SRI SAIRAM ENGINEERING COLLEGE

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

SAMPLE QUESTIONS FOR TEACHING LEARNING PROCESS

Domain: **COMPUTER NETWORKS**

1) The data transfer rate of any co-axial cable usually occurs or lies _____

a. Between TP and fiber optic cables

b. Between STP and UTP cables

c. Both a & b

d. None of the above

2) Which mode of coaxial cable represents the cable bandwidth by a single stream of data during the transmission of any data/information?

a. Baseband mode

b. Broadband mode

c. Passband mode

d. None of the above

3) Which category of UTP cable in accordance to the EIA standard exhibits the capability of three twist per foot in addition to the transmission speed of about 16 Mbps?

a. Category 5

b. Category 4

c. Category 3

d. Category 2

4) How does the crosstalk generated due to the electromagnetic interference between two copper wires placed in vicinity get reduced?

a. By twisting the copper wire

b. By using the repeaters

c. By using amplifiers

d. All of the above

5) The port address in TCP/IP architecture basically involves _____

a. Label assigning to a process

b. Changing of physical address from hop to hop

c. Encapsulation of data in a frame

d. All of the above

6) Which addresses are supposed to be of greater importance for transmitting the data from source to destination?

a. Physical address

b. IP address

c. Both a & b

d. None of the above

7) An Universal Address System is essential in logical addresses in order to identify each host in completely unique manner irrespective of underlying _____

a. Physical networks

b. Internet protocols

c. Processes in an application layer

d. All of the above

8) Which addresses are related to the processes involved in an application layer of TCP/IP architecture?

a. Physical (Link) Addresses

b. Logical (IP) Addresses

c. Port Addresses

d. Specific Addresses

9) Which among the below specified network associated components is/are not involved in the host-to-network layer of TCP/IP model?

a. Protocols

b. Device Drivers

c. Network Interface Card

d. All of the above

10) Which unique internet address is/are of greater significance during the attachment of a header to the datagram by the Internet Protocol (IP)?

a. Source Address

b. Destination Address

c. Both a & b

d. None of the above

11) Addressing is the service offered by the Internet Protocol(IP), which basically deals with _____

a. the provision of sequencing the datagrams

b. the determination of route in order to deliver data to the destination host

c. the handling of large messages in an intervening network

d. All of the above

12) Consider the following assertions. Which of them is/are incorrect in accordance to functions associated with TCP in transport layer?

A. Conversion of an incoming byte stream into discrete message

B. Synchronization occurs between the fast sender and the slow receiver

C. It is widely applicable in prompt delivery

D. It allows an error-less byte stream to get delivered to a specified location

a. A & B

b. C & D

c. Only A

d. Only C

13)   Which protocol assists in providing the remote login access over the network especially in an application layer of TCP/IP reference model?

a. File Transfer Protocol (FTP)

b. Simple Network Management Protocol (SNMP)

c. Simple Mail Transfer Protocol (SMTP)

d. TELNET (Network Terminal Protocol)

14)   Which protocol of TCP/IP exhibits its usability in applications requiring instant and essentially reliable delivery operations?

a. Transmission Control Protocol (TCP)

b. User Datagram Protocol (UDP)

c. Internet Protocol (IP)

d. File Transfer Protocol (FTP)

15)   Which combinational package of layers in OSI model is equivalent to an application layer of TCP/ IP model?

a. Transport, Session & Application Layers

b. Session, Presentation & Application Layers

c. Data Link, Transport & Presentation Layers

d. Network, Session & Application Layers

16)   Which among the four layers of TCP/IP is analogous to the physical and the data link layers of an OSI model?

a. Application Layer

b. Transport Layer

c. Internet Layer

d. Host to network Layer

17)   Which protocol/s is/are used in data link layer of an OSI model?

a. SMB

b. NCP

c. LLC

d. All of the above

18)   Which is the only layer of OSI model that prevents itself from adding its own header to the data during the data transmission process?

a. Application layer

b. Network layer

c. Physical layer

d. None of the above

19)   Which network component/s is/are involved in the Presentation layer of an OSI model?

a. Gateway

b. Multiplexer & Oscilloscope

c. Amplifier & Hub

d. All of the above

20) Which OSI layer allows the transmission and reception of data segments to a session layer in addition to the provision of flow control, sequence numbering and message acknowledgment?

a. Network Layer

b. Session Layer

c. Transport Layer

d. Application Layer

21) What is/are the major role/s of Data Link Layer (DLL) in an OSI model?

A. Detection & Correction of transmission errors

B. Provision of data flow control to prevent DTE from overburdening

C. Identification of various devices on the network

D. Generation of a frame for easy data transfer

a. A, B, C & D

b. Only C

c. Only D

d. None of the above

22) Which among the below mentioned protocols provides a mechanism of acquiring an IP address without manual intervention in addition to plug and play type of networking?

a. BOOTP

b. DHCP

c. Both a & b

d. None of the above

23) Which field of cookie in WWW represents the server's directory structure by identifying the utilization of part associated with server's file tree?

a. Domain

b. Path

c. Content

d. Secure

24) Which language in WWW specifies a web's way by describing three-dimensional objects?

a. HTML

b. VRML

c. XML

d. UML

25) Which URL method of HTTP performs similar function as that of PUT method only with an exception of request comprising a list of differences that exhibit the necessity to get implemented in the existing file?

a. POST

b. GET

c. PATCH

d. OPTION

26) Consider the assertions given below. Which among them prove to be beneficial for Persistent HTTP connections?

