

**CERTIFICATE IN INFORMATION  
TECHNOLOGY (CIT)****Term-End Examination****December, 2015****CIT-001 : FUNDAMENTALS OF COMPUTER  
SYSTEMS***Time : 2 hours**Maximum Marks : 50**(Weightage : 75%)*

---

**Note :** *There are two sections in this paper. All the questions from Section A are **compulsory**. Attempt any **three** questions from Section B.*

---

**SECTION A**

1. In the following objective type questions, each question has four choices. Select the correct choice as your answer. If none of the choices is correct, then write 0 (zero) as your answer. Each objective type question carries 1 mark. Indicate your answer in the answer sheet. *10×1=10*

- (i) The main function(s) of a computer is/are
- (a) Receive input and produce output
  - (b) Information processing
  - (c) Information storage
  - (d) All the above

- (ii) EEPROM can be erased by exposing it to
- (a) Sunlight
  - (b) Ultraviolet radiation
  - (c) Magnetic field
  - (d) Electric charge
- (iii) The refresh rate of a monitor is measured in terms of
- (a) Pixel
  - (b) Resolution
  - (c) Bits
  - (d) Hertz
- (iv) Which of the following is slowest in accessing data ?
- (a) Zip disk
  - (b) Hard disk
  - (c) Floppy disk
  - (d) Magnetic tape
- (v) Computer virus is a
- (a) Hardware
  - (b) Software
  - (c) Memory chip
  - (d) All the above

(vi) Which of the following is **not** a property of Algorithm ?

- (a) Finiteness
- (b) Indefiniteness
- (c) Input
- (d) Output

(vii)  $!$  is a type of a/an \_\_\_\_\_ operator.

- (a) Comparison
- (b) Logical
- (c) Assignment
- (d) Arithmetic

(viii) Ring topology is also known as

- (a) Star topology
- (b) Circular topology
- (c) Bus topology
- (d) Hybrid topology

(ix) Which of the following layers manages connections between different application layers ?

- (a) Application layer
- (b) Transport layer
- (c) Network layer
- (d) Session layer

- (x) VPN means
  - (a) Virtual Private Network
  - (b) Voice Public Network
  - (c) Void Private Network
  - (d) Visual Pen Network

- 2. (a) Write a C program to generate Fibonacci numbers between 0 to 50. 5
- (b) What is Firewall? Name the different types of firewall. 5

## SECTION B

3. (a) Write any three advantages and three disadvantages of Bus topology. 6
- (b) What is the difference between Symmetric key and Asymmetric key encryption systems? 4
4. (a) Explain the uses of flow chart. 4
- (b) Draw a flow chart to find the largest among three numbers x, y and z. 6
5. (a) Write a C program which reads two integers and finds the product of them. 4
- (b) Write a C program to find the sum of the series  
$$1^2 + 2^2 + 3^2 + \dots + 10^2.$$
 6
6. Write brief notes on the following :  $4 \times 2 \frac{1}{2} = 10$
- (a) Memory Hierarchy
- (b) Classification of Software
- (c) Advantages of MS-Word
- (d) Database Model
-