Reg. No. : ...................................

Name: ...................................

# Seventh Semester B.Tech. Degree Examination, November 2013
## (2008 Scheme)
### 08.703 : COMPUTER NETWORKS (R)

Time : 3 Hours

Max. Marks : 100

PART – A

Answer all questions.

1. Briefly explain the design issues for the layers.

2. Distinguish between connection oriented and connectionless services.

3. Explain the frame format for HDLC protocol.

4. Discuss the various phases for bringing a line up and down using PPP.

5. Compare 802.3, 802.4 and 802.5.

6. Where is the routing table maintained ? Also state the purpose of maintaining a routing table.

7. Briefly explain wireless LAN protocol.

8. Explain the IP header frame format.

9. Compare classful and classless addressing.

10. Distinguish between transparent and non transparent fragmentation.

(10×4=40 Marks)

PART – B

11. a) Explain ISO OSI reference model with a neat sketch. 7

b) List atleast two functionalities of each layers of OSI model. 7

c) Explain the criticisms against OSI reference model. 6

OR

12. Explain the following data link protocols.

   a) Unrestricted Simplex Protocol.                                        6

   b) Simplex Stop and Wait Protocol                                        7

   c) Simplex Protocol for Noisy Channel.                                   7

13. Explain the following types of bridges

   a) Transparent bridges

   b) Spanning tree bridges

   c) Source routing bridges.                                             20

                              OR

14. State the major difference between vector routing and link state routing. Discuss
    how these routing techniques work.                                    20

15. Write short notes on :

   a) DNS

   b) SMTP

   c) E-Mail

   d) WWW.                                                        (5×4=20 Marks)

                              OR

16. Explain the following transport protocols.

   a) TCP                                                               12

   b) UDP.                                                               8