

Code: EC6T5

**III B.Tech-II Semester–Regular/Supplementary Examinations–March 2019**

**COMPUTER NETWORKS**  
**(ELECTRONICS & COMMUNICATION ENGINEERING)**

Duration: 3 hours

Max. Marks: 70

PART – A

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

11x 2 = 22 M

1.

- a) Why multipoint connection better than a point-to-point connection?
- b) Explain the role of computer networks in home applications.
- c) Differentiate between coaxial cable and fiber cable.
- d) What is the need for Framming?
- e) What are the advantages of Wireless LAN over Wired LAN?
- f) How do routers differentiate the incoming unicast, multicast and broadcast IP packets?
- g) Find the class of each address
  - i) 10.23.120.8
  - ii) 252.3.12.111
- h) What are the primitives of Transport services?
- i) What are the advantages of UDP?
- j) What is the purpose of DNS?
- k) Write the use of Hyper Text Transfer Protocol (HTTP).

## PART – B

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

3 x 16 = 48 M

2. a) Explain the architecture of internet with a neat sketch of its big picture. 8 M
- b) Write about classification of networks based on network hardware. 8 M
3. a) Find CRC for  $P = 110011$  and  $M = 1100011$ ? 8 M
- b) Explain different protocols for noisy channels. 8 M
4. a) Explain in detail about hierarchical routing. 8 M
- b) Compare Virtual Circuits with Datagram Subnets. 8 M
5. a) Draw TCP state transition diagram and describe each of it. 10 M
- b) Differentiate between TCP and UDP. 6 M
6. a) What is DNS? Explain DNS name space in detail. 8 M
- b) Describe how SMTP protocol is used in e-mail applications. 8 M