

BT-7/DX

8706

UNIX AND LINUX PROGRAMMING

Paper : CSE-471

Opt. (i)

Time : Three Hours]

[Maximum Marks : 75

Note : Attempt *five* questions in all, selecting at least *one* question from each unit.

UNIT-I

1. What is an Operating System ? Explain various features of Linux operating system in detail. 15
2. (a) Explain the role of Shell as command processor with example. 8
(b) Discuss types of Files available in Unix file system and list at least *five* commands used for file system. 7

UNIT-II

3. (a) Write a Script using (i) sed, and (ii) grep to find string "hello" in a file. 8
(b) Explain strength of 'awk' language. How is it different from 'Perl' language ? 7
4. (a) Explain and differentiate grep, egrep and fgrep by giving example. 7
(b) Discuss role of regular expressions in UNIX operating system and explain its character set. 8

UNIT-III

5. (a) How static and dynamic libraries are created ? Explain with example. 8
(b) How large projects are managed by gcc compiler ? Explain with example. 7
6. (a) Explain concept of Debugging. How gdb plays role of debugger in UNIX operating system ? 8
(b) Write short note on Dynamic Memory Management. 7

UNIT-IV

7. (a) What are various init run levels ? Describe initialization process in Linux operating system. 8
(b) Describe various archieving commands available in unix operating system with examples. 7
8. Write short notes on the following :
(i) i-node table. 5
(ii) Signal Handlers. 5
(iii) Soname. 5