



K19P 0919

Reg. No. :

Name :

**II Semester M.C.A. Degree (Reg./Suppl./Imp.) Examination, July 2019
(2014 Admission Onwards)**

MCA2C10 : COMPUTER NETWORKS

Time : 3 Hours

Max. Marks : 80

SECTION – A

Answer any ten questions. Each question carries three marks. (10×3=30)

1. Explain message switching with an example.
2. List and explain the four fundamental characteristics of effective data communication system.
3. Write a short note on ARPANET.
4. Write a note on Single Bit Error and Burst Error.
5. Write a note on Password Authentication Protocol (PAP).
6. Explain transition phases of PPP.
7. Write a short note on exponential back of algorithm.
8. What advantages does TDMA has over FDMA in a circuit-switched network ?
9. Compare and contrast between distance vector routing and link state routing.
10. Define subnet. How do the subnet mask and supernet mask ?

P.T.O.



11. Which protocol supports email and give details about that protocol.
12. Give the description of flags in the control field of TCP header.

SECTION – B

Answer **all** questions. **Each** question carries **ten** marks. **(5×10=50)**

13. a) Discuss OSI reference model as network architecture. **10**

OR

- b) With neat diagram explain the structure of Co-axial cable. Also explain coaxial cable connectors. **10**

14. a) Explain the Link Control Protocol in detail. **10**

OR

- b) Explain the Selective Repeat ARQ in detail. **10**

15. a) Describe the 802.11 protocol stack for wireless LAN. **10**

OR

- b) What is collision ? How does CSMA/CD detect and handle collisions ? **10**

16. a) What is an IP address ? Explain the different classifications of IP address. **10**

OR

- b) Discuss any four methods of congestion control in datagram subnets. **10**

17. a) Describe how TCP uses congestion control to avoid congestion in the network. **10**

OR

- b) Explain leaky bucket technique for traffic shaping in networks. **10**