

Code No: 5258BN

R15

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

M. Tech II Semester Examinations, February - 2017

NETWORK PROGRAMMING

(Computer Science and Engineering)

Time: 3hrs

Max.Marks:75

Note: This question paper contains two parts A and B.
Part A is compulsory which carries 25 marks. Answer all questions in Part A. Part B consists of 5 Units. Answer any one full question from each unit. Each question carries 10 marks and may have a, b, c as sub questions.

PART - A

5 × 5 Marks = 25

1. Write short notes on the following:
 - a) Disk Utilities in Linux. [5]
 - b) File System Structure. [5]
 - c) Signal Generation and Handling. [5]
 - d) Socket Options. [5]
 - e) Network Programming in Java. [5]

PART - B

5 × 10 Marks = 50

- 2.a) Explain about function pointer in C language with example program.
b) How do we provide security for files using file permissions? [5+5]
- OR**
- 3.a) Briefly explain about process utilities.
b) What are the networking utilities available in Linux? [5+5]
4. Explain different file I/O system calls with examples. [10]
- OR**
5. Explain system calls used to lock file and record using an example program. [10]
6. Write a program demonstrating IPC between unrelated processes using FIFOs. [10]
- OR**
7. What are message queues? Write a program to create a message queue. [10]
8. What is shared memory? Explain about different system calls the kernel supports for the shared memory. [10]
- OR**
9. Explain the socket system calls for Connection Oriented Communication. [10]
10. Write a client/server program using TCP sockets in Java. [10]
- OR**
11. Explain the process of handling multiple client requests at a time in server programs with suitable example. [10]