



SM – 621

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. **(5+5)**
- 14) a) Describe df, du and ulimit commands.
b) What is filter ? Explain any four filter commands with examples. **(5+5)**

P.T.O.

SM - 621



- 15) a) Explain file encryption and decryption in UNIX. (5+5)
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. (5+5)
b) Explain the types of shell variables with examples. (5+5)
- 17) a) Illustrate positional parameters with examples. (5+5)
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. (5+5)
b) Explain write and wall commands. (5+5)
- 19) a) Explain user management in UNIX. (5+5)
b) Write a shell script to count the number of vowels in a given string. (5+5)
- 20) a) Describe tar command in UNIX. (5+5)
b) Write a shell script to display all the file types and file permissions in the current directory. (5+5)



US – 642

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

Max. Marks :70

Instruction : Answer all the Sections.

SECTION – A

I. Answer **any ten** questions :

(10×2=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 ?

P.T.O.



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)**
-



MS – 574

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. **(10×2=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. **(5×10=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 ($m < n$). (4+6)
- 16) a) Explain mounting and demounting of files.
b) Explain the types of shell variables. (5+5)
- 17) a) Explain the domain name system.
b) Explain the tar command in unix.
c) Explain the cpio command. (3+4+3)
- 18) a) Describe the compression and decompressing techniques of files in unix.
b) Explain disk related commands. (5+5)
- 19) a) Write note on SED command.
b) Explain the use of grep command. (6+4)
- 20) a) Explain different states of process with a diagram. 5
b) Write a shell script to display all the file types and file permissions. 5

SECTION - B

(2x10=20)

(5+5)

(5+5)

P.T.O.

