



BRAINWARE UNIVERSITY

Term End Examination 2021 - 22

Programme – Master of Science in Advanced Networking & Cyber Security

Course Name – Routing Associate

Course Code - MNCS201

(Semester II)

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 statement is true regarding classless routing protocols?

a) The use of discontinuous networks is not allowed	b) RIPv1 is a classless routing protocol
c) The use of variable length subnet masks is permitted	d) RIPv2 supports classless routing
- (2) Which is a reason for avoiding doing route redistribution on two routers between the same two routing domains?

a) Higher cost of two routers	b) Cisco IOS incompatibility
c) Routing feedback	d) Not possible to use two routers
- (3) Which protocol maintains neighbor adjacencies?

a) RIPv2 and EIGRP	b) RIPv2
c) IGRP and EIGRP	d) EIGRP
- (4) Each node uses shortest path tree protocol to construct its

a) Connections	b) Graphs
c) Routing table	d) Network
- (5) The protocol allows the administrator to assign a cost, called the metric, to each route.

a) OSPF	b) BGP
c) RIP	d) BBGP
- (6) The term refers to which node or nodes in the network are responsible for the routing decision

a) decision place	b) node place
c) routing place	d) switching place

- (7) In OSPF, a link is a network with several routers attached to it.
- a) point-to-point
 - b) stub
 - c) transient
 - d) multipoint
- (8) What does Router do in a network?
- a) Forwards a packet to all outgoing links
 - b) Determines on which outgoing link a packet is to be forwarded
 - c) Forwards a packet to the next free outgoing link
 - d) Forwards a packet to all outgoing links except the originated link
- (9) What is the size of Source and Destination IP address in IP header?
- a) 4 bits
 - b) 8 bits
 - c) 16 bits
 - d) 32 bits
- (10) A _____ is the physical path over which a message travels.
- a) Path
 - b) Medium
 - c) Protocol
 - d) Route
- (11) Three or more devices share a link in _____ connection.
- a) Unipoint
 - b) Multipoint
 - c) Point to point
 - d) Simplex
- (12) Two devices are in network if _____
- a) a process in one device is able to exchange information with a process in another device
 - b) a process is running on both devices
 - c) PIDs of the processes running on different devices are same
 - d) a process is active and another is inactive
- (13) Communication channel is shared by all the machines on the network in _____
- a) broadcast network
 - b) unicast network
 - c) multicast network
 - d) anycast network
- (14) Bluetooth is an example of _____
- a) personal area network
 - b) local area network
 - c) virtual private network
 - d) wide area network
- (15) A _____ is a device that forwards packets between networks by processing the routing information included in the packet.
- a) bridge
 - b) firewall
 - c) router
 - d) hub
- (16) Network congestion occurs _____
- a) in case of traffic overloading
 - b) when a system terminates
 - c) when connection between two nodes terminates
 - d) in case of transfer failure
- (17) How many layers are present in the Internet protocol stack (TCP/IP model)?
- a) 5
 - b) 7
 - c) 6
 - d) 10
- (18) Which of the following layers is an addition to OSI model when compared with TCP/IP model?
- a) Application layer
 - b) Presentation layer
 - c) Session layer
 - d) Session and Presentation layer

- (19) Transport layer is implemented in _____
- a) End system
 - b) NIC
 - c) Ethernet
 - d) Signal transmission
- (20) Delimiting and synchronization of data exchange is provided by _____
- a) Application layer
 - b) Session layer
 - c) Transport layer
 - d) Link layer
- (21) In OSI model, when data is sent from device A to device B, the 5th layer to receive data at B is _____
- a) Application layer
 - b) Transport layer
 - c) Link layer
 - d) Session layer
- (22) In TCP IP Model, when data is sent from device A to device B, the 5th layer to receive data at B is _____
- a) Application layer
 - b) Transport layer
 - c) Link layer
 - d) Session layer
- (23) Which of the following statements can be associated with OSI model?
- a) A structured way to discuss and easier update system components
 - b) One layer may duplicate lower layer functionality
 - c) Functionality at one layer no way requires information from another layer
 - d) It is an application specific network model
- (24) OSI stands for _____
- a) open system interconnection
 - b) operating system interface
 - c) optical service implementation
 - d) open service Internet
- (25) TCP/IP model does not have _____ layer but OSI model have this layer
- a) session layer
 - b) transport layer
 - c) application layer
 - d) network layer
- (26) Which address is used on the internet for employing the TCP/IP protocols?
- a) physical address and logical address
 - b) port address
 - c) specific address
 - d) all of these
- (27) Which layer is responsible for process to process delivery in a general network model?
- a) network layer
 - b) transport layer
 - c) session layer
 - d) data link layer
- (28) Which layer provides the services to user?
- a) application layer
 - b) session layer
 - c) presentation layer
 - d) physical layer
- (29) Which transmission media provides the highest transmission speed in a network?
- a) coaxial cable
 - b) twisted pair cable
 - c) optical fiber
 - d) electrical cable
- (30) EIGRP is a routing Protocol design by Cisco. (Yes/No)?
- a) Yes
 - b) No
- (31) EIGRP can support _____
- a) VLSM/subnetting
 - b) Unequal cost load balancing
 - c) Auto summary
 - d) all of these

