



BRAINWARE UNIVERSITY

Term End Examination 2018 - 19

Programme– Master of Science in Hardware & Networking

Course Name –Network Administration and Configuration

Course Code - MHNE010401

(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) Which algorithm is responsible for EIGRP protocols?
 - a. Dijkstra
 - b. Dual
 - c. Heap
 - d. Binary Search
 - (iii) VTP stands for _____?
 - a. Virtual Point Network
 - b. Virtual Trunk Path
 - c. Virtual Private Network
 - d. None of these
 - (iv) What do you use AUX port used for?
 - a. Console
 - b. Terminal editing
 - c. Modem
 - d. Backup Logging
 - (v) The Media Access Control Sub layer resides in which OSI layer?
 - a. Transport
 - b. Transport
 - c. Datalink
 - d. Datalink

- (vi) The performance of a data communication networks depends on ____
- a. The numbers of users
 - b. The transmission media
 - c. The hardware and software
 - d. All of these
- (vii) What is simplex mode of transmission?
- a. Data can be transmitted in one direction only
 - b. Data can be transmitted in one direction only
 - c. Data can be transmitted in both directions
 - d. Data can be transmitted in both directions
- (viii) Which of the following is false concerning VLAN's?
- a. A VLAN is a broadcast domain
 - b. A VLAN is a logical group of users
 - c. A VLAN is location – dependent
 - d. A VLAN is subnet
- (ix) Which VTP modes will propagate VTP message?
- a. Client and server
 - b. Server
 - c. Client, server and transparent
 - d. Transparent
- (x) Which is an example of a hybrid protocol?
- a. IGRP
 - b. EIGRP
 - c. OSPF
 - d. RIPV1

Group – B

(Short Answer Type Questions)

3 x5 = 15

Answer any *three* from the following

2. What is Open System Interconnection Reference Model? [5]
3. Define Packet Switching and Circuit Switching. [5]
4. Define Subnetting. [5]
5. Define Broadcast Domain and Collision Domain. [5]
6. What are the IP address ranges for public and private address? [5]

Group – C

(Long Answer Type Questions)

3x 15 = 45

Answer any *three* from the following

- | | | | |
|-----|-----|---|-----|
| 7. | (a) | Describe the basic components of a Router. | [8] |
| | (b) | Explain the concept of static and Dynamic Routing. | [7] |
| 8. | (a) | Define Link State Routing Protocols in details. | [6] |
| | (b) | What are the Three tables used in EIGRP? | [5] |
| | (c) | What is Active and Passive Routes? | [4] |
| 9. | (a) | What is DUAL in EIGRP? | [2] |
| | (b) | Define VLAN. | [5] |
| | (c) | Define VTP Server. | [5] |
| | (d) | What is frame tagging? | [3] |
| 10. | (a) | Explain the concept of CIDR. | [6] |
| | (b) | Explain the concept of Custom Subnetting | [6] |
| | (c) | Define Default Static Routing Protocol. | [3] |
| 11. | (a) | How many subnets ids, hosts, valid hosts and valid subnets ids can be obtain from 255.255.255.0/29? What is the broadcast and network address for this network? | [7] |
| | (b) | What is the difference between layer 2 Switching and Layer 3 switching? | [6] |
| | (c) | What is Switching? | [2] |
