

## TECHNICAL UNIVERSITY OF MOMBASA SCHOOL OF BUSINESS

# DEPARTMENT OF MANAGEMENT SCIENCE UNIVERSITY EXAMINATIONS 2016/2017

#### FIRST YEAR FIRST SEMESTER EXAMINATIONS FOR BACHELOR OF

#### **BUSINESS AND OFFICE MANAGEMENT**

**BFI 4102: MICROECONOMICS** 

END OF SEMESTER EXAMINATIONS
SERIES: DECEMBER 2016
TIME: 2 HOURS

### **INSTRUCTIONS:**

- 1. Answer Question **ONE** (**Compulsory**) and any other **TWO** questions.
- 2. Question one carries 30 marks
- 3. Other questions carry 20 marks each.
- 4. Marks will be awarded to students who demonstrate accuracy and clarity of presentation.
- 5. Calculators are allowed in the examination room

#### **QUESTION ONE (COMPULSORY)**

- a) Define normal and inferior goods. Give an example in each case (5 marks)
- b) State the meaning of the following equation  $\frac{MU_F}{p_F} = \frac{MU_m}{p_m}$ . Where: F= food, MU=

Marginal utility, m=medicine, P= Price

(4 marks)

c) Write short notes on the following

(6 marks)

- i. Indifference curve
- ii. Compensation variation
- iii. Consumer surplus
- d) Consider the production function  $Q = AL^{\alpha}$  where  $0 < \alpha < 1$  and A > 0
  - i. Find the marginal product of labour (MP<sub>L</sub>) in terms of  $\alpha$ , L and A (4 marks)
  - ii. Determine the slope of MP<sub>L</sub>

(3 marks)

iii. What is the sign of the slope of MP<sub>L</sub>?

- (2 marks)
- e) The demand facing ABC Company Ltd for its products is represented by the equation

 $Q_d = 50 - P$ , Where;  $Q_d$  is quantity demanded and P is price. The supply of the company is given as  $Q_s = 5 + 0.5P$ , Where;  $Q_s$  is the quantity supplied.

#### Required

i. Solve the equilibrium quantity and price.

(2 marks)

ii. If the government imposes a specific sales tax at the rate of Shs 2 per unit, compute the new equilibrium price and quantity? (4 marks)

#### **QUESTION TWO**

a) Discuss the main features of oligopolistic form of a market structure.

(6 marks)

b) Discuss any four merits of a socialist economic system.

(8 marks)

c) Define positive and normative economics giving an example in each case

(6 marks)

#### **QUESTION THREE**

a) Given the following demand and cost functions of a monopolist as:

$$P = 100 - 2Q$$
  
 $C = 50 + 40Q$  Where P= price, Q= output, C=cost. Calculate:

- i. The monopolist maximizing output (4 marks)
- ii. The monopolist maximizing price (4 marks)
- iii. The monopolist profit (4 marks)
- b) Discuss the assumptions under the revealed preference theory (8 marks)

#### **QUESTION FOUR**

- a) Explain the determinants of supply of a commodity. (8 marks)
- b) With the aid of well labeled diagrams differentiate between movement along the demand curve and shift of the demand curve citing the determinants in each case. (8 marks)
- c) Differentiate between cross and income elasticity of demand. (4 marks)

#### **QUESTION FIVE**

- a) Given a consumer's budget/ income constraints as  $\overline{m}$ , where:-  $P_y$  = price of good Y,  $P_x$  = price of good X,  $Q_Y$  = quantity of good Y,  $Q_x$  = quantity of good X.  $P_x = 100, P_y = 200, \overline{m} = 2000$ . Determine the consumer's budget line (illustrate with a diagram) (8 marks)
- b) Explain the causes of monopoly (8 marks)
- c) What is a Veblen good (4 marks)