



BRAINWARE UNIVERSITY

Term End Examination 2021 - 22

Programme – Diploma in Computer Science & Engineering

Course Name – Computer Network

Course Code - DCSE603

(Semester VI)

Time allotted : 1 Hrs.15 Min.

Full Marks : 60

[The figure in the margin indicates full marks.]

Group-A

(Multiple Choice Type Question)

1 x 60=60

Choose the correct alternative from the following :

- (1) Which data communication method is used to transmit the data over a serial communication link?

a) Full-duplex	b) Simplex
c) Half-duplex	d) None of these
- (2) The network layer concerns with

a) Bits	b) Frames
c) Packets	d) None of these
- (3) Which one of the following is a transport layer protocol used in networking?

a) TCP	b) UDP
c) Both TCP and UDP	d) None of these
- (4) A _____ is a device that forwards packets between networks by processing the routing information included in the packet.

a) Bridge	b) Router
c) Hub	d) Switch
- (5) A set of rules that governs data communication is called

a) Protocols	b) Standards
c) RFC	d) None
- (6) What is the full form of UDP?

a) User Data Protocol	b) User Datagram Protocol
c) Unlimited Data Protocol	d) None
- (7) Which layer of the OSI model is responsible for combining bits into bytes and bytes into frames?

a) Presentation	b) Data Link
c) Application	d) Transport
- (8) You have a network that needs 29 subnets while maximizing the number of host addresses available on each subnet. How many bits must you borrow from the host field to provide the correct sub

net mask?

a) 2 or 3

b) 4 or 5

c) 6

d) 7

(9) The network layer protocol of Internet is

a) Ethernet

b) Internet Protocol

c) Hypertext Transfer Protocol

d) None

(10) In which topology there is a central controller or hub?

a) Ring

b) Star

c) Hub

d) Mesh

(11) Which is not an application layer protocol?

a) HTTP

b) SMTP

c) TCP

d) FTP

(12) To deliver a message to the correct application program running on a host, the _____ address must be consulted.

a) MAC

b) Port

c) IP

d) None

(13) Which of the following commands sets the secret password on a router to Cisco?

a) enable secret password cisco

b) enable password Cisco

c) enable secret cisco

d) None

(14) To create a loop less technology, a bridge can use

a) Prim's algorithm

b) Spanning tree algorithm

c) Marshall's algorithm

d) None

(15) Which of the following is a dynamic mapping method that finds a physical address, given a logical address?

a) ARP

b) RARP

c) BootP

d) None

(16) Which of the following is an application program that uses the services of ICMP to test reachability of a host?

a) Trace

b) Call

c) Ping

d) None

(17) The method of communication in which transmission takes place in both directions, but only one direction at a time is called

a) Simplex

b) Four wire circuit

c) Full duplex

d) Half duplex

(18) A decrease in magnitude of current, voltage or power of a signal in transmission between points, is known as

a) Attenuation

b) Amplitude

c) Aloha

d) Carrier

(19) You are working with a network that has the network ID 172.16.0.0, and you require 25 subnets for your company and an additional 30 for the company that will merge with you within a month. Each network will contain approximately 600 hosts. What subnet mask should you assign?

a) 255.255.192.0

b) 255.255.224.0

c) 255.255.248.0

d) 255.255.252.0

(20) What operates in the Data Link layer and Network Layer?

a) Router

b) Switch

c) Brouter

d) NIC

(21) Which of the following allows devices on one network to communicate with devices on another

- network?
- a) Multiplexer
c) T-switch
- b) Gateway
d) Modem
- (22) Error detection at the data link level is achieved by
- a) Bit stuffing
c) Hamming code
- b) Cyclic redundancy code
d) Equalization
- (23) Which of the following TCP/IP protocol is used for transferring electronic mail messages from one machine to another?
- a) FTP
c) SMTP
- b) SNMP
d) RPC
- (24) When you ping the loopback address, a packet is sent where?
- a) On the network
c) Across the wire
- b) Down through the layers of the IP architecture and then up the layers again
d) None
- (25) Ethernet frame consists of
- a) MAC address
c) Both MAC and IP address
- b) IP address
d) None
- (26) Which of the following is not a cause of LAN congestion?
- a) Too many hosts in a broadcast domain
c) Broadcast storms
- b) Adding switches for connectivity to the network
d) Low bandwidth
- (27) When an HTTP document must be retrieved from a location other than the local machine, which layer of the OSI model must be accessed first?
- a) Presentation layer
c) Transport layer
- b) Application
d) Network layer
- (28) Which of the following contention mechanisms is used by Ethernet?
- a) Token passing
c) CSMA/CA
- b) CSMA/CD
d) Host polling
- (29) Which of the following protocols uses both TCP and UDP?
- a) FTP
c) TELNET
- b) SMTP
d) DNS
- (30) If your routing table has a static, a RIP and an EIGRP route to the same network, which route will be used to route packets by default?
- a) Any available route
c) Static route
- b) RIP route
d) EIGRP route
- (31) A device that links two homogenous packet-broadcast local networks is
- a) Gateway
c) Repeater
- b) Bridge
d) Hub
- (32) The simultaneous transmission of data to a number of stations is known as
- a) Broadcast
c) Analog transmission
- b) Aloha
d) None of these
- (33) Which of the following protocol is connection oriented?
- a) TCP
c) IPX
- b) UDP
d) NetBEUI
- (34) Which protocol is used between E-Mail servers?
- a) POP3
c) FTP
- b) SMTP
d) SNMP

