

Code: IT6T2

III B.Tech - II Semester – Regular Examinations – April 2016

**NETWORK PROGRAMMING
(INFORMATION TECHNOLOGY)**

Duration: 3 hours

Max. Marks: 70

Answer any FIVE questions. All questions carry equal marks

1)

a) Distinguish between UDP and TCP. 6 M

b) Briefly explain TCP connection management. 8 M

2)

a) What is a Socket? Describe the address structure of IPv4 Socket and Generic Socket? 7 M

b) What is the difference between little-endian byte order and big-endian byte order? Why these are important in Network Programming ? 7 M

3) Explain “crashing and rebooting of server host” scenario in TCP client/server communication. 14 M

4) Write short notes on the following

a) shutdown function 6 M

b) getsockopt function 4 M

c) setsockopt function 4 M

- 5) Discuss how a connected UDP socket can also be used to determine the outgoing interface. 14 M
- 6)
- a) What is “hostent”? Write its structure and the information it contains ? 7 M
 - b) Distinguish between “gethostbyname” function and “uname” function. 7 M
- 7)
- a) Distinguish between pipe and FIFO. 4 M
 - b) Write a program using pipe() system call to send data from parent process to child process. 10 M
- 8)
- a) Write short notes on the following
 - i) Semaphores 5 M
 - ii) Remote Procedure Calls 5 M
 - b) Distinguish between Message queues and Shared memory. 4 M