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No. of printed pages : 02

Sardar Patel University
B.Sc. IVth Semester, External Examination (CBCS)
US04ECSC01 : Basics of Linux Operating Systems
16th April, Saturday - 2016

Time : 10:30 am to 12:30 pm

Total Marks : 70

Q.1 Select an appropriate answer.

10

- Linux Kernel was developed by _____.
(a) Richard Stallman (b) KEN Thompson
(c) Linus torvald (d) Dennis Ritchie
- In Linux all executable files are stored in _____ directory.
(a) /bin (b) /etc (c) /home (d) /usr
- The initial Linux file system was _____.
(a) MINIX (b) EXT (c) EXT2 (d) sysv
- A new program is run after a call to _____ process.
(a) fork() (b) newprg() (c) exec() (d) none of these
- Linux separate _____ into three different zones.
(a) physical memory (b) logical memory
(c) virtual memory (d) none of the above
- The Process Identity Consists Mainly _____.
(a) Process ID (b) Credentials (c) Personality (d) All of Above
- _____ wild card character is used to check single character.
(a) * (b) + (c) ? (d) none of these
- _____ is an environmental variable.
(a) HOME (b) home (c) echo (d) MAN
- _____ statement is use to get input from keyboard and store to variable.
(a) input (b) accept (c) read (d) none of these
- To display text or value of variable _____ command is used.
(a) if (b) display (c) echo (d) exit

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

20

- Define file system.
- What is Kernel?
- What is Operating System? Give example of some OS.
- What is process ID (PID)? Why it is used?
- What are the major part of process context?
- Which flags are used with clone() system call?
- Explain function of mkdir and rmdir command.

①

(P.T.O)

8. Define environment variable. List environment variable used in linux.
9. Write all commands related to saving a file in vi editor.
10. What are the advantages to write shell script?
11. Explain read statement with example.
12. Explain simple if statement with example.

- Q.3** [a] Write note on features of linux. **5**
 [b] Which directories are created by Linux at installation time? **5**
 What are the uses of that directories?

OR

- Q.3** [a] Explain history of Linux. **5**
 [b] Write notes on EXT2 file system. **5**
- Q.4** [a] Explain fork() and exec() process model in detail. **5**
 [b] Write notes on management of physical memory. **5**

OR

- Q.4** [a] What is virtual memory? Explain in detail. **5**
 [b] Write notes on process management. **5**
- Q.5** [a] Explain date and cal command with example. **5**
 [b] Write notes on types of File Access Permission.. **5**

OR

- Q.5** [a] Explain sort and grep command with example. **5**
 [b] Explain cut and paste command with exmple. **5**
- Q.6** Explain following with example. **10**
 (i) Test statement (ii) case statement

OR

- Q.6** Explain for loop and while loop with example. What are the use of break and continue statement? **10**

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(2)