# GARISSA UNIVERSITY COLLEGE 

(A Constituent College of Moi University)

# UNIVERSITY EXAMINATION $2016 / 2017$ ACADEMIC YEAR ONE FIRST SEMESTER EXAMINATION <br> SCHOOL OF BUSINESS AND ECONOMICS 

FOR THE DEGREE OF MASTERS OF BUSINESS MANAGEMENT
COURSE CODE: MBA 813
COURSE TITLE: Managerial Economics

## EXAMINATION DURATION: 3 HOURS

## INSTRUCTION TO CANDIDATES

- The examination has SIX (6) questions
- Question ONE (1) is COMPULSORY
- Choose any other THREE (3) questions from the remaining FIVE (5) questions
- Use sketch diagrams to illustrate your answer whenever necessary
- Do not carry mobile phones or any other written materials in examination room
- Do not write on this paper


## QUESTION ONE (COMPULSORY)

(a) You have been appointed to manager of a factory and your main task is to make decisions that will make a turn- around in its fortune by witnessing vibrant growth. Explain the very decisions you will make.
(b) While considering to increase its revenue, a firm wants to increase the price of its goods by five while increasing advertisement expenditure by 15 percent. If the price elasticity of demand is -1.5 and advertising elasticity of demand is +0.6 , explain whether you would foresee an increase or decrease in revenues.
(c) Define demand forecasting and describe five ways of forecasting demand.

## QUESTION TWO

(a) Explain the properties of indifference curves.
(b) The principle of diminishing marginal rate of substitution demonstrates that as a consumer looses a given amount of good Y while gaining good X , the marginal rate of substitution goes on reducing. As a demonstration of this very principle, draw a clearly labeled hypothetical indifference curve and show that the slope of the tangent $\mathrm{GH}=\mathrm{OG} / \mathrm{OH}$, the slope of the tangent $\mathrm{KL}=\mathrm{OK} / \mathrm{OL}$ and finally the slope of the tangent $\mathrm{MN}=\mathrm{OM} / \mathrm{ON}$. If point P is at the top most of the indifference curve, while point R is at the middle of the indifference curve and S at the lowest part of the curve, what are the marginal rates of substitution of these points? What can you say about the relative sizes and magnitudes of $\mathrm{KL}, \mathrm{GH}$ and MN ? What does this tell us about the principle of diminishing marginal rate of substitution on an indifference curve? Explain concisely [11 marks]

## QUESTION THREE

A consumer has an income of Ksh of500 rice and wheat. If the consumer's income increases from Ksh 500 to Ksh 600, draw a well labeled consumer's equilibrium curve explaining consumer's consumption and determine where the consumer's equilibrium will be located and explain why. Show that the slope of the budget line is equal to the marginal rate of substitution of the indifference curve to which it (the budget line) is tangent.

## QUESTION FOUR

The manager of mlolongo cold drink is to make a decision between two investment projects. Project A investment envisages to manufacture cold milk bottles while project B envisages to manufacture icecream. The two investment projects yield the following net cash flows and the initial expenditure.

Net cash flows

| Investment projects | Year1 | Year2 | Year3 | initial investment |
| :--- | :---: | :--- | :---: | :---: |
| A | 50000 | 70000 | 40000 | 120000 |
| B | 40000 | 80000 | 50000 | 110000 |

(a) Calculate the net present value (NPV) of each project with risk free discount rate of 8 percent.
(b) Which of the investment projects the manager should choose if the risk premium is 4 percent on project A and 6 percent on project B ?
[7.5 marks]

## QUESTION FIVE

(a) By the use of a curve, show how a firm in a perfectly competitive market incurs losses.
[7.5 marks]
(b) For a perfectly competitive firm, the following short run function is given;
$T C=2+4 Q+Q^{2}$. if the price of the product prevailing in the market is Ksh 8, at what level of output the firm will maximize profits?

