CERTIFICATE IN INFORMATION TECHNOLOGY (CIT)

Term-End Examination

December, 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 of the following is a proper declaration in C-language of variable x of integer type ?
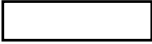
   (i)   int = x;

   (ii) x int;

   (iii) x = int;

   (iv) int x;

(b) Which of the following is **not** a keyword in C programming language ?

(i) char

(ii) int

(iii) scanf

(iv) if

(c) Which of the following is **not** used for looping in C programming language ?

(i) if

(ii) for

(iii) while

(iv) do-while

(d) One byte is equal to _____.

(i) two bits

(ii) four bits

(iii) eight bits

(iv) sixteen bits

(e) Which of the following memory loses its contents when computer is turned off ?

(i) RAM

(ii) ROM

(iii) PROM

(iv) None of the above

(f) Which technology is used widely in the evaluation of aptitude tests ?

    (i)   OCR

    (ii) OMR

    (iii) MCR

    (iv) None of the above

(g) [   ] symbol in ER-Diagram is used to represent _____.

    (i)   Entity

    (ii) Attribute

    (iii) Relation

    (iv) Key Attribute

(h) Which of the following is an example of Guided Media Transmission ?

    (i)   Microwaves

    (ii) Satellite

    (iii) Infrared

    (iv) Coaxial Cable

(i) Which of the following is *not* a network topology ?

    (i)   Star

    (ii) Bus

    (iii) Ring

    (iv) None of the above

(j) A/An _____ is a malware that, when executed, tries to replicate itself into other executable code.

    (i) Operating System

    (ii) Web Brower

    (iii) Virus

    (iv) Application Software

2. (a) Briefly explain ROM and PROM. *5*

    (b) Write a C program to find square of a given number. *5*

SECTION B

3. (a) What is System Software ? Briefly explain any two types of system software. *4*

(b) Briefly explain any three network applications. *6*

4. (a) Define Algorithm. Also write algorithm to find the largest number from three given numbers. *5*

(b) What is Network Topology ? Explain Bus Topology and Star Topology, with the help of diagrams. *5*

5. (a) Explain the use of the following network devices : *6*
   (i) Switch
   (ii) Gateways
   (iii) Bridge

(b) Explain how a virus-infected computer can be cured. *4*

6. (a) Explain any two security issues for a small business, in brief. *5*

(b) Briefly explain database development life cycle. *5*

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