



MERU UNIVERSITY COLLEGE OF SCIENCE & TECHNOLOGY

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University Examinations 2011/2012

SECOND YEAR, FIRST SEMESTER EXAMINATION FOR DEGREE OF BACHELOR OF
COMMERCE, SECOND YEAR, FIRST SEMESTER EXAMINATIONS FOR DEGREE OF
PURCHASING AND SUPPLIES MANAGEMENT

HBC 2241/HPS 2241: INTERMEDIATE MICRO-ECONOMICS

DATE: DECEMBER 2011

TIME: 2 HOURS

INSTRUCTIONS: Answer Question *opne* and any other *two* questions

QUESTION ONE (30 MARKS)

- a) Explain the following terms:
 - a. Diminishing Marginal returns. (4 marks)
 - b. Diminishing Return to scale. (4 marks)
- b) Why is diminishing Marginal returns considered a short run concept while diminishing returns to scale as long run concept. (6 marks)
- c) Explain the concept of elasticity of substitution. (4 marks)
- d) Suppose we have a production function $Q = 5L^{0.5} K^{0.5}$. Determine
 - a. The marginal product of labour (L). (3 marks)
 - b. The marginal product of Capital (K). (3 marks)
 - c. The marginal rate of technical substitution of labour for capital ($MRTS_{l,k}$) (3 marks)
 - d. The elasticity of substitution of substitution of labour for capital (3 marks)

QUESTION TWO (20 MARKS)

- a) Explain the term, Price discrimination. (7 marks)
- b) Discuss the three types of price discrimination (3 marks)
- c) Under what conditions will a monopolist be willing and able to engage in price discriminations (4 marks)

d) Given the demand and supply functions in a particular market as

$$Q_d = 80 - 6p$$

$$Q_s = 30 + 4p$$

Required:

- i) Equilibrium quantity. (3 marks)
- ii) Equilibrium price. (3 marks)

QUESTION THREE (20 MARKS)

- a) Explain the following terms: (10 marks)
 - a. Pareto optimality
 - b. Externality
 - c. Natural monopoly
- b) Discuss in details the difference between short run productions function and the long run production functions. (10 marks)

QUESTION FOUR (20 MARKS)

- a) A production firm faces the production function $Q = 8L - 24L^2 - 4L^3$
Required:
 - a. Find the maximum points of MP and AP curves. (6 marks)
 - b. Show the MP crosses AP at its maximum point. (4 marks)
- b) Explain how production function and describe the technological constraints facing the firm. (10 marks)

QUESTION FIVE(20 MARKS)

- a) Explain how the following terms are used in economics:
 - a. Scarcity (4 marks)
 - b. Production possibility curve (4 marks)
 - c. Opportunity cost (4 marks)
- b) Suppose a firm has a total cost given as $C = 200 + 10Q + 2Q^2$
Required:
Find the function for AFC + ATC (8 marks)