Q.Suppose there is exactly one packet switch between a sending host and a receiving host. The transmission rates between the sending host and the switch and between the switch and the receiving host are R bits/sec, respectively. Assuming that the switch uses store-and-forward packet switching, calculate the total end-to-end delay to send a packet of length L.

Ans.

Consider the data:

R1= Transmission rates between the sending host and the switch

R2= Transmission rates between the switch and the receiving host

L=  Packet of length

Therefore, total end-to-end delay to send a packet of length L=L/R1+L/R2

Q.How does SMTP mark the end of a message body? Compare with HTTP. Can HTTP use the same method as SMTP to mark the end of a message body?

Ans.

SMTP uses a line containing only a period to mark the end of a message body. HTTP uses “Content-Length header field” to indicate the length of a message body. No, HTTP cannot use the method used by SMTP, because HTTP message could be binary data, whereas in SMTP, the message body must be in 7-bit ASCII format.