

Roll No. ....

Total Pages : 037

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 :  $4 \times 4 = 16$
- (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 :  $4 \times 4 = 16$
- (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.