

**CERTIFICATE IN INFORMATION
TECHNOLOGY (CIT)**

Term-End Examination

June, 2010

01292

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

Time : 2 hours

Maximum Marks : 50

(Weightage : 75%)

Note : All the questions in Section - A are compulsory.

Answer any three questions from the Section - B.

SECTION - A

10x1=10

Answer the following objective type questions. Each objective type question carries one mark :

1. (a) Which is not a system s/w ?
 - (i) Application program
 - (ii) OS
 - (iii) Translator
 - (iv) Assembler
- (b) Which is not a function of basic OS ?
 - (i) I/O management
 - (ii) Translation
 - (iii) File management
 - (iv) Memory management

- (c) Which one is not a DBMS ?
- (i) ORACLE (ii) MySQL
(iii) MS ACCESS (iv) MS Word
- (d) Which one is not a property of an algorithm ?
- (i) Definiteness (ii) Effectiveness
(iii) Output (iv) Infiniteness
- (e) Double data types in C - language requires storage of _____ byte (s).
- (i) 1 (ii) 2
(iii) 4 (iv) 8
- (f) Transmission media are usually categorized as _____ .
- (i) Fixed or unfixed
(ii) guided or unguided
(iii) determinate or indeterminate
(iv) metallic or non metallic
- (g) Which of the following is not a guided medium ?
- (i) Twisted pair (ii) Coaxial cable
(iii) Optical Fiber (iv) Atmosphere
- (h) The university building having several departments can be connected by a :
- (i) LAN (ii) MAN
(iii) WAN (iv) None of the above

(i) IP address is a unique _____ bit internet address that is used for communication is IPv4s.

(i) 16 (ii) 32

(iii) 48 (iv) 64

(j) The different kinds of tools to network security are :

(i) Antivirus s/w

(ii) VPN

(iii) Secure network infrastructure

(iv) All of the above

2. Draw a block diagram of a computer and explain the function of ALU. 5

3. Write a program that asks for your height in centimeters and then converts your height to feet and inches. 5

(1 foot = 12 inches, 1 inch = 2.54 centimeters)

7

SECTION - B

4. (a) What are the differences between asynchronous and synchronous transmission ? 5
- (b) Explain the essential steps in encryption and decryption process in public key algorithm. 5
5. (a) Compare between different categories of main memory in terms of technology, volatility and writing mechanism. 5
- (b) Draw a flow chart to accept three numbers and print the maximum of the three. 5
6. (a) Define and discuss the functionalities of hubs and switches. 5
- (b) List and explain any five kinds of viruses. 5
7. (a) Define the following terms : 5
Master file and Transaction file. Also discuss any three advantages of DBMS.
- (b) List all the data types of C programming language and explain their purpose with the help of examples. 5

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