Code: CS5T3

III B.Tech - I Semester – Regular/Supplementary Examinations
October 2017

COMPUTER NETWORKS
(COMPUTER SCIENCE AND ENGINEERING)

Duration: 3 hours   Max. Marks: 70

PART – A

Answer *all* the questions.   All questions carry equal marks

$$11x\ 2 = 22\ M$$

1.

a) List out the major components of data communication system.

b) What are the main functions of transport layer?

c) What is the use of telnet? On which port number it operates?

d) What is Namespace?

e) What do you mean by socket address?

f) Define connectionless service.

g) Discuss Classful addressing classes.

h) What do you know about sub netting?

i) What do you mean by checksum?

j) Define framing.

k) What do you understand by guided media? Give examples.

PART – B

Answer any ***THREE*** questions. All questions carry equal marks.

$$3 \times 16 = 48 \text{ M}$$

2.a) Explain the network topologies in detail.   8 M

  b) What is the difference between circuit switching & packet switching.   8 M

3.a) Illustrate SMTP in detail.   8 M

  b) Discuss the difference between IMAP and POP3 in detail with diagram.   8 M

4.a) Explain the various services provided by UDP.   4 M

  b) Describe the three way handshaking process in detail.   8 M

  c) Illustrate SYN flood attack in TCP.   4 M

5.a) Describe the IPV4 datagram format with proper diagram.   8 M

  b) Illustrate distance vector routing technique.   8 M

6.a) Discuss HDLC protocol.   8 M

  b) Illustrate Slotted aloha in detail.   8 M