

**BCA/M-21****1902****INTERNET TECHNOLOGIES****Paper–BCA-364**

Time Allowed : 3 Hours]

[Maximum Marks : 80

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

**Compulsory Question**

1. Attempt all questions : 4×4=16
- (a) Explain Network News Transfer Protocol.
  - (b) Distinguish between TCP and UDP.
  - (c) Explain structure of E-mail message.
  - (d) Write a note on E-mail Security.

**UNIT–I**

2. How can we create and search Information on the Web portal ? Explain various popular search engines in detail with examples. 16
3. Explain various layers of TCP/IP reference Model in detail. 16

**UNIT–II**

4. What do you mean by IP Address ? Explain various services and classes of IPv4 addresses. 16
5. Explain the Internet Control Message Protocols and Internet Group Message Protocols in detail. 16

**UNIT–III**

6. Write short notes on the following Protocols : 16
- (a) SMTP
  - (b) MIME
  - (c) POP
  - (d) IMAP.

7. (a) Explain FTP server and its types. Also explain basic Model of FTP. 8
- (b) What is TFTP ? Explain its features and operations. 8

#### **UNIT-IV**

8. Explain the RIP, BGP and OSPF protocols in detail. 16
9. Explain Internet Protocol Security (IPSec). Also explain its goals and architecture in detail. 16