



Name :

Roll No. :

Invigilator's Signature :

CS/BCA/SUPPLE/SEM-5/BCA-502/2010

2010

UNIX AND SHELL PROGRAMMING

Time Allotted : 3 Hours

Full Marks : 70

The figures in the margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

GROUP – A

(Multiple Choice Type Questions)

1. Choose the correct alternatives for any *ten* of the following :

10 × 1 = 10

i) 'cp' command has the input in which sequence ?

- a) cp, source, destination
- b) source, destination, cp
- c) cp, destination, source
- d) destination, cp, source.

ii) Ulimit gives

- a) limit on the no. of users
- b) limit on the no. of groups
- c) limit on the file size
- d) none of these.

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iii) 'bc' command gives the

- a) date
- b) calculator
- c) calendar
- d) time.

iv) Output of echo is

- a) same as ls
- b) same as sh
- c) same as ps
- d) same as wc

v) 'mkdir' command

- a) takes single argument only
- b) takes multiple arguments
- c) both (a) and (b)
- d) none of these.

vi) Relative path name never has a

- a) directory name at the start
- b) /at the start
- c) . at the start
- d) ' at the start.



vii) 'ls - la' list

- a) creates a file
- b) hides a file
- c) shows the listing of a hidden file
- d) shows line count.

viii) 'chgrp'

- a) changes permission of a file
- b) changes owner
- c) changes group
- d) none of these.

ix) d in the first place in the first column of the output of
ls - l signifies

- a) directory
- b) ordinary file
- c) device file
- d) none of these.

x) Adding user is done with

- a) useradd
- b) groupadd
- c) both of these
- d) none of these.

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xi) Standard input is signified by

- a) >
- b) <
- c) 2>
- d) 2<.

xii) The sequence of shell creation is

- a) init → getty → login → shell
- b) getty → init → login → shell
- c) init → login → getty → shell
- d) login → init → getty → shell.

xiii) cd is

- a) an internal command
- b) an external command
- c) not a command
- d) a batch file.



GROUP – B

(Short Answer Type Questions)

Answer any *three* of the following.

3 × 5 = 15

2. Draw the UNIX architecture. What are the different parts of it ? 3 + 2

3. What are external and internal commands ? Give examples. 3 + 2

4. What are the different fields of ls – l command ? Describe each.

5. Differentiate between file permission and directory permission. What does wc command do ? 3 + 2

6. Describe the file system tree of UNIX.

7. Write a shell script to check whether a given string is a palindrome.



GROUP – C

(Long Answer Type Questions)

Answer any *three* of the following. $3 \times 15 = 45$

8. What are the salient features of UNIX ? Describe different UNIX components. What is the SHELL used for in UNIX ? Describe the login process briefly. What is the general command structure ? What are tty and type commands ?

$4 + 3 + 2 + 2 + 2 + 2$

9. How can a user be added and deleted from a UNIX system ? Explain shutdown command elaborately. How can an ordinary user become a super user ? How can different files be searched in a UNIX system ? What is the job of user mask ? Where do we need to use hard link ?

$4 + 3 + 2 + 2 + 2 + 2$

10. Write short notes on any *three* of the following : 3×5

- i) process creation
- ii) kill command
- iii) background job execution
- iv) /etc/passwd and/etc/shadow files
- v) UNIX booting
- vi) filter command
- vii) system administration.



11. Write shell scripts to

- a) generate Fibonacci series.
- b) check Armstrong numbers
- c) obtain any number of arguments and print them in the reverse order. 3 × 5
