UGANDA MARTYRS UNIVERSITY

FACULTY OF SCIENCE DEPARTMENT OF ECONOMICS

UNIVERSITY EXAMINATIONS SEMESTER I, 2013/14

THIRD YEAR EXAMINATIONS FOR BACHELOR OF SCIENCE (B.ECON & GEN)

ECO3101: ADVANCED MICROECONOMIC ANALYSIS

DATE: 19TH DECEMBER 2013

TIME: 2:00 - 5:00 PM

Instructions:

- i) Answer any FOUR (4) questions.
- ii) Well argued and illustrated answers will earn more marks.

Question One

Write a Cobb-Douglas production function and relate it to the different returns to scale. At what level of factor inputs should a producer utilize the different factor inputs in the long run?

Question Two

Given a production function, how would a producer maximize his profits from a production process in the short run? What would happen to the factor demand when;

- a) The factor price goes up?
- b) The product price goes up?

Question Three

- a) What are the constituent parts of the average total cost curve and what is the relationship of each to the others?
- b) If you produce a product at two different plants with unequal marginal costs, how can you reduce costs and maintain the same level of output?

Ouestion Four

- a) A consumer with a given fixed money income the whole of which he spends on consuming a pair of commodities. How will he go about to maximize his satisfaction?
- b) Prove that an indifference curve cannot be concave to the origin.

Question Five

Differentiate clearly between the substitution effect and income effect of a price change of a commodity. How do these effects help us to classify different goods?

Question Six

Prove that the elasticity of linear demand curve will never be the same throughout its length.

Question Seven

- a) Differentiate clearly between a consumer's surplus and producer's surplus.
- b) Suppose that a consumer is consuming 10 units of a discrete good and the price increases from \$ 5 per unit to \$ 6. However, after the price change, the consumer continues to consume 10 units of that good. What is the loss in the consumer's surplus from this price change? What is the producer's surplus after this change?

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