

Roll No

MCA-502

MCA. V Semester

Examination, December 2016

Unix and Shell Programming

Time : Three Hours

Maximum Marks : 70

- Note: i) Answer five questions. In each question part A, B, C is compulsory and D part has internal choice.
ii) All parts of each question are to be attempted at one place.
iii) All questions carry equal marks, out of which part A and B (Max. 50 words) carry 2 marks, part C (Max. 100 words) carry 3 marks, part D (Max. 400 words) carry 7 marks.
iv) Except numericals, Derivation, Design and Drawing etc.

Unit - I

1. a) Define Kernel in Unix.
b) What is Buffer Headers?
c) Explain multi user capability of Unix.
d) Discuss the scenarios for retrieval of the buffer.

OR

Discuss advantage and disadvantage of buffer cache.

Unit - II

2. a) Explain absolute path name and relative path name.
b) What are different types of files in an Unix operating system?
c) Write the syntax of STAT and FSTAT.
d) Explain file systems and inodes.

OR

Write short notes on

- i) Mounting and Unmounting
- ii) Link and Unlink

Unit - III

3. a) What is Process?
b) Write the mechanism of process creation.
c) Explain any four commands related to process in Unix OS.
d) What is parent child relationship? With the help of a diagram explain the Unix file system.

OR

Write the solution with master and slave process.

Unit - IV

4. a) What do you mean by "exporting shell variables"?
b) List and explain various special parameters used by shell script.
c) Write a short notes on "Gnup family".
d) Write a shell script to create a menu, which displays the list of files, current date, process status and current users of the system.

OR

What is Shell Script? Write a script that accepts a file name as argument and display the last modification time if the file exists and a suitable message if it does not.

Unit - V

5. a) What is chop() function?
b) Explain the list and array use in Perl.
c) Explain programming features supported by "awk" for flow control
d) Explain if statement for and while loop statement with respect to awk with suitable example.

OR

Discuss the features of Linux.
