

BCA(H) Semester - III Examination, 2021

Subject : Computer Application

Paper Name: Unix and Shell Programming

Paper Code: BCA 305

F.M:80

Time: 3 Hrs.

A. Answer any Six Questions.

6x5=30

1. Discuss different features of UNIX Operating System.
2. Discuss Kernel-Shell architecture of UNIX system.
3. Discuss different inode structure of UNIX Operating System.
4. Explain **chmod** command in UNIX with suitable example.
5. Explain internal and external commands.
6. Explain the contents of /etc/passwd and /etc/shadow file with respect to UNIX OS.
7. Discuss **Head** and **Tail** commands.
8. Explain the commands to add and delete a user.

B. Answer any Five Questions.

5x10=50

1. Explain the following commands with proper examples: (i) **HOME**, (ii) **clear**, (iii) **echo**, (iv) **who**, (v) **script**, (vi) **mkdir**.
Describe the concept of pipe in UNIX . 6+4
2. What do you mean by hard link and soft link? Demonstrate these with suitable examples. 6+4
3. Define file filter. Discuss grep command with different options. Explain how the text is entered and replaced in input mode of vi editor. 5+5
4. Write a Shell script to print the sum of digits of a given integer. Write a Shell script to print the calendar of April 2022. 5+5

5. What are the different ways of setting file permissions? Discuss the navigation commands in vi editor with examples. 5+5
6. Write a Shell script that calculates factorial of a given number. Write the command for the following:
(i) To display time in GMT; (ii) To display time in format hour:minute:second. 5+5
7. Write the use of break and continue statement . Write a shell script to check whether an integer number is prime or not using positional parameter. 4+6