

CHAPTER : E-MAIL

SECTION 1 : BASICS OF E-MAIL

E-Mail stands for : Electronic Mail

E-mail Founder : Ray Tomlinson

First E-mail Sent Year : 1971

First E-mail Patented Year : 1971

First E-mail Message : QWERTYUIOP

First E-mail Provider : Hotmail

Hotmail Founder : Sabeer Bhatia and Jack Smith

Hotmail Founded Year : 1996

Hotmail Acquired by Microsoft : 1997

Hotmail Renamed to : MS Outlook

Unwanted Mail : Spam

Email Spoofing : Malware Attachment

E-mail has 2 Parts : username @ domainname

@ Symbol Introduced : 1972 (by Ray Tomlinson)

Automatically Included Fields : "From" (Sender) and "Date/Time"

Storage Area of E-mail : Mailbox

Access E-mail Anywhere : Webmail Interface (e.g., Gmail, Yahoo Mail)

E-mail via Software : E-mail Client (e.g., Outlook, Thunderbird)

Country where E-mail was invented : USA (America)

SECTION 2 : E-MAIL CLIENT vs WEBMAIL

E-Mail Client

- Software application installed on a computer/device to send, receive, and manage emails.
- Works even in offline mode (for reading downloaded emails).
- Popular E-Mail Clients: MS Outlook, Mozilla Thunderbird, Apple Mail

Webmail

- Access email directly from the internet without installing any software.
- Accessible from any device with an internet connection.
- No software downloads or installations required.
- Popular Webmail Providers: Gmail, Yahoo Mail, AOL Mail, Lycos, Zoho Mail, Yandex Mail

SECTION 3 : E-MAIL PROTOCOLS

E-mail protocols are the set of rules that govern how emails are sent, received, and formatted.

SMTP — Simple Mail Transfer Protocol

- Used for SENDING emails from client to server or between servers.
- It is a PUSH protocol.
- Port Numbers (Updated 2025):
 - Port 25 : Default server-to-server (often blocked by ISPs due to spam risk — NOT recommended for clients)
 - Port 587 : RECOMMENDED — for sending with STARTTLS encryption (most widely used today)
 - Port 465 : Used for SMTP with SSL/TLS (SMTPS)

POP3 — Post Office Protocol version 3

- Used for RECEIVING emails — downloads emails from server to local device.
- Once downloaded, emails are typically deleted from the server (configurable).
- Suitable for accessing email from a single device only.
- Does NOT sync across multiple devices.
- Port Numbers:
 - Port 110 : Default (Unencrypted — NOT recommended)
 - Port 995 : Secure (Encrypted with SSL/TLS — RECOMMENDED)

IMAP — Internet Message Access Protocol

- Used for RECEIVING emails — accesses and manages emails directly on the server.
- Emails remain on the server; no download needed.
- Syncs across multiple devices simultaneously.
- Preferred protocol in modern usage (smartphones, laptops, shared inboxes).
- Port Numbers:
 - Port 143 : Unencrypted (NOT recommended)
 - Port 993 : Encrypted with SSL/TLS (RECOMMENDED)

KEY DIFFERENCE: POP3 vs IMAP

Feature	POP3	IMAP
Email Storage	Downloaded to device	Stays on server
Multi-device Sync	No	Yes
Offline Access	Yes	Limited
Recommended Port	995 (SSL)	993 (SSL)

SECTION 4 : MIME

MIME stands for : Multipurpose Internet Mail Extension

- Used for handling non-text email attachments (images, audio, video, documents).
- Enables sending and receiving of various file types via email.
- Multimedia data over SMTP must be encoded into ASCII.
- Supported File Types: Audio (MP3, WAV), Video (MP4, AVI), Images (JPEG, PNG, GIF), Documents (PDF, DOC, XLS)

S/MIME (Secure/Multipurpose Internet Mail Extension):

- Alternative to PGP.
- Uses digital certificates for email encryption and digital signing.

