SIXTH SEMESTER B.TECH (ENGINEERING) DEGREE EXAMINATION,
APRIL 2014 (2009 Scheme)
IT/CS/PTCS 09 603 COMPUTER NETWORKS
Time : Three Hours Maximum : 70 Marks

Part A
Answer all questions

1. What are the drawbacks of ring topology?
2. Describe various fields in frame format of FDDI.
3. In what situations contention based MAC protocols are suitable?
4. Explain the two techniques for implementing Ethernet switches.
5. Differentiate between ISO - OSI and TCP/IP reference model.

Part B
Answer any four questions

6. Explain in detail about Virtual circuit and their phases.
7. Discuss the features of ATM networks.
8. Explain Distance Vector Routing Algorithm in detail. Illustrate its working with an example.
9. What is IPv6? Explain its advantages over IPv4. Also explain its frame format.
10. Highlight the features of UDP and briefly discuss the same.
11. Discuss the duties of application layer.

Part C
Answer section (a) or (b) of each question

12. (a) Explain the following techniques :
(i) Circuit Switching;
(ii) Packet Switching
(iii) Message Switching

or

(b) Discuss in detail about the wireless LAN MAC sublayers. Also discuss about the high speed networks.

13. (a) State the major difference between Distance Vector Routing and Link State Routing. Discuss how these techniques work.

or

(b) Define Bridge and explain the type of bridges.

14. (a) What is IP addressing? How it is classified? How is subnet addressing is performed ?

or

(b) Discuss briefly about four variants of PIM and also explain in detail about DVMRP.

15. (a) Compare OSI and TCP/IP reference models on form of their merits and demerits.

or

(b) Explain in detail about the following :
(i) TCP;
(ii) UDP;