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# THIRD SEMESTER M.Sc. DEGREE EXAMINATION NOVEMBER 2009

Computer Science

### CS 303 – NETWORK PROGRAMMING AND ADMINISTRATION

(2005 Admissions)

Time : Three Hours

Maximum : 80 Marks

#### Part A

Answer any **five** questions. Each question carries 8 marks.

- 1. Compare UDP and TCP.
- 2. Write note on SNMP.
- 3. (a) Explain the concept of streams.

(b) Differentiate between FIFO and pipe.

- 4. What is a socket? With the help of a block diagram, explain flow of socket system calls for connectionless protocol.
- 5. Write notes on asynchronous I/O.
- 6. What is a TLI? Discuss any three elementary TLI functions.
- 7. Discuss various aspects of Remote login.

 $(5 \ge 8 = 40 \text{ marks})$ 

### Part B

# Answer any **four** questions.

Each question carries 10 marks.

8. (a) Discuss important features of **SMTP**.

(b) Discuss SNMP message format.

- 9. Write notes on : (i) Message queues in IPC. (ii) Semaphores.
- 10. Explain any *five* socket system calls.
- 11. (a) Write notes on stream pipes.
  - (b) Discuss External data representation.
- 12. (a) Explain the significance of I/O multiplexing.
  - (b) Discuss the role of streams and stream pipes in the implementation of TLI.
- 13. (a) What is RPC? Compare a normal procedure call with RPC.
  - (b) Briefly explain design issues associated with remote command execution.

(4 x 10 = 40 marks)