PG – 512

II Semester M.C.A. Examination, June 2015
(CBCS)
MCA-203T : COMPUTER NETWORKS

Time : 3 Hours Max. Marks : 70

PART – A

Note : Answer **any five. Each** question carries **6** marks. **(5×6 = 30)**

1. What are ICMP ? With an example discuss "ping" and "traceroute" commands.
2. With neat diagram, discuss working of coaxial cables, and optical fiber cables.
3. How do one detect transmission error ? With an example explain Cyclic Redundancy Check (CRC) technique.
4. Discuss the following LAN technologies :

   Ring, Bus, star and FDDI.
5. What are repeaters and bridges used for ? Explain the advantages and disadvantages.
6. What is Address Resolution Mechanism ? Explain Address Resolution Protocol (ARP).
7. What are domain name hierarchy ? Discuss DNS.
8. Write the structure of html. With an example explain the following tags, li, p, br, b1.

P.T.O.

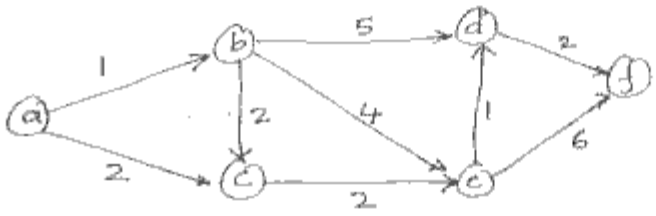
PART – B

Note : Answer **any four**. **Each** carries **10** marks. **(4×10=40)**

9. What is frequency, modulation and wavelength ? What is baud rate and sine wave ? With suitable example discuss frequency modulation, phase modulation, and amplitude modulation.

10. Explain CSMA/CD and CSMA/CA technique.

11. What is a Router ? What are Routing Tables ? Given the following graph, discuss shortest path routing algorithm (from source "a" to destination "f") along with routing table entries.



12. What is Layering of Protocol ? What are the advantages ? Discuss the functioning of OSI-ISO Layers.

13. What is IPv4 addressing format ? Explain class A, class B and class C addressing format. Identify the following address

    192.142.132.11, and 14.132.16.17.

14. What is 3-way handshaking in TCP/IP ? Explain TCP and IP Layers.