



CBCS SCHEME

18SCN22

Second Semester M.Tech. Degree Examination, June/July 2019 Network Programming

Time: 3 hrs.

Max. Marks: 100

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

Module-1

- 1 a. Explain client/server communication over different network applications. (10 Marks)
b. Explain the layered architecture of OSI model and IP suite. (10 Marks)

OR

- 2 a. Write a note on i) UDP ii) SCTP. (10 Marks)
b. Explain BSD networking history. (10 Marks)

Module-2

- 3 a. Compare various socket address structures. (10 Marks)
b. Explain how socket address structure passed from : i) process to kernel ii) Kernel to process. (10 Marks)

OR

- 4 a. Write a program to determine host byte order. (10 Marks)
b. Write a note on : i) 'socket' function ii) 'connect' function. (10 Marks)

Module-3

- 5 a. Explain socket function for SCTP one-to-many style. (10 Marks)
b. Write a note on : i) 'sctp_bindx' function ii) 'sctp_connectx' function. (10 Marks)

OR

- 6 a. Explain how 'shutdown' function works to close a SCTP association. (10 Marks)
b. Explain IPV6 client, IPV4 server interoperability scenario. (10 Marks)

Module-4

- 7 a. Define demon process. Explain 'syslogd' daemon process implementations. (10 Marks)
b. Explain 'recv' and 'send' function with syntax, flags and examples. (10 Marks)

OR

- 8 a. Explain the steps performed by inetd with neat flow diagram. (10 Marks)
b. Explain the steps involved in passing descriptor between two process. (10 Marks)

Module-5

- 9 a. List and explain any two ioctl operations in detail. (10 Marks)
b. Explain datalink socket address structures. (10 Marks)

OR

- 10 a. Write a note on : TCP out-of-band data. (10 Marks)
b. Explain the basic functions to create and terminate the threads. (10 Marks)

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Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.
2. Any revealing of identification, appeal to evaluator and /or equations written eg, 42+8 = 50, will be treated as malpractice.