Roll No. ..... Total Pages : 2

BT-6/M-21 **46173**

UNIX AND LINUX PROGRAMMING

Paper–PE-CS-S 314 A

Time : Three Hours] [Maximum Marks : 75

Note : Attempt *five* questions in all, selecting at least *one* question from each Unit. All questions carry equal marks.

UNIT–I

1. (a) What is UNIX File System ? Discuss its various components in detail. 8

(b) What do you mean by mounting and unmouting a file system ? Also brief its significant role in context to UNIX File System. 7

2. (a) What is i-nodes in UNIX operating system ? Explain. 8

(b) Explain any *five* UNIX commands with their syntax and examples. 7

UNIT–II

3. (a) What are Quantifiers ? What is the importance of Quantifiers ? 8

(b) Explain about grep and egrep utility with suitable examples. 7

4. (a) What is AWK programming ? Illustrate with an example. 8

(b) Write a PERL based simple program to find the Factorial of a given number. 7

UNIT–III

5. (a) What are the dependency calculations in C environment programs ? Discuss in detail. 8

(b) What is static and dynamic memory management in UNIX programming ? 7

6. (a) What is vi editor ? Explain the various modes of vi editor. 8

(b) Briefly discuss about the projects development and execution in C environment based on UNIX operating system. 7

UNIT–IV

7. (a) What is a process ? How are processes initialized and stopped in UNIX operating system ? 8

(b) What do you mean by Job Control processes in Linux ? Discuss in detail. 7

8. (a) Discuss about Linux I/O system in detail. 8

(b) Briefly tell about SIGSTOP and SIGKILL signals in context to signal handlers. 7
