

Code: IT5T1

**III B.Tech - I Semester – Regular/Supplementary Examinations  
October 2017**

**UNIX  
(INFORMATION TECHNOLOGY)**

Duration: 3 hours

Max. Marks: 70

**PART – A**

Answer *all* the questions. All questions carry equal marks

11x 2 = 22 M

1.

- a) Differentiate between relative and absolute path names.
- b) Discuss **script** and **stty** commands.
- c) Explain step by step in terms of stdin and stdout, what the following UNIX command does:  
**ls -l ../UnixMat | grep “^d” >> UnixMatList 2> Mylog**
- d) ‘Shell in a UNIX system is an interface between the user and the system’. Comment.
- e) Write a shell script to display the greatest of three numbers.
- f) How will you retrieve the file status?
- g) Demonstrate the following:
  - i) stat
  - ii) fstat.
- h) ‘The fork() is used to spawn a new process’. Comment.
- i) Differentiate Kill & Raise functions.
- j) Differentiate named pipes and unnamed pipes.
- k) Define unreliable signal.

## PART – B

Answer any **THREE** questions. All questions carry equal marks.

3 x 16 = 48 M

2.a) Explain the architecture of UNIX system with neat diagram.

8 M

b) Discuss navigation and text editing options available in Vi Editor.

8 M

3.a) Discuss with examples the mechanisms for String Handling and Command Line arguments in Shell environment.

8 M

b) Discuss Input, output and error redirection with suitable examples.

8 M

4. Explain the different functions of File I/O.

16 M

5.a) How to terminate the process? Write the different options available for termination.

8 M

b) Explain the data structures used by the kernel when a process is loaded.

8 M

6. Explain in detail about FIFO concept with examples.

16 M