INTERNATIONAL UNIVERSITY OF EAST AFRICA
'Learning to Succeed'

HIGHER EDUCATION CERTIFICATE

END OF SEMESTER EXAMINATIONS - DECEMBER 2025

PROGRAMME: HEC
YEAR/SEM: YEAR 1/SEMESTER 2
COURSE CODE: FDN 1207
NAME: INTRODUCTION TO INFORMATION TECHNOLOGY

DATE:
TIME:

INSTRUCTIONS TO CANDIDATES:

SECTION A

Write short and precise answers – Answer all Questions

Question 1:

Explain the different types of computer memory? **[4 Marks]**

Question 2:

How do you think AI and automation will influence the future of computer skills? **[4 Marks]**

Question 3:

Explain the term Software as applied in computing. **[4 Marks]**

Question 4:

List the Output Devices of a computer system. **[4 Marks]**

Question 5:

Explain the term Hardware as applied in computing. **[4 Marks]**

Question 6:

List the Input Devices of a computer system. **[4 Marks]**

Question 7:

List the three components of a Central Processing Unit? **[4 Marks]**

Question 8:

List any four examples of data processed by a computer. **[4 Marks]**

Question 9:

List the challenges faced when using a computer. **[4 Marks]**

Question 10:

Briefly explain the different types of computers. **[4 Marks]**

Question 11:

Explain any four types of operating systems you know. **[4 Marks]**

Question 12:

List the most essential networking hardware devices. **[4 Marks]**

Question 13:

Briefly explain the Functions Of Information Technology. **[4 Marks]**

Question 14:

Explain briefly four IT Careers you know. **[4 Marks]**

Question 15:

List some of the different forms in which Data exists. **[4 Marks]**

Question 16:

Explain any four Characteristics of Valuable Information. **[4 Marks]**

Question 17:

Explain the five Information System Components. **[4 Marks]**

Question 18:

Briefly differentiate between data and information as applied in computing with examples. **[4 Marks]**

Question 19:

Convert 400 from decimal to binary? **[4 Marks]**

Question 20:

Briefly explain information technology as applied in computing. **[4 Marks]**

SECTION B

Long Essay - Answer any 3 Questions

Question 1:

Explain the purpose of the following devices with examples:

a) Input devices. **[7 Marks]**

b) Output devices. **[7 Marks]**

c) Main memory. **[6 Marks]**

Question 2:

Explain the different steps followed when developing a system. **[20 Marks]**

Question 3:

Explain the different Business Information Systems used in computing. **[20 Marks]**

Question 4:

a) Define an Operating System. **[4 Marks]**

b) Briefly explain the objectives of operating system. **[6 Marks]**

c) Explain the three major basic elements that make up the design components of any operating system. **[10 Marks]**

Question 5:

a) Explain some of the business uses of computers. **[10 Marks]**

b) Explain the different types of computer networks. **[10 Marks]**

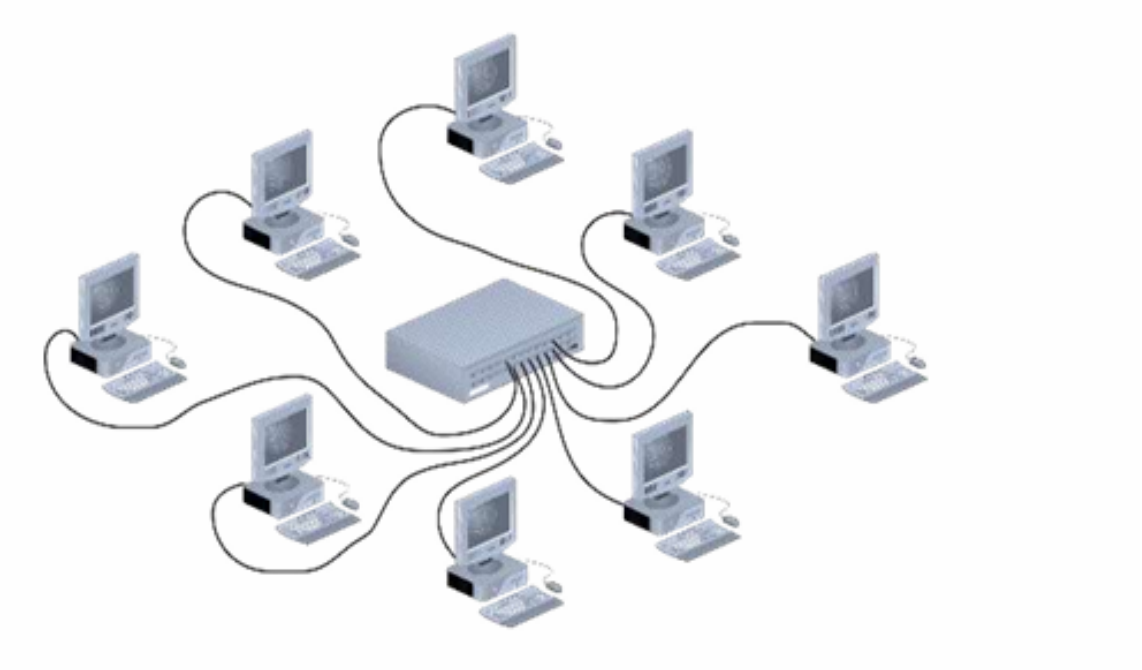
Question 6:

