

Ans 3/1st Short note on SMTP :-

SMTP stands for Simple Mail Transfer Protocol, the procedure behind the email flow on the internet.

- you send an email with your webmail or mail client from your address (e.g. mark@website.com) to a given recipient (e.g. jane@domain.com). In jargon, the webmail or client is called message user agent, or MUA.
- The message is sent normally via port 25 to an SMTP server (named for instance mail.website.com) which is given to your client when you set it up and acts as a message transfer agent or MTA. Client and server start a brief "conversation" where the latter checks all the data concerning the message's transmission (sender, recipient, domains etc.) Note that SMTP language defines only the message's transmission and doesn't deal with its body content.
- Then, if the domain where your recipient has his account is directly connected to the server, the email is immediately delivered. If it's not the case, the SMTP hands it to another incoming server cluster to the recipient (in jargon these packages are called relay). In our example, the website server; which (if everything has gone right) receives the email and stores it!
- What if the recipient's server is down or busy? The SMTP most simply drops the message to a backup server; if none of them is available, the email is queued and the delivery is retried periodically.

## 2★ Short note on FTP :-

File transfer protocol (FTP) is a client/server protocol used for transferring files to or exchanging files with a host computer. It may be authenticated with user names and password. Anonymous FTP allows users to access files, programs and other data from the internet without the need for a user ID or password. Web sites are sometimes designed to allow users to use 'anonymous' or 'guest' as a user ID and an email address for a password. Publicly available files are often found in a directory called 'pub' and can be easily FTPed to a user's computer. FTP is also the internet standard for moving or transferring files from one computer to another using TCP or IP networks. File transfer protocol is also known as RFC 959.

## 3★ Short note on Biometric System :-

A biometric device is a security identification and authentication device. Such devices use automated methods of verifying or recognising the identity of a living person based on a physiological or behavioural characteristic. The characteristics include fingerprints, facial images, iris and voice recognition. Biometric devices have been used by man over a long period of time. Non-automated biometric devices have been used since 500 BC as it was seen that Babylonian business transactions were recorded on a clay tablets that includes fingerprints. Automation in biometric devices was first seen in the 1960s. The Federal Bureau of Investigation (FBI) in the 1960s, introduced the Identimat which started checking for fingerprints to maintain records.