

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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