

MCA/M07  
Linux & Shell Programming  
MCA -402

Time : 3 Hours

MM:50

Note:- Attempt Five questions in all, selecting One question from each unit.

UNIT-I

- 1(a) How many type of users can login in a Unix/Linux operating system? Explain different ways to login and logout in a Linux Operating Systems. How user accounts can be created and deleted? 6
- (b) What do you understand by Shell? Discuss various type of shells available in Linux. 4
- 2 Give the purpose and syntax of following Linux commands along with various options:  
(i) is (ii) find (iii) cat (iv) we (v) In (vi) comm. (vii) dd  
Also give one example in each case. 10
- 3(a) Create a shell script to find sum and reverse of input number. Also check wheather the input number is palindrome or not. 5
- How shell variables can be categorized? Discuss variables in each category in detail. 5

UNIT-II

- 4 What do you understand by regular expression? Discuss various regular expression characters used by grep, set and perl. Also explain some regular expressions which are used by egrep and awk, but not by grep or sed alongwith IRE and Tre. 10
- 5(a) Explain the concept of List and Array in Perl. Also discuss the array handling function Split( ) and Join ( ). 5
- (b) Discuss any five Built-in-function in awk with the help of examples. 5
- 6(a) How a process is created in Linux? Also discus the different ways to stop a process. 5
- (b) How jobs in Linux can be controlled with the help of cron and at commands? 5
- 7(a) List and explain the main privileges that are provided to the administrator in Linux. 5
- (b) Write a short note on Network files in Linux. 5

### UNIT-III

- 8(a) Discuss the different types of basic I/O in Linux in brief. 5  
(b) Explain the different types of signals and signal handlers in Linux in brief. 5
- 9(a) Write short notes on:  
(i) iddtool  
(ii) soname 5
- 10 Discuss the various principles of makefile. On the basis of these principles create a makefile and explain. 10