K18P 0759

Reg. No. : .....

Name : .....

Second Semester M.C.A. Degree (Regular/Supplementary/Improvement) Examination, July 2018
(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. List and explain in brief the five components of data communication system.
2. What are the features of an optical fiber ?
3. What is the role of ISPs in Internet ? Write the hierarchy of ISPs.
4. Explain simple parity check code with example.
5. Write a note on Piggybacking.
6. Write differences between Go-Back-N ARQ and Stop-and- Wait ARQ.
7. Write a short note on Bluetooth Scatternet.
8. Explain briefly : I-persistence and P-persistence strategies of CSMA.
9. What is IP Address ? What are the various classes of IP addresses ?
10. Define routing table. What are the important fields in a routing table?
11. Give the advantages of Email.
12. What is MIME ? What is its use ?

P.T.O.

SECTION – B

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

13. a) Compare and contrast different types of switching techniques. **10**

OR

b) Discuss LAN, WAN, MAN with respect to speed, coverage (area) and topology. **10**

14. a) Explain Cyclic Redundancy Check in detail. Give the general design of encoder and decoder of a CRC code. **10**

OR

b) Explain the sliding window protocol in detail. **10**

15. a) Discuss the frame format for 802.3 LAN. **10**

OR

b) Write a note on Bluetooth goals and applications. **10**

16. a) Explain in detail the various TCP congestion control mechanisms. **10**

OR

b) Write an elaborative note on Distance Vector Routing. **10**

17. a) Discuss how Simple Mail Transfer Protocol (SMTP) is useful in electronic mail. **10**

OR

b) Write an elaborative note on Symmetric key cryptography. **10**