



**BRAINWARE UNIVERSITY**

**Term End Examination 2018 - 19**

**Programme – M. Sc. in Hardware & Networking**

**Course Name - Advanced Linux Administration and Scripting**

**Course Code - MHN303B**

(Semester – 3)

**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) Port no of NFS is

- |            |            |
|------------|------------|
| a. TCP2054 | b. TCP2049 |
| c. TCP2041 | d. TCP2045 |

(ii) /etc/sysconfig/network-scripts/ifcfg-ethX file contains 'BOOTPROTO=none', which refers

- |         |           |
|---------|-----------|
| a. DHCP | b. UDP    |
| c. TCP  | d. Static |

(iii) Mail exchanger record store in dns zone files, which is denoted by

- |       |       |
|-------|-------|
| a. NS | b. NS |
| c. MX | d. MX |

(iv) NFS server maintains information regarding shared directory within \_\_\_\_\_ file

- |                 |                  |
|-----------------|------------------|
| a. /etc/nfs     | b. /etc/rpcbind  |
| c. /etc/exports | d. None of these |

- (v) \_\_\_\_\_ refers the location of share directory in samba server
- a. baseurl=<directory path>
  - b. path=<directory path>
  - c. Both (a) and (b)
  - d. None of these
- (vi) File Sharing between Windows and Linux is done by
- a. FTP
  - b. FTP
  - c. NFS
  - d. NFS
- (vii) allow-transfer { IP address; }; IP address refers
- a. FTP
  - b. samba
  - c. NFS
  - d. None of these
- (viii) Check syntax of httpd.conf file by using
- a. httpd -t
  - b. HTTPD -t
  - c. httpd -T
  - d. HTTPD -T
- (ix) Which command is used to set SELINUX variable
- a. chkconfig
  - b. setsebool
  - c. getsebool
  - d. service
- (x) Command used to start any service from runlevel
- a. init
  - b. chkconfig
  - c. setsebool
  - d. getsebool

### Group – B

(Short Answer Type Questions)

3 x 5 = 15

Answer any *three* from the following

2. Differentiate between Active FTP and Passive FTP. 5
3. How squid server is used for packet filtering? Describe with proper example. 5
4. Differentiate between anonymous FTP and regular FTP with proper example. 5
5. What is 'migrationtools' in LDAP server? Why we integrate NFS server with LDAP? 5
6. What is 'migrationtools' in LDAP server? Why integration of NFS server is required? 2 + 3

**Group – C**

(Long Answer Type Questions)

3 x 15 = 45

Answer any *three* from the following

- |     |  |    |
|-----|--|----|
| 7.  | (a) Describe working principle of DNS with suitable diagram.   | 10 |
|     | (b) Which information must be included in the DNS configuration file for transferring zone to slave DNS?                   | 5  |
| 8.  | (a) What is the way to block 'www.yahoo.com' web page and 'proxy' keyword from SQUID Server?                               | 5  |
|     | (b) Solve the following problems:  |    |
|     | (i) All packets having destination port 80 will be redirected to<br>192.168.30.7   |    |
|     | (ii) Reject outgoing ssh connections.  |    |
|     | (iii) Accept all packets except those from the IP address<br>192.168.1.10  |    |
|     | (iv) Deny all packets coming from 10.10.10.0 network.  | 10 |
| 9.  | (a) Describe the following paths:  |    |
|     | (i) /etc/exports   |    |
|     | (ii) /etc/sysctl.conf  |    |
|     | (iii) /etc/named.conf  |    |
|     | (iv) /etc/hosts  |    |
|     | (v) /etc/vsftpd/ftplib   | 10 |
|     | (b) Differentiate between recursive and iterative resolution in DNS with example.  | 5  |
| 10. | (a) For regular ftp which line must be required to edit in /etc/vsftpd/vsftpd.conf file?                                   | 2  |
|     | (b) What is the way to 'on' or 'off' services from boot time? Describe it with a suitable example.                         | 2  |
|     | (c) Describe the term 'rw', 'ro' and 'sync' within /etc/exports file with suitable example.                                | 6  |
|     | (d) Differentiate between primary DNS server and secondary DNS server. What is the way to transfer a zone from master DNS? | 5  |
| 11. | (a) Describe working principle of DHCP server in Linux.  | 8  |
|     | (b) What is the way to change hostname of a machine? Describe it with proper example.                                      | 4  |
|     | (c) Describe the term 'rw' and 'sync' within /etc/exports file with suitable example.                                      | 3  |

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