KABARAK UNIVERSITY

UNIVERSITY EXAMINATIONS

FIRST SEMESTER, 2016/2017 ACADEMIC YEAR

EXAMINATION FOR THE DEGREE OF BACHELOR OF COMMERCE

ECON 110: INTRODUCTION TO MICROECONOMICS

STREAM: Y1S1 **TIME:** 9.00-11.00 A.M

EXAMINATION SESSION: DECEMBER **DATE:** 5/12/ 2016

INSTRUCTIONS

1. Answer question one
2. Attempt and other two questions

QUESTION ONE **(30 marks)**

a) Clearly distinguish between each of the following pairs of concepts:

i) Marginal cost and opportunity cost. **(2 marks)**

ii) Budget line and isocost line. **(2 marks)**

iii) Change in quantity demanded and change in demand. **(2 marks)**

iv) Returns to scale and economies of scale. **(2 marks)**

v) Price floor and price ceiling. **(2 marks)**

b) Suppose that the general demand and supply functions are:

$Q = -600 + 10P$

$Q = 60 - 2P + 0.01M + 7P_R$

Where: Q is Quantity;

P is Price;

M is average consumer income which is Shs. 40,000;

P_R is price of a related good which is Shs. 20.

i) Identify which is the demand function and which is the supply function. Explain your answer. **(2 marks)**

ii) Compute the equilibrium price and quantity. **(4 marks)**

iii) From (i) above, compute and interpret the price elasticity of demand at equilibrium. **(3 marks)**

c) The following table represents a simple, hypothetical economy that is producing rice and chicken.

Type of product	Production alternatives				
	A	B	C	D	E
Rice	0	1	2	3	4
Chicken	10	9	7	4	0

i) Explain what the point along the PPF implies. **(2 marks)**

ii) What does a point inside the PPF mean? **(2 marks)**

iii) Suppose the firm is producing at point B, what is the opportunity cost if the firm decides to move from point B to point C? **(2 marks)**

d) The following table shows a total utility schedule for a consumer of chocolate bars

Number consumed	Total utility
0	0
1	10
2	25
3	45
4	60
5	70
6	70
7	65

At what point does the consumer experience diminishing marginal utility? **(5 marks)**

QUESTION TWO

a) Given a cost function $TC = 2500 + 2Q^3$

i) Explain the variables in the above function **(2 marks)**

ii) Calculate average cost and marginal cost **(6 marks)**

b) Given that $\pi = TR - TC$

Where: π = Profit, TR = Total revenue and TC = Total cost. Further, you are given that both TR and TC are dependent on output (that is, TR =f (Q) and TC= f (Q)

i) Show the two conditions for profit maximization **(2marks)**

ii) Assuming a perfectly competitive market, use diagrams to show a profit-making and loss-incurring firm in the short run **(6 marks)**

c) Discuss the importance of marginal cost in economics **(4 marks)**

QUESTION THREE

a) Use indifference curves to show the equilibrium condition. **(10 marks)**

b) i) Distinguish between a normal good and an inferior good. **(2 marks)**

iii) A consumer has a fixed income and two commodities (X and Y). Assuming that the price of commodity X changes, while the price of commodity Y is kept constant. Use appropriate diagram to show the price-consumption curve for a normal good

(8 marks)

QUESTION FOUR

a) Define oligopoly. **(2 marks)**

b) The government of Kenya came up with a new policy in which Safaricom must give a 90-day notice before adjusting phone call prices. Suppose Safaricom decides to enter into a collusive agreement with Airtel, use diagrams to show their profit-maximizing price and output.

(10 marks)

c) Explain the shape of the long-run average total cost curve. **(8 marks)**

QUESTION FIVE

Compare and contrast a perfectly competitive industry with a monopolistically competitive industry (Note: use appropriate diagrams). **(20 marks)**