# UNIVERSITY OF SWAZILAND FACULTY OF SOCIAL SCIENCE DEPARTMENT OF ECONOMICS

#### **MAIN EXAMINATION PAPER: MAY 2009**

TITLE OF PAPER

: INTERMEDIATE ECONOMICS THEORY

COURSE CODE

: ECON 301

TIME ALLOWED

: THREE (3) HOURS

#### **INSTRUCTIONS:**

1. ANSWER FOUR (4) QUESTIONS: TWO FROM SECTION A AND TWO FROM SECTION B.

2. ALL QUESTIONS CARRY EQUAL MARKS OF TWENTY FIVE (25) EACH.

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## **SECTION A**

### **Question 1**

a) Describe a rational consumer.

[7 marks]

b) Briefly describe the constraints under which consumers are assumed to operate.

[8 marks]

b) Using a suitable example, explain the law of diminishing marginal rate of Substitution. [10 marks]

**Question 2** 

a) Write short notes on the Roy's Theorem and the Hotelling's Theorem.

[10 marks]

b) Given the following utility function:

$$U(X_1X_2) = X_1^2X_2$$

Derive the ordinary (Marshallian) demand functions for  $X_1$  and  $X_2$ .

[15 marks]

## Question 3

- a) What do you understand by the production theory concept 'Returns to Scale'? [5 marks]
- b) Discuss the type of relationship that exists between total cost, marginal cost and average cost curves of a firm that is experiencing both increasing and decreasing returns to scale (i.e. cubic shaped total cost curve). [20 marks]

# **Question 4**

a) Describe the characteristics of a monopolist.

[7 marks]

b) A monopolist is selling in two markets. The inverse demand curve in market 1 is  $P = 100 - q_1$ . The inverse demand curve in market 2 is  $P = 200 - q_2$ . The firm's total cost function is  $C(q_1 + q_2) = (q_1 + q_2)^2$ . The firm is able to discriminate between two markets.

Find the prices and quantities that he will charge in each market. [18 marks)

## **SECTION B**

#### **Question 5**

Outline the historical development of Macroeconomic Theories.

[25 marks]

## **Question 6**

a) Using a suitable diagram, write short notes on the IS curve.

[10 marks]

b) Given that:

$$C = 40 + 0.8Y$$
 and  $I = 70 - 200i$ ,

Find

a) The IS equation.

[8 marks]

b) The equilibrium levels of income when interest rate is 0.10 and 0.05.

[7 marks]

# Question 7

- a) Explain and graphically show how expansionary fiscal policy works with capital mobility under a fixed exchange rate regime. [12.5marks]
- b) Explain and graphically show how expansionary fiscal policy works with capital mobility under a flexible/floating exchange rate regime. [12.5 marks]

# **Question 8**

Discuss fully how the wage setting in the labor market interacts with the price setting in the product market. [25 marks]