



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.

(5x10=50)