Code No: 138GH **R16**

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
B. Tech IV Year II Semester Examinations, September - 2020
LINUX PROGRAMMING
(Electrical and Electronics Engineering)

Time: 2 Hours **Max. Marks: 75**

Answer any Five Questions
All Questions Carry Equal Marks
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1.a) What are the features of LINUX Operating System?
b) List and explain various Process utilities and Networking utilities. [7+8]

2.a) Explain various system calls used to copy the content of a file to another file with an illustrative example program.
b) What is the purpose of dot(.) and dot dot(..) directories in the file system? [10+5]

3. Derive with neat block diagram the sharing of open files between parent and child after fork. [15]

4. Draw and explain about the "Kernel data structure for a semaphore set". [15]

5. Describe the following socket APIs with clear syntax:
a) socket( ) b) connect( ) c) send( ) [15]

6.a) Discuss briefly about shell meta characters and shell positional parameters.
b) Write a shell script to illustrate 'ls' command without using it. [7+8]

7.a) Differentiate between root directory, home directory, parent directory.
b) Explain the following functions: chdir( ), fchdir( ), seekdir( ). [8+7]

8.a) Explain the structure of a signal( ) function with an example.
b) What are the phases in signaling process? [7+8]

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