

01557

**CERTIFICATE IN INFORMATION
TECHNOLOGY (CIT)**

Term-End Examination

June, 2012

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

Time : 2 hours

Maximum Marks : 50

(Weightage : 75%)

Note : Question No.1 is compulsory. Attempt any four questions from the remaining.

1. Answer the following objective type questions. 10

Each objective type question carries one mark.

- (a) Different computers are connected to LAN by a Cable and _____.
- (i) Modem
 - (ii) NIC
 - (iii) Special wires
 - (iv) Telephone line
- (b) The operation of a digital computer is based on _____ principle.
- (i) Counting
 - (ii) Measuring
 - (iii) Electronic
 - (iv) Logical

- (c) Most of today's Computer designs are based on concepts developed by :
- (i) John Von Neumann
 - (ii) Charles Babbage
 - (iii) Harvard Mark
 - (iv) Bill Gates
- (d) Which of the following hardware device is not used in LAN ?
- (i) Computer
 - (ii) Modem
 - (iii) Printer
 - (iv) Cable
- (e) The inventor /s for RSA algorithm for encryption is/are :
- (i) Ronald Rivest
 - (ii) Adi Shamir
 - (iii) Leonard Adelman
 - (iv) All of the above
- (f) Which of the following is not performed by anti-virus softwares for curing ?
- (i) Prevention
 - (ii) Vaccination
 - (iii) Detection
 - (iv) All of the above one performed

- (g) ----- is not a function of basic operating system.
- (i) File Management
 - (ii) Disk Management
 - (iii) Process Management
 - (iv) Translation
- (h) DDL stands for :
- (i) Data Design Language
 - (ii) Data Dictionary Language
 - (iii) Data Definition Language
 - (iv) None of the above
- (i) Which of the following has fastest data transfer ?
- (i) Coaxial Cable
 - (ii) Twisted Pair
 - (iii) Optimal Fiber
 - (iv) Air
- (j) Which of the following is not a display device ?
- (i) Cathode Ray Tube
 - (ii) Liquid Crystal Display
 - (iii) Projection Device
 - (iv) Anode Ray Tube
2. What is Boot Injector ? Explain how it affects the system file. Also, explain how it can be prevented ? 5
3. Draw and explain the Flow Chart for generating the odd numbers in the given range of numbers. 5

4. (a) Explain the functions of TCP/IP layers. 8
 (b) What is function of Program Counter ? 2
5. (a) Explain the different kinds of threats affects network security. 5
 (b) Consider the following relations with primary key under lined. Draw the ER diagram for this Data base. 5
 Manager (Mag -id, Mag -name, Mag-tel, Mag-Address, Mag-designation)
 Software Engg. (Engg-id, Engg-name, Engg-tel, Engg-address, Project-ID, Mag-id)
 Project (Project-ID, Project-Name, Mag-ID)
6. (a) Discuss the basic Network topologies with their advantages and disadvantages. 6
 (b) What is operating system ? List out the goals of an operating system. 4
7. (a) Differentiate between simplex, Half duplex and Full duplex. Also, give an example of each. 6
 (b) Write a short note on the following : 4
 (i) Cache Memory
 (ii) FDDI