Code No: 844AB

R17

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
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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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