USN ☐☐☐☐☐☐☐☐☐☐   08SCN13

First Semester M.Tech. Degree Examination, June-July 2009
Unix Network Programming

Time: 3 hrs.   Max. Marks:100

Note : *Answer any FIVE full questions.*

1 a. Explain simplified 4 – layer version of the OSI model with peer – to – peer process.
                                                                    (06 Marks)
   b. Describe 7 – layer OSI model and mention protocols used in each layer.   (08 Marks)
   c. Write the steps to Interaction process for client server model.   (06 Marks)

2 a. With a neat diagram, explain the protocols of Internet protocol suite and their
      relationship.   (10 Marks)
   b. What is encapsulation? Explain the encapsulation TCP and UDP data on the Ethernet
      formats.   (10 Marks)

3 a. Explain Network layer functions in XNS protocol.   (08 Marks)
   b. Describe the courier remote procedure protocol layering process.   (06 Marks)
   c. Discuss the UUCP collection programs.   (06 Marks)

4 a. Draw and explain the diagram and socket system calls for connectionless protocol.
                                                                    (08 Marks)
   b. Give the structure of Advanced system calls and explain.   (12 Marks)

5 a. Draw and explain the packet formats of TFTP.   (10 Marks)
   b. Give and briefly explain the client user Interface commands.   (10 Marks)

6 a. Explain the remote command execution with a neat diagram.   (06 Marks)
   b. Explain the sequence of steps to establish an rshd connection with diagram.   (08 Marks)
   c. Give the syntax for rexec function and explain its parameters.   (06 Marks)

7 a. Draw a diagram and explain the functions recording process with stream pipes. (10 Marks)
   b. Explain the functions of 4.3BSD r-login processes with neat diagram.   (10 Marks)

8 Write short notes on:
   a. UUCP
   b. SMTP
   c. HTTP
   d. FTP.
                                                                    (20 Marks)

*****