

Code: IT5T1

**III B.Tech - I Semester – Regular/Supplementary Examinations  
October - 2019**

**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) Highlight the difference between `$echo date` and `$echo `date`` commands.
- b) How would you show the use of wildcards in UNIX O.S.?
- c) What is the main idea behind tar command in UNIX?
- d) Illustrate the various redirection operators available in UNIX?
- e) What is meant by positional parameter? How it can be correlated with command line argument?
- f) Outline the difference between system call and library function.
- g) Write syntax of `stat()` function.
- h) What functions can you find to retrieve process identifiers?
- i) How `waitpid()` is differ from `wait()`?
- j) State importance of `alarm()` and `pause()`.
- k) What is meant by signal disposition?

## PART – B

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

3 x 16 = 48 M

2. a) What would be the response of UNIX for the following commands :

i) du

ii) mount

iii) tee

iv) ps

8 M

b) Explain briefly the importance of grep family with suitable examples. 8 M

3. a) Write a shell script to display the type of file using file test operators. 8 M

b) Write a shell script to count no of lines and characters in a given file. 8 M

4. a) Exemplify following system calls:

i) read()

ii) write()

iii) lseek()

8 M

b) Write a program to simulate 'cp' command using file handling functions. 8 M

5. Illustrate how vfork() and exec() functions changes the flow of execution with suitable example program. 16 M

6. a) What is meant by Inter Process Communication? Dissect pipe() function. 8 M

b) Write a C program to provide IPC between parent and child processes using pipe(). 8 M