COURSE TITLE: PRINCIPLES OF MICROECONOMICS

COURSE CODE: ECON 101

INSTRUCTIONS

- *Question one in section A is compulsory.*
- *Answer any other two questions from section B.*

SECTION A

Question One

- Briefly discuss the assumptions of indifference curves. What is their application in economics? Are there any criticism concerning the use of indifference curves? Explain. (10 marks)
- Suppose a firm increases the price of its product by 2% and the quantity demanded decreases by 3%; what is the price elasticity of demand? (Write down the formula and solve). Interpret the result. (10 Marks)
- Using a relevant diagram, illustrate the law of diminishing returns. (10 Marks)

SECTION B

Question Two

- How is the concept of equilibrium related to allocative efficiency? Illustrate using a relevant diagram. (10 Marks)
- Given the following functions, determine P* and Q* (10 Marks)

Qd = 14 - 2P

$Qs = 2 + 4P$

Question Three

- Does the Kenyan economy have any monopolies? Giving examples where applicable, discuss the main features of a monopoly, and its sources. (14 Marks)

- Given that a firm operates in a competitive market. Show that AR = P. (6 Marks)

Question Four

- Using a PPF curve, show the following:
- Scarcity.
- Increasing opportunity cost.
- Productive/technological efficiency. (14 marks)

- Can the PPF be used to show allocative efficiency? Explain. (6 Marks)

Question Five

Suppose an industry has only one firm and the cost function is given by:

$C = 200 + 10Q^2$

While the demand function for the industry is:

$P = 220 - Q$

- Find the profit maximizing output and use the second order condition to confirm the answer. (10 marks)

- Find the profit for the firm. (10 Marks)