a) Briefly explain the meaning of ASCI. **[4 Marks]**

b) Given two numbers 2000 and 1315. Convert them from decimal to binary? **[16 Marks]**

Question 7:

a) Identify the network topology in the diagram below. **[4 Marks]**



b) Briefly explain the advantages and disadvantages of the network topology above. **[16 Marks]**

Question 8:

a) Briefly explain the internet technologies used in the IT world today. **[10 Marks]**

b) Briefly explain the role of internet in the modern society today. **[10 Marks]**

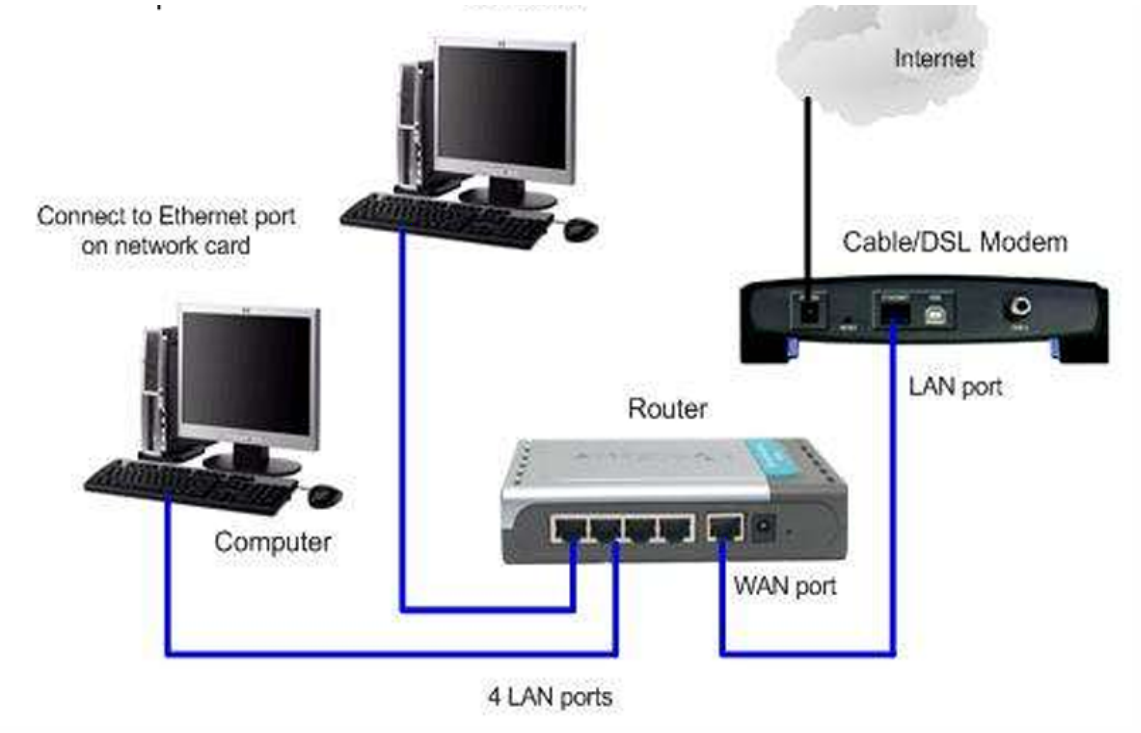
Question 9:

a) Convert **1000** from base 10 to binary. **[10 Marks]**

b) Convert **1988** from base 10 to hexadecimal. **[10 Marks]**

Question 10:

Explain the different types of networks and the other network hardware used to accomplish the task of networking in the network diagram below. **[20 Marks]**


Internet
Connect to Ethernet port
on network card
Cable/DSL Modem
LAN port
Router
Computer
WAN port
4 LAN ports