

**UNIVERSITY OF ESWATINI
FACULTY OF SOCIAL SCIENCES
DEPARTMENT OF ECONOMICS
MAIN EXAMINATION PAPER: DECEMBER 2018**

TITLE OF PAPER : INTERMEDIATE MICROECONOMICS
COURSE CODE : ECO 301
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) Write short explanatory notes on the following: **(10 marks each)**
- i) Rationality of a consumer.
 - ii) Commodity substitution in consumer theory.
- b) Given the following utility function: $U = \sqrt[3]{x_1^2 x_2^2}$
- i) Derive the hicksian demand functions **(10)**
 - ii) Derive the expenditure function **(4)**
 - iii) Use the appropriate theorem to get back the hicksian demand function for the second commodity. **(6)**

ANSWER ANY TWO (2) QUESTIONS FROM THE FOLLOWING:

QUESTION 2

In a monopsony market given that the monopsonist production function is a function of only labour and it is represented as follows: $Q = 10L - 0.05L^2$. The wage rate function is given as: $W = 155 + 35L$. If the monopsonist sells his output at a price $P = E300$.

- i) What will be the profit maximizing output level? **(15)**
- ii) What will be the profit maximizing wage rate? **(3)**
- iii) How much profit will the monopsonist earn? **(2)**
- iv) Prove that the profit maximizing condition; $VMP = MC$ holds in this case. **(10)**

QUESTION 3

Write short explanatory notes on the following general equilibrium concepts: **(5 marks each)**

- a) A pure exchange economy
- b) Gross demand
- c) Final allocation
- d) Walras law
- e) Walrasian equilibrium
- f) Contract curve

QUESTION 4

- a) What is a zero sum game? (3)
- b) What is a dominated strategy? (3)
- c) Create a normal form game of your choice with the relevant payoffs that illustrates the concept of a dominated strategy. (Game should have two players and three strategies) (6)
- d) The prisoner's dilemma game shows that rational individuals might not choose to cooperate even if it might seem that it is in their best interest to do so. Analyse this statement with an example of your choice of a Prisoner's dilemma game. (13)
- e) Represent the prisoner's dilemma game in (c) above as an extensive form. (5)

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