Course Code   :   **CIT-001**
Course Title   :   **Fundamentals of Computer Systems**
Assignment Number   :   **CIT/CIT-001/ASSIGN/2024-25**
Maximum Marks   :   **25**
Last Dates for Submission :   **31ˢᵗ October, 2024 (For July Session)**
                                      15ᵗʰ April, 2025 (For January Session)

There are four questions in this assignment, which carry 25 marks. Answer all the questions. You may use illustrations and diagrams to enhance the explanations. Please go through the guidelines regarding assignments given in the CIT Programme Guide. The examples, whenever asked to be given, should be different from those that are discussed in the corresponding course material.

Question 1:

(a)   What is computer system? Explain major components of computer system.
                                                                    (2 marks)
(b)   What is printing devices? Briefly explain the various types of printing devices.
                                                                    (2 marks)
(c)   What is secondary memory? Explain capacity, density and speed of hard disk
          drive.   **(2 marks)**

Question 2:

(a)   What is Software? Differentiate between System Software and Application
          Software.   **(2 marks)**
(b)   What is a Flowchart? Explain different symbols used in Flowcharts. Draw a
          flowchart for finding the average marks of ten students in CIT-001 Assignment.
                                                                    (3 marks)
(c)   Write a C program to find the smallest and largest number from a give list of
          ten numbers.   **(2 marks)**

Question 3:

(a)   What is computer network? Briefly explain any three network topologies.
                                                                    (2 marks)
(b)   Differentiate between asynchronous and synchronous mode of data transmission
                                                                    (2 marks)
(c)   Explain following network devices: **(2 marks)**
          i.   Bridge   ii. Hub
          ii.   Switch   iv. Router

Question 4:

(a)   Briefly explain advantages and disadvantages of social networking.   **(2 marks)**
(b)   Explain need of security in information and communication system.
           Also list different security threats in computer network.   **(2 marks)**
(c)   What is computer virus? Explain how a computer system can be protected
           from computer virus.   **(2 marks)**