A. Reduction in latency over the sub-sequent requests

B. Pipeline-oriented connection over the requests and responses

C. Increase in number of packets due to TCP opens

D. Prevention in opening and closing of some TCP connections

a. A & B

b. C & D

c. A & C

d. B & D

27) Which phase/s of POP3 allow/s an user agent to retrieve the messages as well as to mark the messages for deletion purpose?

a. Authorization Phase

b. Transaction Phase

c. Update Phase

d. All of the above

28) Which among the below specified illustrations belongs to the category of GUI based user agents?

a. Mail

b. Pine

c. Outlook & Netscape

d. All of the above

29) Which intermediaries are more likely to get involved during the transfer function of an e-mail system?

a. Storage and forwarding of e-mail for certain addresses

b. Act as gateways to other e-mail or messaging systems

c. Both a & b

d. None of the above

30) Which application-level protocol plays a crucial role in carrying out the data definition and manipulation in addition to X-500 features?

a. TCP

b. LDAP

c. FTP

d. None of the above

31) Which DNS client maps an address to a name or a name to an address especially when required by a host?

a. Resolver

b. Mapper

c. Primary Server

d. Secondary Server

32) STUB is a technique utilized in the client-server operation especially for implementation of _____

a. RPC

b. RTP

c. RTCP

d. All of the above

33) Which mechanism in transport layer supplies multiple network connections along with the distribution of traffic over them in a round-robin basis/ fashion?

a. Upward Multiplexing

b. Downward Multiplexing

c. Buffering & Flow Control

d. Crash Recovery

34) Which among the following specifies the impossibility of updating RTT estimator during the arrival acknowledgement of retransmitted data especially at the occurrence of timeout and retransmission phases in TCP?

a. NAGLE algorithm

b. Karn's algorithm

c. Clark's Solution

d. All of the above

35) Which TCP timer signifies its contribution in measuring the time of connection maintenance in TIME_WAIT state?

a. Keep alive Timer

b. Persist Timer

c. Retransmission Timer

d. 2 Maximum Segment lifetime Timer

36) Which among the below specified design issues should not be minimized while designing the system of a computer network?

a. Bandwidth

b. Content Switching

c. Software Overhead

d. All of the above

37) Which mechanism/s is/are extremely essential in data link and transport layers in accordance to operational services offered by the transport protocols?

a. Buffering

b. Flow Control

c. Both a & b

d. None of the above

38) Which among the several transport services deals with the addresses, protocol utility class in addition to performance evaluating features of a connection?

a. Connection Management

b. Quality of Service

c. User Interface

d. Status Reporting

39) What is the purpose of using source & destination port numbers respectively in the addressing method of transport layer?

a. For Delivery & Reply operations

b. For Reply & Delivery operations

c. Only for Delivery operations

d. Only for Reply operations

40) Which among the following are uncontrolled and un-registered form of ephemeral ports in accordance to IANA?

a. Well known Ports

b. Registered Ports

c. Dynamic Ports

d. All of the above

41) Which among the following are delivered by the transport layer in process-to-process delivery mechanism?

a. Frames

b. Datagrams

c. Packets

d. All of the above

42) Which among the below stated datagram discard code fields in ICMP is/are generated if a router fails to forward a packet due to administrative filtering?

a. Source Route Failed

b. Communication Administratively Prohibited

c. Host Precedence Violation

d. Precedence Cut-off in Effect

43) Which field/s of ICMPv6 packet header has/have a provision of minimal integrity level concerning to verification for ICMP messages?

a. Type

b. Code

c. Checksum

d. All of the above

44) The ability of a single network to span multiple physical networks is known as _____

a. Subnetting

b. Masking

c. Fragmenting

d. Hopping

45) What are the problems involved in an IP Fragmentation Process?

A. Loss of any fragment results in rejection of all datagrams

B. Management of buffer space is essential to handle reassembly process

C. No necessity of initializing the timer after the reception of initial fragment

D. Multiple attempts can be made to recover ICMP error message due to connection-oriented IP service

a. A & B

b. C & D

c. B & C

d. A & D

46) On which factors do the size of block depends in classless addressing?

a. Nature & size of an entity

b. Number of addresses

c. Availability of the address space

d. All of the above

47) Which form of byte assigning strategy is adopted in class B type of network corresponding to IP addresses?

a. Network.Node.Node.Node

b. Network.Network.Node.Node

c. Network.Network.Network.Node

d. Network.Node.Node.Node

48) Match the classes of IP addresses with their functional applications

A. Class A -------------------- 1) Multicast services

B. Class B -------------------- 2) Reserved for future use

C. Class D -------------------- 3) Large Organizations

D. Class E -------------------- 4) Midsize Organizations

a. A- 4, B- 3, C- 2, D- 1

b. A- 2, B- 4, C- 1, D- 3

c. A- 3, B- 4, C- 1, D- 2

d. A- 1, B- 2, C- 3, D- 4

49) Which unit plays a crucial role in carrying out the functions of network layer, simply by the addition of a header to it?

a. Network Service Data Unit (NSDU)

b. Medium Access Control Unit (MACU)

c. Network Address Translation Unit (NATU)

d. None of the above

50) A packet used for the transmission purpose is basically a combination of _____

a. group of bits

b. source & destination addresses

c. Both a & b

d. None of the above