

01719

**CERTIFICATE IN INFORMATION  
TECHNOLOGY (CIT)**

**Term-End Examination  
December, 2012**

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

*Time : 2 hours*

*Maximum Marks : 50*

*(Weightage : 75%)*

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**Note :** *All the questions in Section - A are compulsory. Answer any three questions from Section - B*

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**SECTION-A**

Answer the following multiple choice questions:

1. (a) Which is not a component of a processor **10x1=10**
- (i) Control Unit
  - (ii) ALU
  - (iii) Primary memory
  - (iv) Secondary memory.
- (b) Which one is not a relational operator ?
- (i) >                      (ii) <
  - (iii) ≤                    (iv) ++
- (c) Which one does not belong to pointing devices ?
- (i) joystick                      (ii) Touch Screen
  - (iii) Smart cards                (iv) Light Pen

- (d) Which one among the following does not belong to mass storage Devices ?
- (i) Pen Drive
  - (ii) Hard Disk
  - (iii) CD-ROMs
  - (iv) Digital Camera
- (e) Which of the following is true about primary memory in comparison with secondary memory ?
- (i) Faster Access Time
  - (ii) Smaller Storage capacity
  - (iii) Higher cost per bit storage
  - (iv) All of the above.
- (f) Which is not true about public Domain Software ?
- (i) Has a copyright
  - (ii) Any one can make copies of the software
  - (iii) Free to use
  - (iv) No one owns a right to control it.
- (g) Which one does not belong to category of virus ?
- (i) Spyware
  - (ii) Shareware
  - (iii) Trojans
  - (iv) Phishing

- (h) Which mode is used for data communication ?
- (i) Simplex
  - (ii) Half-duplex mode
  - (iii) Full-duplex mode
  - (iv) All of the above
- (i) Which one does not belong to wireless transmission modes ?
- (i) Radio waves      (ii) Ethernet
  - (iii) Microwaves      (iv) Infrared
- (j) Oracle is an example of
- (i) Hierarchical database model
  - (ii) Network database model
  - (iii) Relational database model
  - (iv) None of the above

2. (a) For three given numbers, write a program in C to find the smallest number, among them. 6
- (b) Define the following constraints in terms of database. 4
- (i) Key constraint
  - (ii) Not NULL constraint
  - (iii) Semantic constraint
  - (iv) Referential Integrity constraint

### SECTION-B

3. (a) What are the two basic methods of accessing information from various memory devices? Explain. 4
- (b) Briefly describe how data are stored on storage devices. 2
- (c) Write a program in C-Language to exchange values among two variables and print them. 4
4. (a) What is distributed operating system? How is it different from conventional operating system? Also list its important advantages. 5
- (b) What is Q Gateways? How does it work? 5
5. (a) What are the considerations for choosing a topology? List advantages and disadvantages of mesh topology. 5
- (b) Show the processes of encryption and authentication in public key cryptography, with explanation. 5
6. (a) Briefly define the following devices and also explain its purposes and features. 5
- (i) VPN
- (ii) Modem.
- (b) Explain the following operators with an examples : 5
- || OR
- && ANT
- \ NOT
- + +
- -
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