

Roll No.

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B.C.A.**FIFTH SEMESTER EXAMINATION, 2019-20****UNIX AND SHELL PROGRAMMING**Time : **3 Hours**Max. Marks : **60**

Note : (i) Attempt **ALL** questions.
(ii) Choices are given in each question set.

1. Attempt any **Four** of the following questions: **3 x 4 = 12**

- (a) Explain the function of Kernel and Shell in UNIX.
- (b) Explain various blocks of UNIX file system.
- (c) Distinguish between Absolute Pathname and Relative Pathname with suitable example.
- (d) Write any two directory related commands and two file related commands in UNIX with suitable example.
- (e) Explain various features of UNIX operating system.
- (f) Define following commands in UNIX with suitable example:
 - (i) echo
 - (ii) who
 - (iii) mkdir

2. Attempt any **Four** of the following questions: **3 x 4 = 12**

- (a) Explain Vi editor. Define Input and Command mode with example.

- (b) Write UNIX command to run the process in background. Differentiate between KILL and DELETE command.
- (c) Define init and cron command with example.
- (d) What is the significance of PID and PPID? Explain with example.

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- (e) What do you mean by File permissions? Write the procedure to change the file permission in UNIX?
- (f) Define any four system calls used for process management with example.

3. Attempt any **Two** of the following questions: **6 x 2 = 12**

- (a) How to create a new user account in UNIX. User account

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5. Attempt any **Two** of the following questions: **6 x 2 = 12**

- (a) (i) What is filter in UNIX? Discuss any two filter commands with suitable example.
- (ii) Explain Cut, Paste command in UNIX with syntax.
- (b) (i) How to count the number of words and lines in a given file? Write command with syntax in UNIX.
- (ii) Explain the following with suitable example:
 - (1) pr
 - (2) grep

name is your name and set the password. Write the steps to delete the newly created account.

- (b) (i) State the security features of UNIX.
- (ii) Define Bootstrap and explain the role of Superuser in administration task.
- (c) Explain the following commands with suitable example:
 - (i) mount (ii) tar
 - (iii) nice (iv) Su
 - (v) chmod

4. Attempt any **Two** of the following questions: **6 x 2 = 12**

- (a) (i) Write a shell script to check the given number is Prime or Not.
- (ii) Write a shell script to check the given number is Palindrome or Not.
- (b) (i) Explain the following with suitable example:
 - (1) case- esac (2) if - fi
- (ii) Differentiate between while and for loop in UNIX.
- (c) Write a Shell Script to input 3 Subjects Marks and calculate the percentage according to following criteria.
 - (i) If average <90 and >=75 Honour
 - (ii) If average <75 and >=60 First Division
 - (iii) if average <60 and >=45 Fail

(3) uniq

- (c) (i) Write short notes on nroff and tbl with example.
- (ii) Explain sed with suitable example.