



K16P 0819

Reg. No. :

Name :

**II Semester MCA Degree (Reg./Supple./Improve.) Examination, July 2016
(2014 Admn. Onwards)
MCA 2C10 : COMPUTER NETWORKS**

Time : 3 Hours

Max. Marks : 80

SECTION - A

Answer **any ten** questions. **Each** question carries **three** marks.

1. What are the applications of Computer Network ?
2. Mention the services of physical layer.
3. How Hybrid switching is different from the other switching services ?
4. Compare and contrast GSM/CD and CSMA/AD.
5. What are the Error Correction techniques in Computer Network ?
6. Mention the significant features of Multiple Access Protocols.
7. What are the properties of MAC address ?
8. Define Internetworking.
9. What are the uses of ICMP ?
10. What are the design issues of transport layer ?
11. How to distinguish connection oriented and connectionless protocols ?
12. What are the challenging issues of Network Security ?

(10×3=30)

P.T.O.



SECTION – B

Answer all questions. Each question carries ten marks.

13. a) Explain briefly architecture of OSI-ISO reference model and TCP/IP reference model.

OR

- b) Explain the classification of Computer Network with various parameters.

14. a) Mention the design issues of data link layer, explain any two of them briefly.

OR

- b) With suitable example explain the CRC error detection technique briefly.

15. a) Discuss the properties and frame format specification of IEEE 802.3 and IEEE 802.4.

OR

- b) Explain briefly pure ALOHA and slotted ALOHA channel Allocation techniques.

16. a) Define congestion control, explain two important techniques of congestion control.

OR

- b) Describe briefly classification of IP-addresses with suitable examples.

17. a) Explain briefly importance of cryptography. Discuss the merits of DES and RSA algorithm.

OR

- b) Mention the design issues of the Application layer, explain any two of them briefly.

(5×10=50)