Code No: 824AB

R15

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
MCA IV Semester Examinations, July/August - 2021
LINUX PROGRAMMING

Time: 3 Hours   Max.Marks:75

Answer any five questions
All questions carry equal marks
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1.a) Describe the characteristic features of Linux operating system.
 b) Summarize all the Shell Meta characters with examples.   [7+8]

2.a) Write the syntax and examples of the following commands.
     (i) tee   (ii) grep   (iii) mount   (iv) sort.
 b) Write a shell script to reverse the given number and check whether it is palindrome or not.   [7+8]

3.a) Differentiate between dup( ) and dup2( ) System calls.
 b) Write a C program to copy the contents of one file to other using system calls.   [7+8]

4. Define a system call. Write about directory handling system calls with syntax and suitable examples.   [15]

5.a) When the process is said to be Zombie state? Write a 'C' Program to illustrate Zombie Process.
 b) Differentiate between reliable and unreliable signals.   [8+7]

6. Write about Kernel support for a Process in Linux? Compare and Contrast wait( ) and waitpid( ) System Calls with suitable programs.   [15]

7. What are the limitations of anonymous pipes? Write about communication between two unrelated processes using Named Pipes.   [15]

8.a) Explain about Socket address structures for Internet Domain.
 b) Write a program for single client-server connection.   [8+7]

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