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SEAT No. _____

No. of printed pages: 02

[19/A-18]

SARDAR PATEL UNIVERSITY
B.Sc. IVth Semester, External Examination (CBCS)
US04ECSC01: Basics of Linux Operating Systems
13th April, Friday - 2018

Time: 10:00 A.M. to 12:00 P.M.

Total Marks: 70

Q.1 Select an appropriate answer.

10

1. Linux is _____ operating system.
 (a) multithreading (b) multitasking (c) multiuser (d) All of above
2. All configuration files are located in _____ directory.
 (a) /bin (b) /etc (c) /home (d) /usr
3. The heart of Linux is _____.
 (a) program (b) kernel (c) file system (d) none of these
4. _____ is the job of allocating CPU time to different task.
 (a) Scheduling (b) Process (c) Management (d) All of the above
5. A new process is created by _____ process model.
 (a) exec() (b) fork() (c) nproc() (d) none of these
6. The Process Identity Consists Mainly _____.
 (a) Process ID (b) Credentials (c) Personality (d) All of the Above
7. _____ command is used to create new directory.
 (a) rmdir (b) mkdir (c) cd (d) none of these
8. _____ shortcut key is used for logout.
 (a) CTRL + L (b) CTRL + C (c) CTRL + D (d) CTRL + A
9. _____ quotes is used to execute command.
 (a) Double (b) Back (c) Single (d) None of these
10. _____ statement is used to transfer control at beginning of the loop.
 (a) break (b) continue (c) locate (d) all of the above

Q.2 Answer the following questions. (Attempt any TEN)

20

1. What is Operating System? Give example of OS.
2. What is Process? List down its various states.
3. Explain use of /usr and /lib directories in Linux.
4. Which flags are used with clone() system call? Write function of each.
5. What is Scheduling? Why it is needed?
6. What is process ID (PID)? Why it is used?
7. Which wild card characters are used in Linux?
8. Write different modes of vi editors.

[P.T.O.]

9. Which file redirection commands used in Linux?
10. Explain the use of Quotes in Linux.
11. Which logical operators are used in Linux?
12. Explain Read Statement with example.
- Q.3** [a] Explain File System. Write notes on EXT2 file system. **5**
 [b] Write notes on history of Linux. **5**
- OR**
- Q.3** [a] List and Explain features of Linux. **5**
 [b] Explain Design Principles of Linux. **5**
- Q.4** [a] Explain fork(), exec() process model. What is process identity? Explain in brief. **5**
 [b] Explain Process and Threading with example. **5**
- OR**
- Q.4** [a] Explain Kernel Synchronization in detail. **5**
 [b] List and explain major part of process context. **5**
- Q.5** [a] Explain ls and dir command with suitable example. **5**
 [b] Explain sort and grep command with example. **5**
- OR**
- Q.5** [a] Explain cut and paste command with example. **5**
 [b] Write notes on types of File Access Permission. **5**
- Q.6** Explain all types of if statement with example. **10**
- OR**
- Q.6** What is Loop? Which Loops are used in Linux? Explain all types of Loops with example. **10**

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