Exam. Code : 206703
Subject Code : 4694

M.Sc. Computer Science 3rd Semester
NETWORK PROGRAMMING
Paper—MCS-305

Time Allowed—3 Hours]   [Maximum Marks—100

Note :— Candidates are to attempt *five* questions, *one* from each Section. **Fifth** question may be attempted from any Section. All questions carry equal marks.

SECTION—A

1. (a) Discuss the concept of Zombies and Daemon Processes. 10

    (b) How OSI model is used for networks ? Explain. 10

2. Discuss the following concepts :

    (a) Protocol independence 10

    (b) Socket address structures. 10

SECTION—B

3. What is the procedure for TCP connection establishment ? Discuss the working of protocol usage by applications. 20

4. Explain the following concepts by taking suitable example :

    (a) Concurrent server usage 10

    (b) Significance of port numbers for TCP addressing. 10

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SECTION—C

5. Discuss the procedure for UDP connection establishment and the working of protocol usage by applications.

20

6. Elaborate the following concepts used for UDP :

    (a) Working of echo client   10

    (b) Echo server.   10

SECTION—D

7. (a) What is the structure used for socket address ? Explain.   10

    (b) Discuss the concept of byte ordering for socket address.   10

8. Write short notes on the following concepts :

    (a) IPv4 and IPv6   10

    (b) I/O multiplexing.   10