SECTION 5 : E-MAIL PORT NUMBERS — SUMMARY TABLE

Protocol	Purpose	Port (Unencrypted)	Port (Encrypted)
SMTP	Sending mail	25 (server-server)	587 (STARTTLS) / 465 (SSL)
POP3	Receiving mail (download)	110	995
IMAP	Receiving mail (server access)	143	993

Note: Port 587 is now the most recommended SMTP port for email clients (as of 2025-26). Port 25 is largely blocked by ISPs.

SECTION 6 : CC vs BCC

Feature	CC (Carbon Copy)	BCC (Blind Carbon Copy)
Full Form	Carbon Copy	Blind Carbon Copy
Function	Sends copy to additional recipients	Sends hidden copy to additional recipients
Visibility	All To and CC recipients can see each other's addresses	Only the sender can see all email addresses
Use Case	Keeping others informed	Maintaining recipient privacy

Memory Tip: CC = sharing a document with everyone in the room; BCC = sending individual letters without revealing recipients to each other.

SECTION 7 : E-MAIL SECURITY

PGP (Pretty Good Privacy)

- Encryption software for securing email communications.
- Uses public-key cryptography.
- Provides authentication and integrity checking.

SSL (Secure Sockets Layer)

- Protocol for securing internet connections.

Drafts : Stores unsent/incomplete emails for later editing and sending.

Sent : Stores all outgoing/successfully sent emails.

Outbox : Temporarily holds emails waiting to be sent.

Trash / Deleted Items : Deleted emails are moved here; acts like Recycle Bin. Permanently deleted after 30 days.

Spam / Junk : Folder for unwanted/unsolicited emails. Auto-cleaned after 30 days.

Archive : Stores emails you want to keep for reference without cluttering the inbox.

Archived emails are removed from inbox but remain accessible.

Flagging : Marking specific emails for follow-up or priority. Flagged emails are highlighted or displayed separately.

SECTION 10 : E-MAIL SIGNATURE

- Placed at the bottom of each email.
- Personalized block of text automatically appended to outgoing emails.
- Typically includes: Sender's name, job title, company, contact details, disclaimers.
- Also known as: Footer of the email.

SECTION 11 : OTHER IMPORTANT TERMS

Subject Line : Describes the contents/essence of the email message.

Address Book : Convenient place to store contact information for quick retrieval.

Paper Clip Icon : Used to add an attachment to an email.

Forward : To send a received email to another person.

Reply To : To respond to the sender only.

Reply All : To respond to all recipients including CC.

Mandatory for sending email : Sender's Mail ID (To field is mandatory; Subject and Body are optional).

Correct Email Format : username@domainname (e.g., ramesh@yahoo.com)

30 IMPORTANT MCQs WITH ANSWERS

Q1. Who is the founder of E-mail?

(a) Tim Berners-Lee (b) Vint Cerf (c) Ray Tomlinson (d) Sabeer Bhatia **Answer: (c) Ray Tomlinson**

Q2. In which year was the first e-mail sent?

(a) 1969 (b) 1971 (c) 1974 (d) 1980 **Answer: (b) 1971**

Q3. What was the first e-mail message ever sent?

(a) HELLO WORLD (b) ABCDEFGH (c) QWERTYUIOP (d) 12345 **Answer: (c) QWERTYUIOP**

Q4. Which protocol is used for SENDING emails?

(a) POP3 (b) IMAP (c) SMTP (d) HTTP **Answer: (c) SMTP**

Q5. What is the recommended port for SMTP with STARTTLS encryption in 2025-26?

(a) 25 (b) 110 (c) 465 (d) 587 **Answer: (d) 587**

Q6. Which port is used by POP3 for secure (SSL/TLS) connections?

(a) 110 (b) 143 (c) 993 (d) 995 **Answer: (d) 995**

Q7. Which port is used by IMAP for encrypted connections?

(a) 110 (b) 143 (c) 993 (d) 995 **Answer: (c) 993**

Q8. What is the key difference between POP3 and IMAP?

