No. of Printed Pages : 6

CSI-13

BACHELOR IN INFORMATION TECHNOLOGY (BIT)

Term-End Examination

December, 2010

00986

CSI-13 : NETWORKING

Time : 3 hours *Maximum Marks : 75*

Note : *There are **two** sections in this paper. **All** questions from **Section-A** are **compulsory.** Answer any **three** question from **Section-B.** Multiple Choice questions carry **one** mark each.*

SECTION - A

1. Which of the following function does not belongs to Data Link Layer ? 1

   (a) Error Control (b) Flow Control

   (c) Multiplexing (d) Addressing

2. Packet selects the routes from source to destination, based on the congestion or network conditions. Which of the following switching approach belongs to the above statement ? 1

   (a) Datagram (b) Virtual Circuit

   (c) Cross Circuit (d) Frame Switching

3. Television Broadcasting is an example of : 1

(a) Simplex (b) Half Duplex

(c) Full Duplex (d) Half Simplex

4. Which of the following is not a guided medium ? 1

(a) Atmosphere (b) Coaxial Cable

(c) Fibre Optics (d) UTP

5. FDDI is a high performance token _____ LAN. 1

(a) BUS (b) Ring

(c) Star (d) Mesh

6. _____ layer is called as "True-end to end" layer. 1

(a) Session (b) Network

(c) Transport (d) Application

7. Thin server : 1

(a) Perform a single or specialized set of server functions.

(b) are pocket size servers.

(c) are like normal server, but called "thin" because of the company name.

(d) are specialized in the handling of timing information.

8. To automate the dial-up procedure in Windows NT, you should include some script in which of the following file ? 1

(a) DIALUP.SYS (b) DIALUP.INF

(c) SWITCH.INF (d) AUTOMATE.SYS

9. _____ utility can be used to get status information from remote LPD print Queue. 1

(a) LPR (b) LPQ

(c) LPG (d) LPT

10. Database Query is an example of : 1

(a) Connection-oriented service

(b) Reliable service

(c) Fixed service

(d) Connectionless service

11. Assume you are designing a network for a Manufacturing Company. The company has four departments at different Towers located (Within 1 km radius) like Administration, Management, Manufacturing and Sales. Except Manufacturing each department has 26 computers, 10 printers and two FAX machines

while Manufacturing department has 5 computer and 2 printers only. Administration department is working as Central Office, which maintains all databases and the main server. The main server is connected with the servers of other departments. Give the answers of the following, based on the network specifications defined above :

(i) Draw and explain the best suited physical and logical topology for the network. 4

(ii) Justify the need of each network device you may use in the network. 4

(iii) Which cable is best suited for this company ? Compare merits and demerits of all the available cables to justify your answer. 5

(iv) Which operating system is best for this company ? Justify your answer. 4

(v) Explain the best hardware and software you should use in the network to implement the security. 3

SECTION - B

Answer *any three* questions from this section :

12. (a) Explain **any two** functionalities of each of the following : 6

    (i) Physical layer of OSI model

    (ii) Presentation layer of OSI model

    (iii) Transport layer of TCP/IP model

    (b) How many file systems are supported by Windows NT ? Compare each system and write two advantages and limitations of each. 9

13. Write three differences between each of the following pairs : 3x5=15

    (a) IEEE 802.3 and IEEE 802.4

    (b) Distributed and centralised computing

    (c) Twisted pair and coaxial cable

    (d) MAN and WAN

    (e) Router and Hub

14. (a) How the problem of administrating a large number of servers on a single server is handled by Windows NT ? Also, Draw and explain different network configurations available in Windows NT. 9

    (b) What is meant by "trojan horse" in networking ? Explain the possible precautions, an administrator has to take for controlling trojan horses and viruses. 6

15. (a) What is "domain" in networks ? How does Windows NT manage the domains ? Explain the process of creating trust relationship between domains with the help of an example. 8

(b) What is application level proxy server ? How does it help to provide security in network ? Explain the layered structure of proxy server with the help of a diagram. 7

16. (a) How does a Token Ring network work ? In what way is it different from Ethernet ? Explain purpose of the main fields in a token ring frame header. 5

(b) Explain the access policy features controlled by the user profile. 5

(c) Explain how do "Screening Router" and "Stateful Inspection Techniques" provide security in networks ? 5