CS/IT-802

B. E (Eighth Semester) EXAMINATION, June, 2010 (Common for CS & IT Engg. Branch)

WEB ENGINEERING

Time: Three Hours Maximum Marks : 100 Minimum Pass Marks : 35

Note : Attempt all questions. All questions carry equal marks.

1. Explain the following terms : 20

(i) MTV (ii) Encapsulation (iii) Demultiplexing

(iv) Port numbers (v) Subnet addressing, subnet mask

Or

2.(a) Given the following IP address, find class, Net ID and range of addresses and broadcast address : 10

(i) 132-21-0-0

(ii) 220-34-76-0

(b) Explain fragmentation field, flags,- fragmentation offset field of IPv 4 header field. What are their functions ? 10

3. (a) Explain the frame format of APR. What is the function of ARP and RARP ? 10

(b) Explain ICMP timestamp request and reply. 10

Or

4. (a) What are the basic commands in ICMP ? How are they categorize d ? 10

(b) Explain the following terms : 10

(i) Proxy ARP (ii) RARP server design

5. (a) Explain BGP in detail with example. 10

(b) How trace route is performed ? What is the necessity of trace route ? 10

Or

6. (a) Which layer protocol is UDP ? What is the main function of UDP ? Explain UDP header frame format. 10

(b) Differentiate between adaptive routing and non-adaptive routing. 5

(c) What is Pseudoheader ? 5

7. (a) Explain the frame format oi TCP. Discuss various fields in it. 10

(b) Compare FTP and TFTP. 10

Or

8. (a) Explain the connection establishment and termination procedure of TCP. 10

(b) What is state transition diagram ? 5

(c) What is BOOTP ? 5

9. (a) Explain Telnet. 10

(b) How NFS is used ? What are the various protocols of application layer of TCP/IP ? 10

Or

10. (a) What, is SNMP ? How MIB is used in SNMP ? 10

(b) What are the various ports used for FTP ? What commands are used for FTP ? Give some example. 5

(c) What is user agent and message transfer agent in SMTP ? 5