

Code: CS5T3

**III B.Tech - I Semester – Regular/Supplementary Examinations  
October 2019**

**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) Define computer Networks.
- b) Can you write the difference between circuit-switched and packet switched networks?
- c) List any four Application layer protocols and its uses.
- d) Can you define three way handshaking protocol in TCP.
- e) Write the difference between error detection and correction.
- f) Compare TCP and UDP.
- g) Can you define DNS and its services.
- h) What is count-to-infinity problem.
- i) Define the classes of addressing in Internet.
- j) Define Random access method for medium access mechanisms.
- k) What is SMTP and its usage.

## PART – B

Answer any **THREE** questions. All questions carry equal marks.  
3 x 16 = 48 M

2. a) Can you explain components and categories of data communication in detail. 8 M
- b) Compare TCP/IP and OSI Model. 8 M
3. a) Sketch the UDP Datagram Format and explain the services of UDP. 8 M
- b) How would you summarize that Go-back-N protocol(GBN) improves the efficiency of transmission. 8 M
4. a) Explain in detail about HTTP protocol. 8 M
- b) Can you explain in detail about FTP protocol? 8 M
5. a) What are the various mechanisms to translate IPv4 to IPv6. 8 M
- b) How would you explain the Distance vector (DV) routing algorithm with an example. 8 M
6. a) How would you interpret in your own words about MAC protocols in Wireless LANS. 8 M
- b) Can you explain different types of transmission media? Explain them in detail. 8 M