

CBCS Scheme

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16LNI/SCN41

Fourth Semester M.Tech. Degree Examination, June/July 2018 Client Server Programming

Time: 3 hrs.

Max. Marks: 80

Note: Answer FIVE full questions, choosing one full question from each module.

Module-1

- 1 a. Explain the following technologies and concepts :
 - i) Privilege and complexity (06 Marks)
 - ii) Connectionless VS connection oriented servers. (06 Marks)
- b. Write a concurrent C-program to display value of i and sum of values. (06 Marks)
- c. List out the conceptual operations of interface functionality. (04 Marks)

OR

- 2 a. What are standard Vs. Nonstandard client software? Explain parameterization of clients. (08 Marks)
- b. With a neat diagram, explain how single sever program handles incoming requests concurrently. (04 Marks)
- c. Explain system call mechanism with a neat diagram. (04 Marks)

Module-2

- 3 a. Explain Socket Descriptors and file descriptors with a neat diagram. (08 Marks)
- b. How do you identify location of a server? Explain in detail. (08 Marks)

OR

- 4 a. Explain the Generic Address structure. (08 Marks)
- b. Explain the following :
 - i) Parsing an Address Argument (08 Marks)
 - ii) Looking up a Domain Name.

Module-3

- 5 a. Define procedural abstraction. Explain procedure Library for client programs. (04 Marks)
- b. Write a C program for implementation of connect UDP. (06 Marks)
- c. Write a note on ECHO service. (06 Marks)

OR

- 6 a. Write a C-program that forms connections by allocating a socket and connecting to it. (10 Marks)
- b. Write a note on TIME service. (06 Marks)

Module-4

- 7 a. Define conceptual server Algorithm. Explain concurrent VS. Iterative servers. (06 Marks)
- b. Explain the iterative, connection-oriented server Algorithm. (06 Marks)
- c. Explain the important problem of server Deadlock. (04 Marks)

OR

- 8 a. Differentiate between connection oriented and connectionless servers, with respect to server software Design. (06 Marks)
b. Explain how, do you optimize the stateless servers. (10 Marks)

Module-5

- 9 a. Write a C-program on UDP TIME server. (08 Marks)
b. Explain connection Termination and server vulnerability. (04 Marks)
c. Write a note on cleaning up Errant processes. (04 Marks)

OR

- 10 a. Explain, how do you create a passive socket, with supporting C-program. (06 Marks)
b. With a neat diagram, explain the process structure of a concurrent, connection oriented server. (04 Marks)
c. Write a note on allocating a passive TCP socket. (06 Marks)

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