

ADIT/BIT PROGRAMME

Term-End Examination

June, 2010

00325

CSI-09 : COMMUNICATION TECHNOLOGY

Time : 3 hours

Maximum Marks : 75

*Note : There are two sections in this paper. Section A is compulsory and consists of 10 objective type questions and descriptive question. Section B consists of 4 questions from which you have to answer any three questions.*

SECTION - A

1. (A) There are 10 objective type questions in this section. There are four choices given for each question. Select the best choice as your answer. If you feel that none of the given choices are correct then mark '0' as your answer. Attempt all the questions. Each question carries one mark. **10x1=10**
- (a) RAID 0 is known as :
- (i) Mirroring
  - (ii) Disk striping
  - (iii) Parity striping
  - (iv) None of the above

- (b) Collection of communication lines and routers is called :
- (i) Subnet
  - (ii) Hosts
  - (iii) End system
  - (iv) Gateway
- (c) \_\_\_\_\_ is a high performance WAN protocol at the physical and data link layers of the OSI reference model.
- (i) Frame delay
  - (ii) X.25
  - (iii) LAP-B
  - (iv) CSU/DSU
- (d) SSL stands for :
- (i) Secure Sockets Layer
  - (ii) Sockets Secure Layer
  - (iii) Secret Secure Layer
  - (iv) Secure Secret Layer
- (e) The first Public key cryptographic technique was published by :
- (i) Ron Rivest
  - (ii) Ali Shemir
  - (iii) Diffie-Hellman
  - (iv) Len Adleman

- (f) The purpose of a Bridge is :
  - (i) Isolates networks by MAC addresses
  - (ii) Manages network traffic by filtering packets
  - (iii) Translates from one protocol to another
  - (iv) All of the above
- (g) The technique whereby a router can dynamically initiate and close a circuit switched session as transmitting end station demand is :
  - (i) Dial on demand routing
  - (ii) Dial Back up
  - (iii) PPP
  - (iv) None of the above
- (h) RIPEM email public key system developed by :
  - (i) Mark Riordan
  - (ii) Zimmermann
  - (iii) Lai
  - (iv) Massey
- (i) \_\_\_\_\_ defines the network's basic geographical arrangement.
  - (i) Configuration
  - (ii) Router
  - (iii) Subnet
  - (iv) Topology

- (j) MBONE is a :
- (i) Physical network
  - (ii) Logical network
  - (iii) Virtual network
  - (iv) None of the above

- (B) List out the factors that affect the networking costs. Explain the broad classification of cost categories and also discuss costs involved in the Network implementation. **10**
- (C) Discuss the working of transparent bridge and compare with source routing bridge. **10**

## SECTION - B

Answer *any three* questions from this section (numbered 2 to 5) :

2. What is an Intranet ? Compare and contrast Intranet with Internet. Discuss the problems solved by the Intranet from Business, operations and functional perspectives. Mention the applications of Intranet, also. **15**
3. Explain the role of the following : **4x2=8**
- (a) WAN devices in a network :
    - (i) CSU/DSU
    - (ii) ISDN Terminal Adopter
    - (iii) Modem
    - (iv) Repeaters
  - (b) What is a RAID technology and what is its need ? Explain different levels of RAID. **7**
4. (a) What is a firewall ? Explain the usage of a firewall in networking. Also, discuss the different types of firewalls. **8**
- (b) Discuss at least three modes of electronic payments in E-commerce. **7**
5. (a) What is a Virtual circuit ? List and explain its types and also compare it with circuit switching. **7**
- (b) What is EFT ? Mention any three applications of EFT. Also, write the advantages of EFT. **8**