

**CERTIFICATE IN INFORMATION
TECHNOLOGY (CIT)**

Term-End Examination

June, 2025

**CIT-001 : FUNDAMENTALS OF COMPUTER
SYSTEMS**

Time : 2 Hours

Maximum Marks : 50

Weightage : 75%

Note : *All questions of Section A are compulsory. Answer any **three** questions from Section B.*

Section-A

1. Answer the following multiple choice questions. Only one answer is correct :

1×10=10

- (a) Which of the following is a non-volatile memory ?
- (i) Cache Memory

- (ii) Secondary Memory
 - (iii) Register
 - (iv) Main Memory
- (b) Which of the following is a pointing device ?
- (i) Mouse
 - (ii) Printer
 - (iii) Monitor
 - (iv) Keyboard
- (c) The total access time for a disk is equal to
- (i) Seek time – Latency time
 - (ii) Seek time + Latency time
 - (iii) Seek time $\times$ Latency time
 - (iv) Seek time / Latency time
- (d) GUI stands for :
- (i) General User Interaction
 - (ii) Graphical User Interaction
 - (iii) Graphical User Interface
 - (iv) General User Interface

- (e) One MB is equal to :
- (i) 2^{10} bytes
 - (ii) 2^{16} bytes
 - (iii) 2^2 bytes
 - (iv) 2^{20} bytes
- (f) Which of the following is not a system software ?
- (i) Operating system
 - (ii) MS-Word
 - (iii) Compiler
 - (iv) None of the above
- (g) Which of the following is not a keyword of C programming language ?
- (i) array
 - (ii) for
 - (iii) double
 - (iv) switch

- (h) Walkie-talkie is an example of
 - (i) Simplex communication
 - (ii) Half-duplex communication
 - (iii) Full-duplex communication
 - (iv) None of the above
 - (i) Which of the following types of signals are used for short-range communication ?
 - (i) Radiowave
 - (ii) Infrared
 - (iii) Microware
 - (iv) Dark wave
 - (j) Compromising confidential information comes under
 - (i) Bug
 - (ii) Threat
 - (iii) Virus
 - (iv) Attack
2. (a) What is an algorithm ? Write an algorithm to find area of a circle. 5
- (b) What is parallel transmission ? How is it different from serial transmission ? 5

Section-B

Note : Answer any *three* from the following.

3. (a) What is computer system ? Explain basic computer organization with the help of a block diagram. 5
- (b) What is an operating system ? Briefly explain any *two* functions of operating system. 5
4. (a) What is Main Memory ? Briefly explain the types of main memory. 5
- (b) What is Network Topology ? Explain Ring Topology with the help of a diagram. 5
5. (a) What is OSI model ? Briefly discuss different layers of OSI model. 8
- (b) What is the use of MODEM ? 2
6. (a) What is the need of network security ? List various elements of network security. 5
- (b) What is a database ? Briefly explain database development life cycle. 5

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