BCA/M-23   **1879**

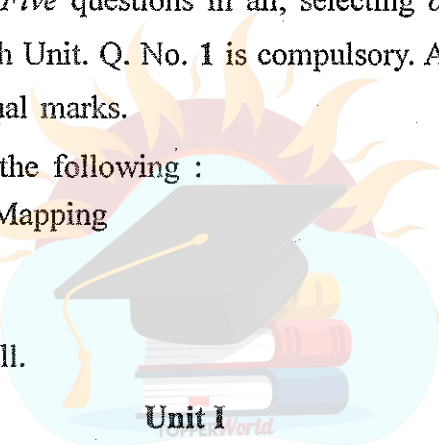# INTERNET TECHNOLOGIES
BCA-364

Time : Three Hours]   [Maximum Marks : 80

Note : Attempt *Five* questions in all, selecting *one* question from each Unit. Q. No. 1 is compulsory. All questions carry equal marks.

1. Attempt all the following :   4×4=16

    (a)   DNS Mapping

    (b)   DHCP

    (c)   SMTP

    (d)   Firewall.

Unit I

2. (a)   What is Internet ? Explain history and services of Internet.   8

    (b)   Explain the following terms related to internet : Client-Server, Chat and Bulletin Board, URL and Web browsers.   8

3. (a)   Explain various layers in TCP/IP reference model.   10

    (b)   Distinguish between Internet and Intranet.   6

Unit II

4. What do you mean by IP Address ? Explain various classes of IPv4 address. Explain IPv4 header format in detail and distinguish between IPv4 and IPv6. 16

5. Explain the following terms with header format : 4×4=16

   (a) TCP

   (b) UDP

   (c) ARP

   (d) ICMP.

Unit III

6. (a) Explain FTP and distinguish between FTP and TFTP. 8

   (b) Explain RTP and RTCP in detail. 8

7. Explain the following terms : 4×4=16

   (a) Telnet

   (b) IMAP

   (c) RSVP

   (d) POP.

Unit IV

8. (a) Explain OSPF protocol in detail. 8

   (b) What is Virtual Private Network ? Explain with proper diagram. 8

9. Explain the following terms : 4×4=16

   (a) BGP

   (b) Mobile IP

   (c) NAT

   (d) Firewall.