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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