

**CERTIFICATE IN INFORMATION
TECHNOLOGY (CIT)**

Term-End Examination

June, 2022

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

Time : 2 hours

Maximum Marks : 50

(Weightage : 75%)

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


SECTION A

1. Answer the following Multiple Choice Questions.

Only one of the answers is correct.

10×1=10

- (a) Which is **not** a component of a processor ?
- (i) Control Unit
 - (ii) ALU
 - (iii) Cache memory
 - (iv) Secondary memory

- (b) Which of the following is an output device ?
- (i) Control Unit
 - (ii) Printer
 - (iii) Scanner
 - (iv) None of the above
- (c) Which of the following is **not** a type of main memory ?
- (i) RAM
 - (ii) PROM
 - (iii) EPROM
 - (iv) None of the above
- (d)  symbol in a flowchart is used for _____ .
- (i) Input
 - (ii) Output
 - (iii) Start
 - (iv) Decision-making
- (e) Which of the following logical operators in C is used for AND ?
- (i) &
 - (ii) &&
 - (iii) !
 - (iv) ||

- (f) _____ is the process to verify that a person or object is who he/she is, or claims to be.
- (i) Authentication
 - (ii) Authorization
 - (iii) Selection
 - (iv) None of the above
- (g) COMMAND.COM contains _____ .
- (i) Only Copy command
 - (ii) Only DIR command
 - (iii) All the internal commands
 - (iv) None of the above
- (h) Which of the following software can cause harm to the computer data and does not belong to the category of virus ?
- (i) Compiler
 - (ii) Interpreter
 - (iii) Phishing
 - (iv) Trojans
- (i) Which of the following is **not** a relational operator ?
- (i) <
 - (ii) < =
 - (iii) >
 - (iv) +

(j) Which of the following is ***not*** an application software ?

(i) MS-Word

(ii) MS-PowerPoint

(iii) MS-Excel

(iv) Windows 7

2. (a) Draw a flowchart to find the area of a rectangle. 5

(b) What is ALU ? Explain the basic functions of ALU in a computer. 5

SECTION B

- 3.** (a) What is full-duplex mode of data transmission ? How is it different from half-duplex mode of data transmission ? Explain briefly. 5
- (b) Write a C program which takes a number as input and displays whether this number is less than or greater than 100. 5
- 4.** (a) Explain the following in context of DBMS, with the help of examples : 6
- (i) Attribute
- (ii) Primary key
- (iii) Key constraint
- (b) Explain any two elements of network security. 4
- 5.** (a) Explain the purpose of using routers in network. 5
- (b) What is computer virus ? Briefly explain the following categories of viruses : 5
- (i) Boot Infectors
- (ii) System Infectors
- 6.** (a) What is a printer ? Explain the advantages of the following printers : 5
- (i) Ink-jet Printer
- (ii) Laser Printer
- (b) What is optical fiber ? Explain its advantages. 5
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