NATIONAL OPEN UNIVERSITY OF NIGERIA
University Village, Plot 91, Cadastral Zone,
Nnamdi Azikiwe Expressway, Jabi, Abuja

FACULTY OF COMPUTING

2024_2 EXAMINATION

Course Code:	CIT701
Course Title:	Foundation of Information and Communication Technology
Credit Unit:	3
Time Allowed:	2½ hours
Instruction:	Answer Question 1 and any other three (3) questions

Q1 **25 marks**

a. Explain the concept Information Communication Technology (ICT)? Describe its importance in today's society. (6 marks)

b. Computer systems are composed of several basic components. What are these components? (5 marks)

c. Enumerate 5 ways in which information can be transmitted (5 marks)

d. Differentiate between a computer and a computer system (6 marks)

e What term is used to describe the amount of memory required to store one million bytes, letters or characters (3 marks)

Q2 **15 marks**

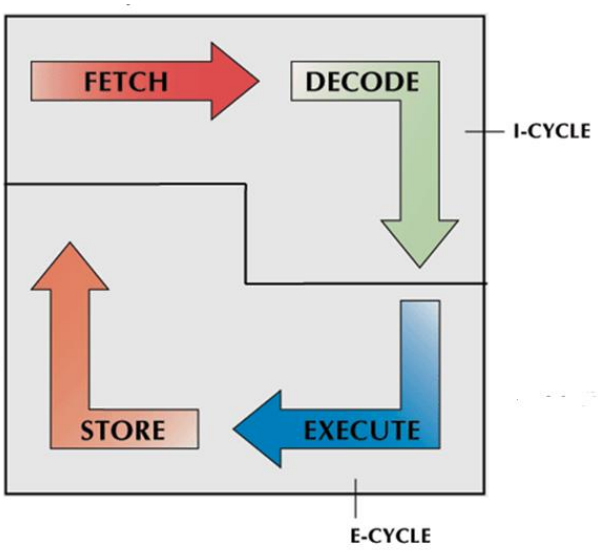
a. Enumerate each layer in the seven layers of the OSI model (7 marks)

b. Explain the concept of cloud computing and how it is transforming organizations today. (4 marks)

c. Outline (4) four common features of application software (4 marks)

Q3 **15 marks**

a. The following diagram shows the processing sequence and steps of a CPU (Machine Cycle). Briefly explain the four steps. (8 marks)



b. Briefly explain the following terms (7 marks)
   (i) Ports
   (ii) Universal Serial Bus (USB)
   (iii) Add-in Boards
   (iv) Expansion Slot

Q4 **15 marks**

a. What are output devices? Describe THREE output devices in computing? (8 marks)
b. Discuss three differences between storage and memory. (7 marks)

Q5 **15 marks**

a. Explain the concept database? (3 marks)
b. Enumerate any three types of databases (3 marks)
c. What are the different levels of database normalization? (6 marks)
d. Explain the basic functions of a computer mouse (3 marks)

Q6 **15 marks**

a. Explain the following database concepts (8 marks)
   (i) Views
   (ii) Indexes
   (iii) Client server computing
   (iv) SQL
b. What are networking devices? Describe the functions of a router and switch (7 marks)