INTERNATIONAL UNIVERSITY OF EAST AFRICA
'Learning to Succeed'

HIGHER EDUCATION CERTIFICATE

END OF SEMESTER EXAMINATIONS - APRIL 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 differentiate between data and information as applied in computing with examples. **[4 Marks]**

Question 2:

Briefly explain an information system. **[4 Marks]**

Question 3:

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

Question 4:

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

Question 5:

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

Question 6:

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

Question 7:

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

Question 8:

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

Question 9:

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

Question 10:

Briefly explain the meaning of Information Technology. **[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:

What is a Central Processing Unit? **[4 Marks]**

Question 15:

What is RAM? **[4 Marks]**

Question 16:

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

Question 17:

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

Question 18:

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

Question 19:

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

Question 20:

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

SECTION B

Long Essay - Answer any 3 Questions

Question 1:

Explain the purpose of the following devices in a wireless LAN (WLAN):

a) Switch. **[10 Marks]**

b) Router. [10 Marks]

Question 2:

Information about the planets in the solar system is listed below in the following order:

planet, diameter (km), distance from the Sun (millions of km) and length of year.

Mercury, 4 840, 58, 88 Earth days

Venus, 12 200, 108, 225 Earth days

Earth, 12 800, 150, 365 Earth days

Mars, 6 750, 228, 687 Earth days

Jupiter, 143 000, 778, 12 Earth days

Saturn, 121 000, 1430, 29 Earth days

Uranus, 47 200, 2 870, 84 Earth days

Neptune, 44 600, 4 500, 154 Earth days

Pluto, 6 000, 5 900, 248 Earth days

You are required to do the following:

a) Create or Draw a table with ten rows and four columns. **[10 Marks]**

b) Put the information above into the table under the headings in the appropriate columns. [10 Marks]

Question 3:

Explain the following terms:

a) FTP. [4 Marks]

b) Upload. **[4 Marks]**

c) Download. [4 Marks]

d) VoIP. [4 Marks]

c) Software. **[4 Marks]**

Question 4:

Explain the purpose of the following devices with examples:

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

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

c) Main memory. **[6 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) What is a computer 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 7:

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

Question 8:

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

Question 9:

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 10:

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