



# **MOI UNIVERSITY**

**OFFICE OF THE DEPUTY VICE CHANCELLOR ACADEMIC AFFAIRS,  
RESEARCH AND EXTENSION**

## **UNIVERSITY EXAMINATIONS**

### **2014/2015 ACADEMIC YEAR**

**FIRST YEAR END OF SEMESTER I EXAMINATIONS**

**FOR THE DEGREE OF  
BACHELOR OF ARTS/BACHELOR OF BUSINESS  
MANAGEMENT**

**COURSE CODE: ECO 110**

**EXAM TITLE: MATHEMATICS FOR ECONOMICS**

**DATE: 3<sup>RD</sup> DECEMBER, 2014    TIME: 2 .00 P.M. – 5.00 P.M.**

---

***INSTRUCTION TO CANDIDATES***

**➤ SEE INSIDE.**

**THIS PAPER CONSISTS OF (1) PRINTED PAGES**

**PLEASE TURN OVER**

## **INTRODUCTION TO MICROECONOMICS**

**ECO 110**

### **QUESTION ONE**

- a) Explain the following tools of economic analysis
  - I. The deduction method (7mks)
  - II. The inductive method (7mks)
- b) Examine the merits and demerits of the above tools of economic analysis (11mks)

### **QUESTION TWO**

- a) Discuss the difference between the law of marginal returns and the law of returns to scale (15mks)
- b) Using illustration explain the least cost combination as applied in the production function (10mks)

### **QUESTION THREE**

- a) Using diagrams explain the following movement and give reason why they occur
  - i. Movement along the demand curve (5mks)
  - ii. Shift of the demand curve (5mks)
- b) Explain the property of isoquant curves in the production function (7mks)
- c) Distinguish between oligopolistic and monopolistic competition (8mks)

### **QUESTION FOUR**

- a) Distinguish between marginal rate of substitution and marginal rate of technical substitution (10mks)
- b) With the help of a diagram distinguish the income effect and the substitution effect of price change. (15mks)

### **QUESTION FIVE**

Explain the following terms

- i. Indifference curves
- ii. Budget line
- iii. Income elasticity
- iv. Giffen goods
- v. Economics as a normative science (5mks each)

### **QUESTION SIX**

- a) Distinguish between short run and long run costs of a firm (10mks)
- b) With the help of a diagram explain why marginal revenue curve cut marginal cost curve from below. (15mks)