- (35) Which layer in the TCP/IP stack is equivalent to the Transport layer of the OSI model?
- a) Application
 - b) Host-to-host
 - c) Internet
 - d) Network Access
- (36) A virtual local area network(VLAN) is configured by
- a) Hardware
 - b) Software
 - c) Protocol Stack
 - d) None
- (37) In which of the following modes do you need to be to set RIP as your routing protocol?
- a) Router>
 - b) Router(config)#
 - c) Router#
 - d) Router(config-if)#
- (38) In the operation of CSMA/CD, which host(s) have priority after the expiration of the backoff algorithm?
- a) All hosts have equal priority
 - b) The two hosts that caused the collision will have equal priority
 - c) The host that sent the jam signal after the collision
 - d) The host with the highest MAC address
- (39) Your senior network administrator wants you to monitor the RIP traffic on your network in real time. Which of the following commands would you issue?
- a) show ip route
 - b) show processes
 - c) debug ip rip
 - d) show ip rip
- (40) For a switch to forward frames out of its network segment, what command must be issued in global configuration mode?
- a) ip default-gateway
 - b) routing enabled
 - c) router rip
 - d) router ip
- (41) A switch typically operates at layer 2 of the OSI model. What layer 3 functionality can it utilize to help create broadcast domains?
- a) Full-duplex
 - b) VLANs
 - c) Half-duplex
 - d) RIP
- (42) What type of address does a layer 2 switch utilize?
- a) Media Access Control
 - b) Burned Access Address
 - c) Internet Protocol Address
 - d) Internet Packet Exchange
- (43) What is the maximum number of VLANs that can be configured on a switch?
- a) 24
 - b) Switch-dependent
 - c) 8
 - d) 255
- (44) You want to verify VLAN membership on a Cisco Catalyst 2950 switch. You want to display VLAN assignment and membership type for all switch ports, however you do not want to view any extra information. Which command best displays this information?
- a) show vlan brief
 - b) display vtp brief
 - c) show vlan short
 - d) display vtp short
- (45) Multipoint topology is
- a) Bus
 - b) Star
 - c) Ring
 - d) Mesh
- (46) ISP stands for
- a) Internet Service Provider
 - b) International Service Provider
 - c) Internet System Provider
 - d) International Systems Provider
- (47) When displaying a web page, the application layer uses the
- a) HTTP protocol
 - b) SMTP protocol
 - c) FTP protocol
 - d) None

- (48) Which sublayer of the data link layer performs data link functions that depend upon the type of medium?
- a) Logical link control sublayer
 - b) Media access control sublayer
 - c) Network interface control sublayer
 - d) None
- (49) Time required for a message to travel from one device to another is known as:
- a) Transit time
 - b) Dialogue time
 - c) Response time
 - d) Wait time
- (50) What is the default subnet mask for a class C network?
- a) 255.255.255.0
 - b) 127.0.0.1
 - c) 255.0.0.0
 - d) 255.255.0.0
- (51) What is the first octet range for a class A IP address?
- a) 1-124
 - b) 1-125
 - c) 1-129
 - d) None of these
- (52) Which command displays RIP routing updates?
- a) show ip route
 - b) debug ip rip
 - c) show ip rip
 - d) show protocols
- (53) Which of the following is private IP address?
- a) 12.2.3.0
 - b) 172.15.14.36
 - c) 168.172.19.39
 - d) 192.168.24.43
- (54) Which layer 4 protocol is used for a TELNET connection?
- a) IP
 - b) TCP/IP
 - c) TCP
 - d) UDP
- (55) Which layer 1 device can be used to enlarge the area covered by a single LAN segment?
- a) Hub
 - b) NIC
 - c) Bridge
 - d) Router
- (56) URL stands for
- a) Uniform resource locator
 - b) Unique reference label
 - c) Unified resource locator
 - d) None of these
- (57) To join the Internet, the computer has to be connected to a
- a) Internet society
 - b) Internet service provider
 - c) Internet architecture board
 - d) None of these
- (58) Which of the following transmission directions listed is not a legitimate channel?
- a) Simplex
 - b) Half Duplex
 - c) Full Duplex
 - d) Double Duplex
- (59) A collection of hyperlinked documents on the internet forms the
- a) World Wide Web (WWW)
 - b) E-mail system
 - c) Mailing list
 - d) Hypertext markup language
- (60) A proxy server is used as the computer?
- a) With external access
 - b) Acting as a backup
 - c) Performing file handling
 - d) Accessing user permissions