

2023 (MAY)

**BCA224A: Linux Environment (Skill Enhancement
Elective course) (NEW)**

TOTAL TIME: 3 HOURS

TOTAL MARKS: 75

PASS MARKS: 25

**Part-A Answer ALL The questions. Each question carries 1
mark**

10X1=10

- ① What is the difference between bin and/sbin?
- ② Which Command will lists all Files including Hidden Files along with their Inode Numbers?
- ③ Write a command to print the calendar for the month September '49.
- ④ How we can perform overwriting and appending with cat Command?
- ⑤ How we can redirect Standard Output of the ls Command to a File called Output.txt?
- ⑥ Define pipe.
- ⑦ What is the use of chmod command?
- ⑧ How to Check Default Shell in our System?
- ⑨ How to read dynamic data from the user?
- ⑩ Write a command to create a multiple directories.

**Part-B Answer any FIVE out of Eight Questions. Each Question
carries 2 marks**

5X2=10

- ① Explain the Types of Files in Linux.
- ② Explain the Various options with rm Command.
3. How can two files be merged using the sort command?

- ④ What are the symbols that are used as redirection operators?
- ⑤ Distinguish between an editor and a word processor.
- ⑥ Write a grep command line to select all lines that have less than 10 characters from a file.
- ⑦ What do you mean by the exit status of a command?
- ⑧ Write a Script to Print 1 to 5 by using until Loop?

Part-C Answer any FIVE out of Eight Questions. Each Question carries 5 marks

5X5=25

- ① Mention the chief components of a UNIX system and explain each one of them briefly.
- ② Assume that there are three files say file1, file2, file3 write a command to display only the total number of lines, total number of word and total number of characters on these files.
- ③ Mention the command used for changing file permissions. Explain with illustrations.
- ④ Mention the different modes of the vi editor and explain how you can move from one mode to other mode. Also discuss what can be done in each of these modes.
5. Write a Script to Test whether the given String is Empty or not? If it is not empty then print its Length.
- ⑥ Why we are using ls command? Explain the various option of ls command.
7. Write a Script to Read 4 Digit Integer Number and Print the Sum of Digits Present in that Number?
8. Write a Script that Accepts a Single Character and Checks whether it is Digit or Special Character or Vowel or Consonant?

Part-D Answer any THREE out of FIVE Questions. Each Question carries 10 marks

3X10=30

- ① How are UNIX file organized? Discuss the same with the aid of a diagram that depicts the organizational structure.
- ② Explain the various option to View Content of the Files?
- ③ Mention the different loop control structures that are used in the shell programming.
4. Create a file emp.txt and content of the file are
100:sunny:1000:Hyderabad
200:bunny:2000:Chennai
300:chinny:3000:Hyderabad
400:vinny:4000:Delhi
500:pinny:5000:Hyderabad
 - a. Write a Script to Display all Employees Information where Salary is Greater than 2500
 - b. Write a Script to Save all Employees Information where Salary is Greater than 2500 and City is Hyderabad to hyd.txt
5. Write a shell script that computes the gross salary of an employee according to the following rules is given below. The basic salary is input interactively through the keyboard

If basic salary is < 1500 then HRA = 10% of basic and DA = 90% of the basic

If basic salary is >=1500 then HRA = Rs 500 and DA = 98% of the basic
