

UGANDA COARTYRS UNIVERSITY  
FACULTY OF SCIENCE  
SUPPLEMENTARY/SPECIAL 2009/2010  
ECO: 3101 ADVANCED MICROECONOMIC THEORY  
BSC III GEN, ECON

DATE: 3<sup>rd</sup> August 2010

TIME: 2:00pm – 5:00pm

Instructions

---

*Answer any FOUR (4) questions.*

*Well argued and illustrated answers will earn more marks.*

---

**Question One.**

- a) Suppose that a consumer is consuming 10 units of a discrete good and the price increases from shs 500 to shs 600 per unit. However, after the price charge, the consumer continues to consume 10 units of the discrete good. What is the loss in the consumer's surplus from this price charge?
- b) What is the effect of a subsidy in a market with
  - i) A horizontal supply curve?
  - ii) A vertical supply curve? Who among the producers and suppliers gains and why?

**Question Two**

- a) Assuming that the demand for apartments for rental were in a perfectly competitive market and the first 25 potential tenants were each willing to pay \$ 500 per month, while the 26<sup>th</sup> tenant was willing to pay \$ 200 per month. Draw a graph that shows how the demand for apartments would look like and explain why the demand curve takes that shape.
- b) What is the marginal rate of substitution of shs 1000/- notes for shs 5000/- notes?

**Question Three.**

- a) Define price leadership and how it arises.
- b) Define price discrimination and how it is classified. Is it correct to infer that price discrimination is always disadvantageous to consumers?

**Question Four.**

- a) Suppose a firm is maximizing profits in the short run with variable factor X1 and fixed factor X2. If the price of X2 comes down, what happens to the firm's use of X1? What happens to the firm's level of profits?



- b) Suppose that a cost-minimizing firm uses two inputs that are perfect substitutes. If the two inputs are equally priced, what do factor demands facing the firm look like?

#### Question Five

- a) What is the difference between a price offer curve and the income offer curve? What is the usefulness of each of these "offer curves" in understanding the theory of the consumer behavior?
- b) What would be the income effect if the consumer purchases two commodities which are perfect substitutes but the price of one commodity increases while the price of the other remains constant?

#### Question Six

- a) How come that a producer in a perfectly competitive industry is perceived to be producing at zero profits? What are the assumptions and their importance for this to be true?
- b) How far true is the assertion that there is intense competition and big co-operation between firms in an oligopolistic industry?

#### Question Seven

- a) Define the technical rate of substitution and give the properties of this concept. How is this concept useful to the producer?
- b) In a production process, is it possible to have decreasing marginal product of an input yet increasing returns to scale? How?