BT-7/D06   **9419**

Unix and Linux Programming
Paper–CSE–471

Time : Three Hours]   [Maximum Marks : 75

Note :– Attempt any **FIVE** questions, selecting at least **ONE** question from each unit.

UNIT–I

1. (a) Explain the UNIX file system and various categories of files.
   8

   (b) Explain the i-node structure and the commands related to the file system.
   7

2. (a) Describe the shell functions.
   5

   (b) Write a shell script to display the number of words and number of lines present in a given file.
   10

UNIT–II

3. (a) Explain the main strength of Perl language. How is it better than Awk Language ?
   6

   (b) Find out the occurrences of three consecutive and identical word characters (like aaa or bbb) using (i) grep (ii) sed. 9

4. (a) (i) How do these expressions differ ?

      (i)   [0 – 9]* and [0–9] [0– 9]*

      (ii) ^ [^ ^] and ^ ^ ^

      (ii) What does grep " ^ \ * " look for ? Is the \ really necessary ?
      8

   (b) Explain the text editing feature of sed using suitable examples.
   7

UNIT–III

5. (a) How will you copy two groups of ten and five lines each from one file to another? 8

   (b) Explain the features of gcc compiler along with options. 7

6. (a) Write down the various steps in tracing a program using gdb. 8

   (b) Explain the concept of statically linked and dynamically linked programs. 7

UNIT–IV

7. (a) What is Init? What is its use? 7

   (b) Explain the shuttling down process for linux system with its option. 8

8. (a) Explain the Password file and various fields in each of its entry. 7

   (b) Explain various job control facilities to manipulate jobs. 8