(a) POP3 keeps mail on server; IMAP downloads it (b) IMAP keeps mail on server; POP3 downloads it (c) Both work the same way (d) IMAP is used for sending; POP3 for receiving **Answer: (b) IMAP keeps mail on server; POP3 downloads it**

Q9. MIME stands for:

(a) Mail Internet Message Exchange (b) Multipurpose Internet Mail Extension (c) Multiple Internet Mail Encryption (d) Mail Inbox Management Extension **Answer: (b) Multipurpose Internet Mail Extension**

Q10. Which of the following protocols is used for email security using public-key cryptography?

(a) SSL (b) TLS (c) PGP (d) SMTP **Answer: (c) PGP (Pretty Good Privacy)**

Q11. Who is the founder of Gmail?

(a) Larry Page (b) Sundar Pichai (c) Paul Buchheit (d) Jerry Yang **Answer: (c) Paul Buchheit**

Q12. Gmail was launched on:

(a) January 1, 2004 (b) April 1, 2004 (c) June 1, 2005 (d) March 1, 2003 **Answer: (b) April 1, 2004**

Q13. What is the free storage limit offered by Gmail?

(a) 5 GB (b) 10 GB (c) 15 GB (d) 25 GB **Answer: (c) 15 GB (shared across Gmail, Drive, and Google Photos)**

Q14. What is the maximum attachment size in Gmail?

(a) 10 MB (b) 15 MB (c) 20 MB (d) 25 MB **Answer: (d) 25 MB**

Q15. How many emails can a free Gmail account send per day?

(a) 100 (b) 200 (c) 500 (d) 1000 **Answer: (c) 500**

Q16. Who are the founders of Yahoo?

(a) Bill Gates & Paul Allen (b) Jerry Yang & David Filo (c) Steve Case & Marc Seriff (d) Sabeer Bhatia & Jack Smith **Answer: (b) Jerry Yang & David Filo**

Q17. What is the free storage offered by Yahoo Mail?

(a) 5 GB (b) 15 GB (c) 100 GB (d) 1 TB **Answer: (d) 1 TB**

Q18. Which email feature hides recipient addresses from other recipients?

(a) CC (b) To (c) BCC (d) Subject **Answer: (c) BCC (Blind Carbon Copy)**

Q19. All outgoing messages that are waiting to be sent are stored in which folder?

(a) Inbox (b) Drafts (c) Sent (d) Outbox **Answer: (d) Outbox**

Q20. An incomplete/unsent email saved for later is stored in which folder?

(a) Inbox (b) Trash (c) Drafts (d) Outbox **Answer: (c) Drafts**

Q21. After how many days are messages in Trash/Spam permanently deleted?

(a) 7 days (b) 15 days (c) 30 days (d) 60 days **Answer: (c) 30 days**

Q22. Which program is used by a user to send and receive emails?

(a) Mail Transfer Agent (b) Mail Delivery Agent (c) Mail User Agent (d) Mail Reading Agent **Answer: (c) Mail User Agent**

Q23. Which of the following is an example of an Email Client (not webmail)?

(a) Gmail (b) Yahoo Mail (c) MS Outlook (d) AOL Mail **Answer: (c) MS Outlook**

Q24. What is the storage area of an email called?

(a) Attachment (b) Hyperlink (c) Mailbox (d) IP Address **Answer: (c) Mailbox**

Q25. In which year was the @ symbol introduced in email addresses?

(a) 1970 (b) 1971 (c) 1972 (d) 1975 **Answer: (c) 1972**

Q26. Which icon is used to add an attachment to an email?

(a) Stationery icon (b) Paper Clip icon (c) GIF icon (d) Emoji icon **Answer: (b) Paper Clip icon**

Q27. To send a received email to another person, you use which function?

(a) Reply (b) Reply All (c) Forward (d) Copy **Answer: (c) Forward**

Q28. Which of the following is NOT an email protocol?

(a) SMTP (b) POP3 (c) IMAP (d) UDP **Answer: (d) UDP**

Q29. TLS in email security stands for:

(a) Transfer Layer Security (b) Transport Layer Security (c) Transmission Level Security (d) Text Layer Security **Answer: (b) Transport Layer Security**

Q30. Which of the following is mandatory to send an email?

(a) Subject (b) Body (c) Attachment (d) Sender's Mail ID **Answer: (d) Sender's Mail ID (To field with recipient address)**