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UNIVERSITY OF SWAZILAND

DEPARTMENT OF ECONOMICS

FINAL EXAMINATION 2005

TITLE OF PAPER: INTRODUCTION TO MICROECONOMICS (1)- IDE

COURSE CODE: ECON 201- 1

INSTRUCTIONS:
1. ANSWER ANY THREE QUESTIONS
2. ALL QUESTIONS CARRY 25 MARKS EACH

TIME ALLOWED: THREE HOURS

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Question 1

Write short notes on each of the following:

a) Increasing returns to scale [3 marks]
b) The law of variable factor proportions [4 marks]
c) Usefulness of the concept of Cross Price Elasticity of Demand in industry. [6 marks]
d) Inductive versus Deductive reasoning in economic modelling [6 marks]
e) Capitalist versus the Capitalist mode of production. [6 marks]

Question 2

a) Mavukuvuku Second-hand Clothing Outlet announces that the price of second-hand clothing will be reduced next year, 2006. Given that this type of clothing is an inferior good, as an economist for the company explain and illustrate the resultant outcome (substitution and income effects) to the sales (output).

[15 marks]

b) For the case of a price increase, showing clearly the income and substitution effects of a price change, demonstrate how the demand curve for a giffen good violates the Law of Demand.

Question 3

Consider the following single good markets:

i) $Q_d = 40 - 4P$
$Q_s = 25 + P$

ii) $Q_d = -2P^2 - 4P + 14$
$Q_s = -1 + 3P$

a) For each market, determine, algebraically the equilibrium values of price and quantity traded.

[14 marks]

b) For market (i), determine, both graphically and algebraically, the effect of a parallel shift in supply. Explain, in economic terms, how the market adjusts itself after such a change in supply.

[11 marks]

Question 4

Use the Lagrangian approach to solve the following cost minimization problem:

$$\text{Min. } C = wL + rK$$
$$\text{s.t. } 100 = L^{1/2} K^{1/2}$$

where all variables have their usual meaning

a) Given that w = E5 and r = E2, how much labour and capital should the producer use? [14 marks]

b) What is the optimum budget for the production of 100 units of output? [5 marks]

c) What is the homogeneity of the production function and what kind of returns to scale does it exhibit? [6 marks]

Question 5

A) As an economist for John Deer Tractor Company, explain how your company can positively utilize information on price elasticity of demand, cross-price elasticity and income elasticity of demand. [10]

b) With the aid of diagrams, explain the behaviour of output in a short run production system. Indicate and comment on the stages of technical efficiency for the variable input. [15 marks]

QUESTION 6

a) ***"A compensated demand curve is always downward sloping"*** True or False, analyse with the aid of diagrams. [13 marks]

b) If the demand function is

$$P = 10 - Q - Q^2$$

And the supply function is