



BRAINWARE UNIVERSITY

Course - MSc(HN)

ADVANCED NETWORKING (MHN102)

(Semester – 1)

Time allotted: 3 Hours

Full Marks : 70

[The figure in the margin indicates full marks. Candidates are required to give their answers in their own words as far as practicable.]

Group –A

(Multiple Choice Type Question)

1 x 10 = 10

- 1) Choose the correct alternatives of the following :
 - i) How many Subnets and Hosts can you get from the Network 192.168.254.0/26?
 - a) 4Network with 64Hosts
 - b) 2Network with 62 Hosts
 - c) 254 Network with 62 Hosts
 - d) 1Network with 254 Hosts
 - ii) Which of the following commands set the Secret password to “nopass”
 - a) enable secret password nopass
 - b) enable secret nopass
 - c) enable password nopass
 - d) enable password secret nopass
 - iii) If you want to delete the contents of NVRAM reboot the router then what mode will have in
 - a) Privilege Mode
 - b) Global Mode
 - c) Setup Mode
 - d) NVRAM Loaded Mode
 - iv) Which Cisco IOS command can you use to see the IP routing Table
 - a) sh ip config
 - b) sh ip arp
 - c) sh ip route
 - d) sh ip table

- v) Which two of the following are True regarding distance –vector and link state routing protocol
- a) Link state sends its complete routing table out all active interfaces on periodic time interval
 - b) Distance Vector sends its complete routing table out all active interfaces on periodic time interval
 - c) Link state sends updates containing the state of their own links to all routers in the internetwork
 - d) Distance vector sends updates containing the state of their own links to all routers in the internetwork
- vi) What is the administrative distance of OSPF?
- a) 90
 - b) 100
 - c) 110
 - d) 120
- vii) Which Layer2 device enables high speed data exchange?
- a) Repeater
 - b) Hub
 - c) Switch
 - d) Router
- viii) Which multiple access technique is used by IEEE 802.11 standard for wireless LAN?
- a) CDMA
 - b) CSMA/CA
 - c) ALHOA
 - d) none of the mentioned
- ix) What PRI Stands for?
- a) Primary Rate Internet
 - b) Primary Rate Interface
 - c) Packet Ratio Interchange
 - d) Primary Route Information
- x) What does L2TP stands for?
- a) Layer2 Tunneling Protocol
 - b) Layer 2 Tree Protocol
 - c) Layer 2 Topmost Protocols
 - d) Level 2 Tunneling Protocols

Group – B

(Short Answer Type Question)

3 x 5 = 15

(Answer any *three*)

- 2) What are interfaces of Cisco Routers and mention the function of each interface?
- 3) What is the function of Transport Layer of ISO-OSI Model?
- 4) What are Three Tables in OSPF, describe them and Function of Layer2 switching
- 5) Define Routing Loops
- 6) What is the role of SSID in wireless network?

Group – C

(Long Answer Type Question)

3 x 15 = 45

(Answer and *three*)

- 7) Define VLAN and create a vlan infrastructure of six Dept. with router on a stick concept, also create Trunk mode .So design the infrastructure neatly.
NOTE: The examinee can take dept and network as per their choice.
- 8) Create a Subnetting of network address 192.168.10.0 and subnet mask 255.255.255.224. So find out Subnets, Hosts, valid subnets, Starting and Ending IP of each subnet. So do the necessity design for this Scenario.
- 9) Create RIP ver 1 network with network 172.16.10.0 by taking six routers and switches for 30 hosts. So do the necessity diagram and configuration for this scenario.
- 10) Create a wireless setup of 10 wireless clients by applying SSID and channel selection.