



RR-4007-08

B. Sc. (IT) (Sem. VI) Examination

March / April – 2010

Unix & Shell Programming

Time : 3 Hours]

[Total Marks : 70

RR-4007

Instruction :

| | |
|--|---|
| नीचे दर्शावेल निशानीवाणी विगतो उत्तरवडी पर अवश्य लपवी. Fillup strictly the details of signs on your answer book. | Seat No. : |
| Name of the Examination : | <input type="text"/> |
| <input type="text" value="B. Sc. (IT) (Sem. 6)"/> | <input type="text"/> |
| Name of the Subject : | <input type="text"/> |
| <input type="text" value="Unix & Shell Programming"/> | <input type="text"/> |
| Subject Code No. : <input type="text" value="4"/> <input type="text" value="0"/> <input type="text" value="0"/> <input type="text" value="7"/> | Section No. (1, 2,.....) : <input type="text" value="1"/> |
| | <input type="text" value="Student's Signature"/> |

1 Answer the following questions in detail : (any three) 15

- (1) Explain various features of Unix Operating System ?
As kernel administrator, what kind of other features can you implement in modern Linux OS ?
- (2) Everything is a file in Unix. Justify this statement and explain the file accessing mechanism in Unix.
- (3) What are the different permission assigned to file when created ? How the user can change these permissions of the file ?
- (4) Which command is used to extract some fields from a file ? Explain with all possible options.

2 (a) Do as directed : 8

- (1) With vi editor, how ESC mode is useful for performing various options ?
- (2) What is the result of [^0-9]* regular expression ?
- (3) To search for blank line and replacing those lines with *** which command user will write ?
- (4) Change the access time of file bca5 to 1st April, 9 am.

(b) Explain following commands : 4

(1) ps - f

(2) fork()

(3) who -h

(4) lock

3 Write following scripts : (any **two**) 8

(1) Write a script to reverse the fields of the employee file and display all the records.

(2) Write a script to count number of occurrences of inputted word for student file e.g. how many dotnet words are there.

(3) Write a script to reverse the lines of file.

RR-4008

Instruction :

नीचे दशांश विषय निशानीवाणी विगतो उत्तरवडी पर अवश्य लभवी.
Fillup strictly the details of signs on your answer book.

Name of the Examination :
B. Sc. (IT) (Sem. 6)

Name of the Subject :
Unix & Shell Programming

Subject Code No. : **4 0 0 8** Section No. (1, 2,.....) : **2**

Seat No. :

Student's Signature

- 4 Write the command or shell script for following problems : 8
- (1) Write a command to create a new process in Unix.
 - (2) Assign all permissions to group users for file subject.
 - (3) Substitute all the blank lines with unix in the file subject.
 - (4) Print the year of the today's date.
 - (5) Extract third word from all the lines delimited by | of file lab.
 - (6) Append the content of file 1 to file 2.
 - (7) Write the regular expression to find any day of the week. (monday, sunday)
 - (8) To display 3 lines starting from 6th line of file 6th sem.
- 5 (a) Answer in brief : (any **four**) 12
- (1) What is escape sequencing ? Explain with example.
 - (2) Explain variable of shell ? When user required export statement ?
 - (3) What are the different operating modes of Unix ?

- (4) Explain the filter which cannot accept a regular expression with example.
- (5) What is the use of NF, FILENAME and NR ?
- (b) Explain booting process of Unix in detail. How GRUB will be loaded ? **7**
- 6** Attempt any **two** questions : **8**
- (1) Write an awk program for displaying percentage of the student calculated on the basis of all subject marks in a particular semester.
- (2) Explain various testing condition for string checking with example.
- (3) Explain various redirections with example.
-