

BACHELOR IN INFORMATION TECHNOLOGY

Term-End Examination

December, 2011

00990

CSI-09 : COMMUNICATION TECHNOLOGY

Time : 3 hours

Maximum Marks : 75

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

SECTION - A

1. 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.

- (a) RAID 0 is known as : 10x1=10
- (i) Parity striping
 - (ii) Mirroring
 - (iii) Disk striping
 - (iv) None of the above

- (b) Collection of communication lines and routers form the
- (i) Hosts
 - (ii) End system
 - (iii) Gateway
 - (iv) Subnet
- (c) The first public key cryptographic technique was published by :
- (i) Ron Rivest
 - (ii) Adi Shamir
 - (iii) Len Adleman
 - (iv) Diffie-Hellman
- (d) SSL stands for
- (i) Sockets secure layer
 - (ii) Secure sockets layer
 - (iii) Secure secret layer
 - (iv) Secret secure layer
- (e) _____ are used where the network is being locally (talking physical location) segmented.
- (i) Translation bridges
 - (ii) Remote bridges
 - (iii) Local bridges
 - (iv) None of the above

- (f) Bridge :
- (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) Ethernet, linked by virtual point to point links is called.
- (i) Tunnels
 - (ii) Channels
 - (iii) Cables
 - (iv) None of the above
- (h) RIPEM email public key system is developed by :
- (i) Mark Riordan
 - (ii) Zimmermann
 - (iii) Lai
 - (iv) Massey
- (i) The next generation of IPV 4 is :
- (i) IPV 5
 - (ii) IPV 6
 - (iii) IPV 3
 - (iv) IPV 4.1

(j) _____ is a high performance WAN protocol that operates at the physical and data link layers of the OSI reference model.

(i) X.25

(ii) LAP-B

(iii) CSU/DSU

(iv) Frame Relay

2. (a) What is an ATM ? Explain how an ATM protocol works. Explain the various applications of ATM technology. 15
- (b) What is switching ? Differentiate between circuit switching and packet switching. 5

SECTION - B

Answer *any three* from the following (numbered 3 to 6) :

3. (a) Discuss at least four modes of electronic payments in E-commerce. 8
- (b) With the help of an example data, explain Network Cost Analyzer. 7
4. (a) Explain the following public key algorithms : 8
(i) RSA (ii) RC4
- (b) Write short notes on : 7
(i) Basic Rate Interface ISDN service
(ii) Primary Rate Interface ISDN service
5. (a) What is a firewall ? Explain the usage of a firewall in networking. Also discuss the different types of firewalls. 7
- (b) What is an Intranet ? How is it different from Extranet and Internet ? Explain its features, applications and security mechanisms of it. 8
6. Discuss briefly : 3x5=15
- (a) Electronic shopping cart
- (b) RAID technology
- (c) Router
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