1. Answer in brief:  

(i) What do you mean by command substitution?

(ii) What is the use of ^ in regular expression?

(iii) What is the purpose of BEGIN and END section in awk?

(iv) Use of tee command.

(v) Explain the purpose of super block.

(vi) What is the significance of cp–R option?

(vii) Write a command to count all special characters in file.

(viii) What happen when cd command is run without argument?
2 Answer the following : (any three)
   (i) Explain how the file access permissions are handled in the Linux Operating System. List any three commands related to file access permissions.
   (ii) Explain command line interpretation of shell.
   (iii) Write shell script to reverse a number.
   (iv) Write a shell script find smallest of three numbers that are read from keyboard.

3 Answer the following : (any three)
   (i) Develop a shell script that creates 50 files with the name st001 to st050.
   (ii) Write a note on different role played by shell during the program execution.
   (iii) Explain UNIX kernel structure architecture.
   (iv) Write shell script to reverse a number.

4 Answer the following questions : (any three)
   (i) Write script to perform mathematical operations using menu.
   (ii) Write a short note on Log Files.
   (iii) Explain User Management Concepts in detail.
   (iv) Explain grep utility.