



# **MACHAKOS UNIVERSITY**

**University Examinations for 2018/2019 Academic Year**

**SCHOOL OF BUSINESS AND ECONOMICS**

**DEPARTMENT OF ECONOMICS**

**FIRST YEAR SUPPLEMENTARY EXAMINATION FOR**

**BACHELOR OF ECONOMICS AND STATISTICS**

**BACHELOR OF ECONOMICS**

**EET 100: MICROECONOMICS THEORY I**

**DATE: 26/9/2019**

**TIME: \_2.00-4.00 PM\_\_\_\_\_**

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## **INSTRUCTIONS TO CANDIDATES**

**Answer Question One and Any Other Two Questions**

### **QUESTION ONE (COMPULSORY) (20 MARKS)**

- a) Write short notes on the following
  - i) Consumer sovereignty
  - ii) Scarcity and choice
  - iii) Opportunity cost
  - iv) The production possibility frontier (10 marks)
- b) Briefly explain the differences between a free market system and a command market system (10 marks)
- c) Distinguish between the shift in demand curve and movement along the demand curve (6 marks)
- d) Explain the factors that may cause an outward shift in supply curve (4 marks)

### **QUESTION TWO (20 MARKS)**

- a) Discuss the economic meaning of costs and profit (4 marks)
- b) Distinguish between the short run, long run, fixed and variable factors (6 marks)

- c) Explain the shape of the production function and Law of Diminishing Returns (6 marks)
- d) Using the following demand and supply functions for a commodity  $x$ , compute the equilibrium price and quantity. (4 marks)

$$Q_d = 100 - 2p; \quad Q_s = 40 + 4p$$

### QUESTION THREE (20 MARKS)

- a) Distinguish between own price elasticity and cross elasticity of demand (4 marks)
- b) Briefly explain the factors that affect own price elasticity of demand for a commodity. (8 marks)
- c) Briefly explain the application of the concept of indifference curve analysis. (8 marks)

### Question Four

Consider the production data below where labour is the variable factor of production:

| Labour (hrs) | Total Physical Products |
|--------------|-------------------------|
| 1            | 15                      |
| 2            | 35                      |
| 3            | 60                      |
| 4            | 90                      |
| 5            | 120                     |
| 6            | 144                     |
| 7            | 158                     |
| 8            | 160                     |
| 9            | 160                     |
| 10           | 158                     |

- a) Find the average physical products and marginal physical products at each level of labour. (8 marks)
- b) Using the data, illustrate and explain the three stages of production in the short-run (12 marks)

**QUESTION FIVE (20 MARKS)**

- a) Briefly discuss characteristics of perfect competition and explain why individual firms are price takers. (10 marks)
- b) With the aid of a diagram analyze short term profit maximization for a monopolist (10 marks)