- a) Link state protocol
c) Error-correction protocol
- b) Routing information protocol
d) All of the mentioned
- (45) Which of the following is false with respect to the features of OSPF?
- a) Support for fixed-length sunbathing by including the subnet mask in the routing message.
c) More flexible link cost than can range from 1 to 65535.
- b) Use of designated router.
d) Distribution of traffic over multiple paths that have equal cost to the destination.
- (46) Which of the following is not a type of OSPF packet?
- a) Hello
c) Link-state request
- b) Link-state response
d) Link-state ACK
- (47) In OSPF database descriptor packet, which field is used to indicate that the router is master?
- a) M
c) MS
- b) I
d) Options
- (48) If routers in a single area are configured with the same priority value, what value does a router use for the OSPF Router ID in the absence of a loopback interface?
- a) The lowest IP address of any physical interface
c) The highest IP address of any physical interface
- b) The lowest IP address of any logical interface
d) The highest IP address of any logical interface
- (49) You get a call from a network administrator who tells you that he typed the following into his router: Router(config)#router ospf 1 Router(config-router)#network 10.0.0.0 255.0.0.0 area 0 He tells you he still can't see any routes in the routing table. What configuration error did the administrator make?
- a) The wildcard mask is incorrect
c) The OSPF area is wrong
- b) The OSPF Process ID is incorrect.
d) The AS configuration is wrong.
- (50) Which of the following is not applicable for IP?
- a) Error reporting
c) Handle addressing conventions
- b) Datagram format
d) Packet handling conventions
- (51) Which of these is not applicable for IP protocol?
- a) Is connectionless
c) Offer reliable service
- b) Offer unreliable service
d) None of the mentioned
- (52) What is private IP Address range of Class A Network?
- a) 10.0.0.0-10.255.255.255
c) 1.0.0.0-1.255.255.255
- b) 10.0.0.0-11.255.255.255
d) 11.0.0.0-11.255.255.255
- (53) Convert the binary number 10011101 into its decimal
- a) 185
c) 169
- b) 157
d) 158
- (54) You have sub netted the 210.106.14.0 network with a /24 mask. How many usable sub networks and usable host addresses per subnet this would provide?
- a) 2 networks with 128 hosts
c) 4 networks with 64 hosts
- b) 6 networks with 30 hosts
d) 1 network with 254 hosts
- (55) Which command is required to properly configure a router to run OSPF and to add network 192.168.16.0/24 to OSPF area 0?

- a) Router(config-router)# network 192.168.0
255.255.255.0 area 0
- b) Router(config-router)# network 192.168.1
6.0 0.0.0.255 0
- c) Router(config)# router ospf area 0
- d) Router(config-router)# network 192.168.1
6.0 0.0.0.255 area 0

(56) Which address represents a unicast address?

- a) 224.1.5.2
- b) FFFF.FFFF.FFFF
- c) 192.168.24.58/30
- d) 255.255.255.255

(57) What does the command "ping 204.211.38.52" use to test connectivity between the two devices?

- a) ICMP echo request
- b) Information request
- c) Timestamp reply
- d) Source quench

(58) If your routing table has a static, a RIP, and an IGRP route to the same network, which route will be used to route packets by default?

- a) The IGRP route
- b) The RIP route
- c) The static route
- d) All three will load balance

(59) You have sub netted the 201.105.13.0 network with a /26 mask. How many usable sub networks and usable host addresses per subnet this will provide?

- a) 4 networks and 62 hosts
- b) 64 networks and 4 hosts
- c) 4 networks and 64 hosts
- d) 62 networks and 2 hosts

(60) Given the address 192.168.20.19/28, which of the following is valid host address on this subnet?

- a) 192.168.20.16
- b) 192.168.20.29
- c) 192.168.20.31
- d) 192.168.20.0