

Question Paper Code : 6576

BCA (Semester-V) Examination, 2021

UNIX AND SHELL PROGRAMMING

[Paper : BCA-504]

Time : Three Hours]

[Maximum Marks : 70

Note : Answer any five questions. All questions carry equal marks.

1. What is an Operating System (OS) ? Explain Unix architecture with diagram and features of UNIX OS. How it differs from Linux ? [14]
2. (a) Discuss relative and absolute file access permissions with example. [7]
(b) What is a filter in UNIX ? List out various filters in UNIX. Explain any three. [7]
3. Define Process. Explain different states of a process with diagram. Which command is useful to know the status of process ? Explain it with example. [14]

4. (a) Explain any four operations that can be performed on a file. [7]
- (b) Explain the commands cp, rm and cat with examples. [7]
5. (a) What are the applications of 'sed' command? Explain. [7]
- (b) What is Shell's Interpretive cycle? Also describe shell offerings. [7]
6. (a) What is Regular Expression? Explain any one utility which use regular expression, with proper example. [7]
- (b) Define Redirection. List out the symbols used for redirection. [7]
7. (a) What information is presented when the following commands are entered : [7]
- (i) date (ii) who
- (iii) passwd (iv) mv
- (b) Define vi Editor and explain its modes. Also write commands used in the vi Editor. [7]

8. (a) What are the file types available in Unix? Discuss file operators with suitable examples. [7]
- (b) Explain in detail foreground and background jobs. Give example. [7]
9. (a) Write a shell program for counting characters, words, size and number of line. [7]
- (b) Explain, what will happen when the following command is typed inside the vi Editor : [7]
- (i) i (ii) j
- (iii) ~ (iv) p
10. Write short notes on the following : [14]
- (i) Zombie state of a process
- (ii) fork() system call
- (iii) Pattern Matching
- (iv) File Permission

-----x-----