to Walrus law the value of aggregate excess demand is identically zero, and this is true for all possible choices of prices and not just the equilibrium prices. Provide an algebraic proof of this assertion. **(15)**

QUESTION 4

Write short explanatory notes on the following game theory concepts: **(5 marks each)**

    i)   Differentiate between a simultaneous move game and a sequential move game.

    ii)   Nash Equilibrium.

    iii)   Best Response strategy.

    iv)   Differentiate between a dominant strategy and a dominated strategy.

    v)   A pure strategy versus a mixed strategy.

    vi)   Zero Sum Game

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