

R16

Code No: 138GH

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B. Tech IV Year II Semester Examinations, September - 2020

LINUX PROGRAMMING

(Electronics and Communication Engineering)

Time: 2 Hours

Max. Marks: 75

**Answer any Five Questions
All Questions Carry Equal Marks**

- 1.a) Explain briefly about various backup utilities and process utilities with syntax, options and example for each.
- b) Discuss briefly about I/O redirection operators in Linux. [8+7]
- 2.a) Differentiate between chown(), fchown() and lchown() functions.
- b) Illustrate the need of lseek() function with an example code. [7+8]
- 3.a) With the help of a program, illustrate the use of exit() and _exit() system calls.
- b) Give a brief description on real IDs and effective IDs. [8+7]
- 4.a) List and explain various APIs related to Message Queue IPC mechanism.
- b) Write about kernel support for messages. [8+7]
5. Explain briefly about the following socket APIs with clear syntax:
a) socket() b) connect() c) send() [15]
- 6.a) Discuss various system commands in awk.
- b) Write a shell script to illustrate the 'cp' command without using it. [7+8]
7. Explain the following file I/O system calls:
a) open() b) read() c) write() d) close() [15]
- 8.a) Differentiate between fork() and vfork() system calls.
- b) Demonstrate alarm(), pause(), abort(), sleep() functions. [7+8]

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