

8. (a) Compare and contrast C-shell and Borne shell. 9
- (b) List and explain conditional statements with respect to shell programming with suitable example. 6

No. of Printed Pages : 04

Roll No. ....

**EE-686**

**M.C.A. EXAMINATION, May 2018**

(Fifth Semester)

(B. Scheme) (Re-appear Only)

(MCA)

MCA655

NETWORK ADMINISTRATION

*Time : 3 Hours]*

*[Maximum Marks : 75*

---

Before answering the question-paper candidates should ensure that they have been supplied to correct and complete question-paper. No complaint, in this regard, will be entertained after the examination.

---

**Note :** Attempt *Five* questions in all, selecting at least *one* question from each Unit.

### Unit I

1. (a) List and explain any *three* network related commands. **9**  
(b) What is the concept of Subnetting ? Explain with an example. **6**
2. (a) Write the use of the following interconnecting devices : **9**  
(i) Router  
(ii) Bridge  
(iii) Switch  
(b) Briefly describe TCP/IP model. **6**

### Unit II

3. (a) What are substitution ciphers ? List and explain any *two* substitution cipher techniques. **9**  
(b) Explain the concept of IDS in detail. **6**
6. Write short notes on any *two* of the following :  
(a) Digital signatures  
(b) Firewalls  
(c) DES. **15**

### Unit III

5. (a) What are the different measures to estimate the performance of a host machine ? Also write how the system performance can be improved. **6**  
(b) Write a detailed note on NTFS file system. Also write how it is different from FAT. **9**
6. (a) What is System Administration ? Also list and explain necessary issues in host administration and how they are tackled. **9**  
(b) Explain the directory structure of Unix operating system. **6**

### Unit IV

7. (a) Write a shell script to calculate the sum of a given series of number. **6**  
(b) Discuss the mounting and unmounting of a new file system to/from the existing environment. Show how to create Pipes and perform read/write operations. **9**