B. C. A. (Sem. V) (CBCS) Examination

April / May – 2015

CS – 27 Network Technology and Administration

Faculty Code : 003

Subject Code : 003503

Time : $2\frac{1}{2}$ Hours]   [Total Marks : **70**

SECTION - A

1 Answer following MCQ :   **20**

   (1) A network model where there is no server computer is _____.

   (a) Client/Server Network

   (b) Centralized Network

   (c) Peer-to-Peer Network

   (d) All of above

   (2) Router operates at _____ layer of OSI reference model.

   (a) Physical Layer   (b) Transport Layer

   (c) Data Link Layer   (d) Network Layer

   (3) _____ is a form of wireless transmission in which signals are sent via pulses of infrared light.

   (a) Radio Networking

   (b) Microwave transmission

   (c) Infrared transmission

   (d) All of these

   (4) _____ protocol is built into most popular e-mail products such as Outlook Express.

   (a) ARP   (b) SMTP

   (c) HTTP   (d) POP

   (5) A user can get files from another computer by using _____.

   (a) Internet Protocol

   (b) TCP/IP

   (c) File Transfer Protocol

   (d) None of these

(6) _____ of the following is considered as a broad band communication channel.

    (a) Microwave circuits   (b) Fiber Optic cables

    (c) Coaxial cable   (d) All of the above

(7) Layer one of the OSI model is _____.

    (a) Physical Layer   (b) Data Link Layer

    (c) Transport Layer   (d) Application Layer

(8) A NIC card can be used for _____.

    (a) WI-FI   (b) Ethernet

    (c) CDDI   (d) FDDI

(9) _____ of the following is unbound transmission media.

    (a) Microwave   (b) Co-axial

    (c) UTP   (d) fiber Optics

(10) _____ of the transport layer protocol is connectionless.

    (a) UDP   (b) FTP

    (c) TCP   (d) SMTP

(11) The data unit in the TCP/IP layer is called _____.

    (a) Message   (b) Datagram.

    (c) Segment   (d) Frame

(12) Devices on one network can communicate with devices on another network via _____.

    (a) File Server   (b) Application Server

    (c) Gateway   (d) Hub

(13) _____ address use 7 bits for the network and 24 bits for the host portion of the IP address.

    (a) Class A   (b) Class B

    (c) Class C   (d) Class D

(14) A protocol defines _____.

    (a) What data is communicated ?

    (b) How data is communicated ?

    (c) When data is communicated ?

    (d) All of these

(15) Error detection at Data Link Layer is achieved by _____.

    (a) Hamming Code   (b) Equalization

    (c) CRC   (d) Stuffing

(16) _____ topology has the highest reliability.

    (a) Ring Topology   (b) Mesh Topology

    (c) Star Topology   (d) Bus Topology

(17) Start and Stop bits are used in Serial Communication for
_____.

    (a) Error Detection

    (b) Error Correction

    (c) Fasting the communication

    (d) Synchronization

(18) FTP stands for _____.

    (a) File Transmission Protocol

    (b) File Transfer Protocol

    (c) Favorite Transfer Protocol

    (d) False Transfer Protocol

(19) _____ of the following are the Network services.

    (a) File Service   (b) Database Service

    (c) Print Service   (d) All of these

(20) The loss in signal power as light travel down the fiber is called
_____.

    (a) Attenuation   (b) Propagation

    (c) Scattering   (d) Interruption

SECTION - B

2 Answer following questions :

(a) Write any three out of six :   **6**

    (1) What is networking? Explain types of network.

    (2) Differentiate: TCP Vs. UDP.

    (3) Explain: CSMA/CA and CSMA/CD.

    (4) What is CARP? Explain working of it.

    (5) Explain: Fiber Optic Cable

    (6) Explain Message Switching and Packet Switching techniques.

(b) Write any three out of six :   **9**

    (1) Write a note on Wireless Transmission media.

    (2) Differentiate: Active Hub, Passive Hub, Intelligent Hub

    (3) Explain L2CAP and RFCOMM Protocol.

    (4) Write a note on NIC.

    (5) Compare TCP/IP Vs. OSI model.

    (6) Explain Security Wheel.

(c) Write any two out of five : **10**

    (1) Explain OSI reference model in detail.

    (2) What is Multiplexing? Explain its types.

    (3) Explain IP. Differentiate IPV4 and IPV6 within it.

    (4) What is Router? Explain types of it.

    (5) List and explain various Network Services in detail.

3 Answer following questions :

(a) Write any three out of six : **6**

    (1) Explain: Logging Events.

    (2) Define Apple Talk and IPX/SPX.

    (3) Explain Interior and Exterior routing protocol.

    (4) Explain: Gateway.

    (5) What is Protocol? Explain it.

    (6) Explain Peer-to-Peer model.

(b) Write any three out of six : **9**

    (1) Write a note on De facto and De Jurie standards.

    (2) What is modem ? Explain its types..

    (3) Write a note on Repeaters.

    (4) Explain: BGP.

    (5) Explain: WEP.

    (6) Write a note on network monitoring.

(c) Write any two out of five : **10**

    (1) What is network topology ? Briefly explain any two of it.

    (2) Write a note on TCP/IP protocol.

    (3) What is wireless communication? Explain Radio and Infrared transmission.

    (4) Define CIA model. What is the importance of using it ?

    (5) List types of account in Windows Server 2003.

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