



R17

Code No: 844AB

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

MCA IV Semester Examinations, March/April - 2022

LINUX PROGRAMMING

Time: 3 Hours

Max.Marks:75

**Answer any five questions
All questions carry equal marks**

- 1.a) Write a shell script to find the factorial of a given number.
b) Explain about shell meta characters and shell variables. [8+7]
- 2.a) Explain about the control structures used in shell programming.
b) Write a shell program to concatenate two files. [7+8]
- 3.a) Write a Perl program to sort the list of element in an array.
b) Explain about the Unix file structure. [8+7]
4. Explain the following system calls with complete syntax and examples.
a)chmod b) chown c)link d)symlink e) getcwd. [15]
- 5.a) Explain about the reliable and unreliable signals.
b) Explain about the kernel support for process. [8+7]
- 6.a) Explain about the wait and waitpid system call.
b) Explain about the process control. [8+7]
- 7.a) What are pipes? Explain their limitations. Explain how pipes are created and used in IPC with an examples.
b) Explain about the Unix kernel support for messages. [8+7]
- 8.a) Write client server program using TCP.
b) Explain about the Unix API for shared memory. [7+8]

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