Code: R7410501

R07

## B.Tech IV Year I Semester (R07) Supplementary Examinations, May 2013

## **NETWORK PROGRAMMING**

(Common to CSE and IT)

Time: 3 hours Max. Marks: 80

Answer any FIVE questions All questions carry equal marks

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- 1. (a) Explain how TCP connection is established using three-way hand-shake protocol.
  - (b) What are the limitations on the size of the IP datagram also explain how they effect the data transmitted by application?
- 2. (a) What are the advantages of concurrent servers? Explain the procedure for handling multiple clients.
  - (b) Explain byte ordering and byte manipulating functions.
- 3. (a) Explain POSIX signal handling.
  - (b) Explain what happens when the sever host crashes?
- 4. (a) Explain the following generic socket options (i) SO-DONTROUTE (ii) SO-ERROR.
  - (b) Explain and compare five different I/O models in Unix.
- 5. (a) Explain the important functions of OOP echo server.
  - (b) Explain:
    - (i) Lost datagram. (ii) Lack of flow control with UDP.
- 6. (a) Explain in get host by name in IPV6 address and get host by address functions.
  - (b) Explain different types of resource records.
- 7. (a) Draw the message queue structure in kernel and explain it.
  - (b) What is a pipe? Explain with an example how IPC is done using pipes.
- 8. (a) With a neat diagram explain the RPC execution.
  - (b) Give a note on Pseudo terminals.

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