IV Semester B.C.A. Examination, May/June 2018
(F + R) (CBCS) (2015-16 and Onwards)
COMPUTER SCIENCE
Unix Shell Programming

Time : 3 Hours
Max. Marks : 70

Instruction: Answer all the Sections.

SECTION – A

I. Answer any ten questions. Each question carries two marks: (10×2=20)
   1) Differentiate Kernel and shell.
   2) Define inode.
   3) What is the use of scale function?
   4) What do you mean by zombie process?
   5) What is the use of PS command?
   6) Briefly explain format and fdformat commands.
   7) What is sed?
   8) What is signal? Give the names of any two signals in UNIX.
   9) What is the significance of expr command?
   10) Write the syntax of while statement in shell programming.
   11) What is the use of finger command?
   12) Define system administrator.

SECTION – B

II. Answer any five questions. Each question carries ten marks: (5×10=50)
   13) a) Explain the various usages of cat command with examples.
       b) Illustrate PCB.
   14) a) Describe df, du and ulimit commands.
       b) What is filter? Explain any four filter commands with examples.
15) a) Explain file encryption and decryption in UNIX.
   b) Describe the different modes of vi editor. (5+5)

16) a) What is the use of chmod command? Differentiate absolute and
    symbolic modes with examples.
   b) Explain the types of shell variables with examples. (5+5)

17) a) Illustrate positional parameters with examples.
   b) Write a shell script to reverse a given number and check whether it is
      palindrome or not? (5+5)

18) a) Describe branching control structures in shell programming with
    examples.
   b) Explain write and wall commands. (5+5)

19) a) Explain user management in UNIX.
   b) Write a shell script to count the number of vowels in a given string. (5+5)

20) a) Describe tar command in UNIX.
    b) Write a shell script to display all the file types and file permissions in the
       current directory. (5+5)
IV Semester B.C.A. Examination, May 2017
(F+ R) (CBCS) (2015-16 and Onwards)
COMPUTER SCIENCE
BCA-406 : Unix Shell Programming

Time : 3 Hours

Instruction : Answer all the Sections.

Max. Marks : 70

SECTION – A

1. Answer any ten questions :  \((10\times 2=20)\)

1) Mention any two features of Unix Operating System.

2) Differentiate the following commands :
   a) bc and xcalc
   b) uname and Hy.

3) What is a wild card ? Mention any one purpose of wild card.

4) Explain any two process creation command in Unix.

5) Define Disk partitioning.

6) Write any two options of cut command with an example.

7) Mention any two types of shells.

8) Explain the usage of back quote.

9) What are the different shell variables available in Unix Operating System ?

10) Write the syntax of if-then-else-fi statement with an example.

11) Mention any two functions of system administrator.

12) What is distributed file system ?
SECTION - B

II. Answer any five questions: (5×10=50)

13) a) Explain unix architecture with a neat diagram.
   b) Explain the following commands with Syntax and example.
      1) pwd           2) mkdir
      3) cal           4) cp
      5) tput          (5+5)

14) a) What is a file system? Explain the basic types of files in Unix.
   b) Explain the various purpose of cat command. (5+5)

15) a) Explain the different types of processes in Unix Operating System.
   b) Explain process related commands in Unix O.S. (5+5)

16) a) Explain u limit and all the options of df and du commands.
   b) Define filter, Explain any 4 filter commands with Syntax and example. (5+5)

17) a) Write a note on awk programming.
   b) Write a shell script to find the number of occurrences of a particular character in a given string. (5+5)

18) a) Explain different types of tests used in shell script with an example.
   b) Explain ls command with different options. (5+5)

19) a) Explain positional parameters in Unix Shell Programming.
   b) Write a note on Unix System Communication Commands. (5+5)

20) a) Explain different privileges of a system administrator.
   b) Explain user management in Unix O.S. (5+5)
IV Semester B.C.A. Examination, May 2016
(CBCS) (Fresh) (2015 – 16 & Onwards)
COMPUTER SCIENCE
BCA – 404 : Unix Shell Programming

Time: 3 Hours  Max. Marks: 70

Instruction: Answer all the Sections.

SECTION – A

I. Answer any ten questions. (10x2=20)

1) List the different part of a unix file system.
2) What is the use of echo command?
3) What are the two different types of unix command?
4) What is the function of unlimit command?
5) What is an interrupt?
6) What is a wildcard? Why are they used?
7) What is the use of mkfs command?
8) What is a filter?
9) Explain the concept of pipe.
10) What are positional parameters? Write the function of any two positional parameters.
11) What is finger and merg command?
12) What is file encryption? How do you encrypt a file?

SECTION – B

II. Answer any five questions. (5x10=50)

13) a) Explain unix architecture with a neat diagram.
    b) Explain salient features of unix operating system. (5+5)
14) a) What are the different modes of setting file permissions? Explain with an example.
    b) Compare Kernel mode versus user mode. (5+5)

P.T.O.
15) a) Explain different loop control structures available in unix.
    b) Write a shell program to print all prime numbers between m and n (m<n).
    
16) a) Explain mounting and demounting of files.
    b) Explain the types of shell variables.
    
17) a) Explain the domain name system.
    b) Explain the tar command in unix.
    c) Explain the cpio command.
    
18) a) Describe the compression and decompressing techniques of files in unix.
    b) Explain disk related commands.
    
19) a) Write note on SED command.
    b) Explain the use of grep command.
    
20) a) Explain different states of process with a diagram.
    b) Write a shell script to display all the file types and file permissions.