



BRAINWARE UNIVERSITY

Course –M.Sc. (HN)

Network Administration and Configuration (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)

10 x 1 = 10

1. Choose the correct alternative from the following

(i) What is the administrative distance of OSPF?

- | | |
|--------|--------|
| a. 90 | b. 100 |
| c. 120 | d. 110 |

(ii) What is the reason you want to use switches in your network instead of hubs?

- | | |
|--|---|
| a. They are less expensive | b. Switches are more faster than hubs at reading frames |
| c. Switches create more collision domain | d. Switches do not forward broadcasts |

(iii) Which algorithm is responsible for EIGRP protocols?

- | | |
|--------------|------------------|
| a . Dijkstra | b. Dual |
| c. Heap | d. Binary search |

(iv) What is the default Administrative Distance of RIP?

- | | |
|--------|--------|
| a. 90 | b. 100 |
| c. 120 | d. 110 |

(v) RIPV1 support _____

- | | |
|--------------------------------|--|
| a. variable length subnet mask | b. do not support variable subnet mask |
| c. support broadcast | d. do not support broadcast |

- (vi) ISDN stands for _____
- | | |
|--|-------------------------------------|
| a. Internal server for digital network | b. Internal service data network |
| c. Integrated service digital network | d. Information service data network |
- (vii) CHAP stands for _____
- | | |
|--|---|
| a. Challenge Handshake Authentication Protocol | b. Channel Handshake for Access Protocol |
| b. Change Handshake for Access Private key | d. Change Handshake for Authentication Protocol |
- (viii) VTP stands for _____
- | | |
|------------------------------|-----------------------------------|
| a. Virtual Trunking Protocol | b. Virtual Trunk Path |
| c. VLAN Trunking protocol | d. Variable Transmission Protocol |
- (ix) PPTP is a _____
- | | |
|--------------------------------------|--|
| a. Peer- to- Peer Tunneling Protocol | b. Point –to –Point Tunneling Protocol |
| c. Password-Primary Tunnel Protocol | d. ALL |
- (x) VPN stands for _____
- | | |
|----------------------------|-------------------------|
| a. Virtual Point Network | b. Virtual Private Name |
| c. Virtual Private Network | d. None of there |

Group – B

(Short Answer Type Questions)

(Answer any *three* from the following)

- | | |
|---|------------|
| | 3 x 5 = 15 |
| 2. Define Route Poisoning methodology. | [5] |
| 3. Define VLSM. Explain in brief. | [5] |
| 4. What is Distance Vector Routing Protocol? | [5] |
| 5. What is convergence in network? Explain with proper example. | [5] |
| 6. Briefly describe Subnetting. | [5] |

Group – C

(Long Answer Type Questions)
 (Answer any *three* from the following)

- | | | |
|-----|--|-----------|
| | | 3x 15= 45 |
| 7. | (a) What are the differences between RIPV1 and RIPV2? | [6] |
| | (b) Define Static Routing with a neat diagram. | [6] |
| | (c) Define Default Static Routing Protocol. | [3] |
| 8. | (a) Define major functionalities of different OSI layers in detail. | [8] |
| | (b) Explain Tracert and Ping with example. | [7] |
| 9. | (a) Illustrate OSPF with proper example. | [5] |
| | (b) Define link state routing protocol with example. | [6] |
| | (c) Explain the methodology of EIGRP. | [4] |
| 10. | (a) Define Count to Infinity protocol and Hold down timer. | [4+3] |
| | (b) How many subnet ids, hosts, valid hosts and valid subnet ids can be deduced from 255.255.255.0/28? What is the broadcast and network address for this network? What is CIDR? | [4+3+1] |
| 11. | (a) Define ‘Man in the middle attack’ and firewall. | [3+2] |
| | (b) Write short notes on ISDN and PSTN. | [5] |
| | (c) Describe the working functionalities of Nslookup and Nostat. | [5] |