

- 2** Answer the following questions (any six) **18**
- (a) Explain the command of giving write permission to file 6thsem for the owner.
 - (b) What is the use of input redirection ? Explain with example.
 - (c) Which command is used to remove lines beginning with capital letter and ends with number ?
 - (d) Which process is created after the Linux Kernel running in memory. What are the duties, of this process ?
 - (e) CAT command will always create new file. Justify.
 - (f) Explain command for extracting first world delimited by * of the file 6thunix.
 - (g) Explain all the columns of Is - l command.
- 3** Answer the following questions (any six) **18**
- (a) How to declare variable in shell ? Explain the export statement.
 - (b) Write the grep filter for extracting the names ending with "ti" from file student.
 - (c) What are the different run levels in Linux ?
 - (d) What is the use of NF, NR, FILENAME of awk.
 - (e) Write the command to append contents of file2 to file1.
 - (f) What is the use of test in checking various condition.
 - (g) What this command will returns : 724 unix1 and 624 unix2.

4 Answer any **four** questions :

16

(a) How the Linux operating system is evolved ? Give the brief history of Unix OS.

(b) Write the shell script to print following pattern

```
1
2 2
3 3 3
```

(c) Write an awk program to display student name and marks of various subjects from the student file, check marks of 1st subject should be greater than 70.

(d) What is shell ? How many different shells are there ?

(e) Explain the user creation and package management task in Linux. What is the use of get-apt install.