Code: CS5T3

### III B.Tech - I Semester – Regular / Supplementary Examinations March - 2021

## COMPUTER NETWORKS
### (COMPUTER SCIENCE AND ENGINEERING)

Duration: 3 hours                                    Max. Marks: 70

### PART – A

Answer *all* the questions.   All questions carry equal marks
$$11 \times 2 = 22 \text{ M}$$

1.
   a) Describe the significance of computer networks.
   b) Define a packet switched network.
   c) How would you compare non persistent and persistent connections in HTTP?
   d) What is the main idea of DNS?
   e) Can you list two differences between TCP and UDP protocols.
   f) What can you say about port numbers?
   g) How would you identify a computer system over internet?
   h) Define classless addressing.
   i) How would you classify coding in DLC?
   j) What can you say about framing in Data link layer?
   k) How would you compare IPV4 and IPV6?

# PART – B

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

3 x 16 = 48 M

2. a) Illustrate and Explain the functioning of each layer in OSI Model. 8 M

   b) How would you compare TCP / IP and OSI Model? 8 M

3. a) How would you transfer files using FTP. 8 M

   b) Can you explain about services provided by the application layer. 8 M

4. a) Discuss in detail TCP connection management and data transfer. 8 M

   b) How would you summarize the services and applications of UDP. 8 M

5. a) What approaches would you use to route packets from source to destination? Explain one approach with a neat sketch. 8 M

   b) How would Network layer solve congestion in networks? 8 M

6. a) Can you assess the importance of CSMA/CD  MAC
protocol. 8 M

b) How would you compare different guided media? 8 M