



**SCHOOL OF COMPUTING AND ENGINEERING SCIENCES**  
**BACHELOR OF SCIENCE IN COMPUTER NETWORKS AND CYBER SECURITY**  
**BACHELOR OF SCIENCE IN INFORMATICS AND COMPUTER SCIENCE**  
**END OF SEMESTER EXAMINATION**  
**CNS 1105/ICS 1105: FUNDAMENTALS OF ECONOMICS**

**DATE:** Thurs, 1<sup>st</sup> Aug 2024

**TIME:** 13:00 – 15:00

**Instructions**

1. This examination consists of **FIVE** questions.
2. Answer **Question ONE (COMPULSORY)** and any other **TWO** questions.

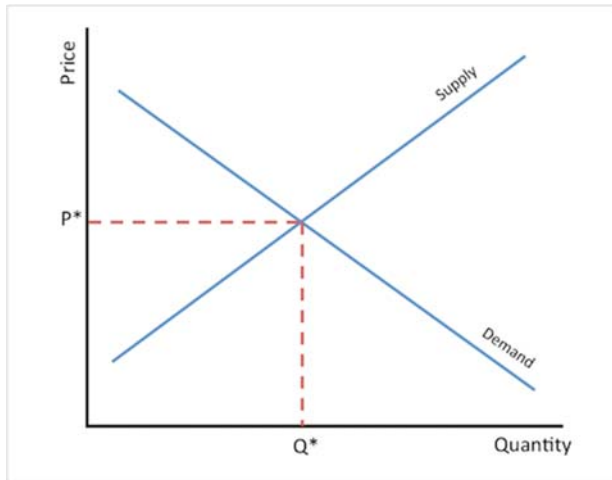
**Question ONE (Compulsory)**

Distinguish between the following concepts as used in economics.

- |      |  |                  |
|------|--|------------------|
| i)   | Positive and normative economics   | <b>(3 Marks)</b> |
| ii)  | Inferior goods and normal goods  | <b>(3 Marks)</b> |
| iii) | Economic growth and economic development   | <b>(3 Marks)</b> |
| iv)  | Terms of trade and balance of payment  | <b>(3 Marks)</b> |
| v)   | Economies of scale and Diseconomies of scale   | <b>(3 Marks)</b> |
| vi)  | Outline <b>THREE</b> functions of money  | <b>(3 Marks)</b> |
| vii) | Suppose the market demand curve for mangoes is given by the equation $Q_d = 500 - 4P$ , while the market supply curve for mangoes (when $P \geq 50$ ) is described by the equation $Q_s = -100 + 2P$ , where $P$ is the price of mangoes expressed in dollars per barrel, and quantity ( $Q_d$ or $Q_s$ ) is in thousands of barrels per year. |                  |

**REQUIRED:**

- a) Calculate the equilibrium market price. **(2 Marks)**
  
- b) What will be the equilibrium quantity demanded and supplied? Show this equilibrium graphically. **(4 Marks)**



viii) Outline **THREE** characteristics of perfect competition **(3 Marks)**

ix) Highlight **THREE** causes of inflation **(3 Marks)**

**(Total 30 marks)**

### Question TWO

a) In the recent past, youth unemployment has been increasing at an alarming rate in the Republic of Kenya, a situation considered by experts as a time bomb. As an economics expert, recommend **FIVE** measures that may be taken to address the situation. **(10 Marks)**

b) i) State the law variable proportions **(2 Marks)**

ii) Explain **FOUR** assumptions of the law in (i) above **(8 Marks)**

**(Total: 20 Marks)**

### Question THREE

a) The Central Bank is a government institution that is responsible for ensuring stability in the working of a country's financial system. Explain **FIVE** functions of the central bank in an economy. **(10 Marks)**

b) The law of demand does not hold in all situations. Explain **FIVE** such situations. **(10 Marks)**

**(Total: 20 Marks)**

### Question FOUR

a) Draw the demand curve for orange juice,  $D_1$ , and choose a point  $A (P_1, Q_1)$  on the demand curve. What happens in each of the following scenarios? Why? **(2 Marks)**

i. The price of apple juice increases **(2 Marks)**

ii. The price of orange juice falls **(2 Marks)**

iii. Consumers' income falls (and orange juice is a normal good) **(2 Marks)**

- b) A rise in the consumers' disposable income from Kenya Shilling of 1500 to Kenya Shilling of 2000 triggered the demand for good X to reduce from 20,000 to 15,000 units per month.

**REQUIRED:**

- i. Calculate the price elasticity of demand using the Standard Method. **(2 Marks)**
  - ii. Interpret the income elasticity of demand in (i) and identify the type of good in question. **(2 Marks)**
  - c) Explain **FOUR** factors that influence the elasticity of supply. **(8 Marks)**
- (Total: 20 Marks)**

**Question FIVE**

- a) In the process of determining the national income statistics of a country, economists may face several problems. Explain **FIVE** such problems **(10 Marks)**
  - b) Describe **THREE** characteristics of a monopoly market structure. **(4 Marks)**
  - c) With the help of relevant examples, explain **THREE** sources of monopoly Power. **(6 Marks)**
- (Total: 20 Marks)**