

**CERTIFICATE IN INFORMATION
TECHNOLOGY
(CIT)**

Term-End Examination

December, 2024

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

Time : 2 Hours

Maximum Marks : 50

(Weightage : 75%)

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

Section—A

1. Answer the following multiple choice questions.

Only one of the answers is correct : $10 \times 1 = 10$

- (a) Information security is not concerned with

- (i) Confidentiality

- (ii) Availability
 - (iii) Integrity
 - (iv) Affordability
- (b) Computer display is a/an
- (i) Input device
 - (ii) Output device
 - (iii) Storage device
 - (iv) Printing device
- (c) Which memory device has optical storage mechanism ?
- (i) Hard Disk
 - (ii) CD-ROM
 - (iii) Magnetic Tape
 - (iv) Pen-drive
- (d) Which of the following is a part of CPU ?
- (i) Hard Disk
 - (ii) General Register
 - (iii) Program
 - (iv) Network Interface Card

- (e) Which of the following is an example of an output device ?
 - (i) Mouse
 - (ii) Keyboard
 - (iii) Plotter
 - (iv) Bar Code Reader
- (f) The delay between job-submission and job-completion is called
 - (i) Execution Time
 - (ii) Turnaround Time
 - (iii) Compilation Time
 - (iv) Waiting Time
- (g) Which of the following statements prevents any further statements of a program from being executed ?
 - (i) break
 - (ii) continue
 - (iii) switch
 - (iv) case

- (h) Fiber Distributed Data Interface (FDDI) is an example of
 - (i) Bus Topology
 - (ii) Star Topology
 - (iii) Ring Topology
 - (iv) Tree Topology
- (i) Denial-of-Service (DoS) attack
 - (i) Sends large volume of traffic to a critical network element
 - (ii) Alters data packets being transmitted
 - (iii) Sends sensitive information from inside your organization
 - (iv) Executes program file randomly
- (j) Internet is an example of
 - (i) WPAN
 - (ii) MAN
 - (iii) LAN
 - (iv) WAN

2. (a) What is a LAN ? Explain the characteristics of it. 5
- (b) What is memory hierarchy ? Explain its need. 5

Section—B

Note : Answer any *three* from the following.

3. (a) Draw a flowchart to find the sum of three given numbers. 5
- (b) What is Wireless Transmission ? Briefly explain Radiowave and Microwave communications. 5
4. (a) What is the need of network security ? Briefly explain various elements of network security. 5
- (b) Discuss the functions of the following : 5
- (i) Switch
 - (ii) Router

5. (a) What is computer virus ? Classify different types of computer viruses. 5
- (b) Write a C program to find whether a given number is odd or even. 5
6. (a) What is parallel-transmission ? Explain its advantages. 5
- (b) What is an Operating System ? Briefly explain any *four* functions of an operating system. 5

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