INTERNATIONAL UNIVERSITY OF EAST AFRICA
'Learning to Succeed'

HIGHER EDUCATION CERTIFICATE

END OF SEMESTER EXAMINATIONS - AUGUST 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:

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

Question 2:

Convert 100 from decimal to binary? **[4 Marks]**

Question 3:

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

Question 4:

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

Question 5:

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

Question 6:

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

Question 7:

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

Question 8:

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

Question 9:

What does URL stand for?. **[4 Marks]**

Question 10:

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

Question 11:

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

Question 12:

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

Question 13:

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

Question 14:

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

Question 15:

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

Question 16:

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

Question 17:

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

Question 18:

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

Question 19:

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

Question 20:

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

SECTION B

Long Essay - Answer any 3 Questions

Question 1:

Explain the common terms listed below used in computer networking

i. IP address. **[5 Marks]**

ii. Nodes. **[5 Marks]**

iii. Routers. **[5 Marks]**

iv. Switches. **[5 Marks]**

Question 2:

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

b) Given two numbers 1000 and 1515. Convert them from decimal to binary? **[16 Marks]**

Question 3:

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

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

Question 4:

a) What is a driver as applied in computing? . **[4 Marks]**

b) Differentiate between Cold booting and warm booting. **[6 Marks]**

c) List the major functions of operating systems. **[10 Marks]**

Question 5:

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 6:

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

Question 7:

Technology has improved education and learning processes.

a) Explain two ways in which technology can be used to assist the teacher. **[10 Marks]**

b) Describe an example of how you use technology to assist with your studies. **[10 Marks]**

Question 8:

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

Question 9:

Explain the different ways used to Achieve a Competitive Advantage in business. **[20 Marks]**

Question 10:

Explain the purpose of the following devices with examples:

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

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

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