

**Third Semester B.E. Degree Examination, Dec.2018/Jan.2019**  
**Unix and Shell Programming**

Time: 3 hrs.

Max. Marks: 100

**Note: Answer any FIVE full questions, choosing ONE full question from each module.**

**Module-1**

- 1 a. By writing a neat diagram, explain the architecture of UNIX. (10 Marks)  
b. Discuss the following commands  
i) `ls` ii) `who` iii) `cat` iv) `echo` (10 Marks)

**OR**

- 2 a. Explain the features of UNIX. (10 Marks)  
b. Explain the commands used to add, modify and delete users. (10 Marks)

**Module-2**

- 3 a. What is a file? Explain different categories of files. (10 Marks)  
b. By giving example, explain the following commands.  
i) `pwd` ii) `cd` iii) `mkdir` iv) `rmdir`. (10 Marks)

**OR**

- 4 a. Discuss `ls` commands with options. (10 Marks)  
b. Explain absolute method of changing permissions by giving example. (10 Marks)

**Module-3**

- 5 a. Explain different modes of Vi editor (10 Marks)  
b. Discuss ex-mode commands of Vi editor. (10 Marks)

**OR**

- 6 a. Explain shell interpretive cycle. (04 Marks)  
b. Which are standard files used in UNIX? Explain. (08 Marks)  
c. By giving examples, explain extended regular expression. (08 Marks)

**Module-4**

- 7 a. With example, explain logical operators in shell programming. (05 Marks)  
b. Discuss for statement in shell script with example. (05 Marks)  
c. Write a shell program to do the following :  
i) List of files ii) Processes of user iii) Today's date vi) Users of the system.  
Using case conditional. (10 Marks)

**OR**

- 8 a. Discuss head and tail commands along with its options. (10 Marks)  
b. By specifying examples, explain hard and soft links. (10 Marks)

**Module-5**

- 9 a. Along with the options and examples, explain `ps` command. (10 Marks)  
b. By giving example, explain `nice` and `nohup` commands. (10 Marks)

**OR**

- 10 a. Explain string handling function of perl. (06 Marks)  
b. With example, explain split and join function of perl. (06 Marks)  
c. What is subroutine? Explain by giving example. (08 Marks)