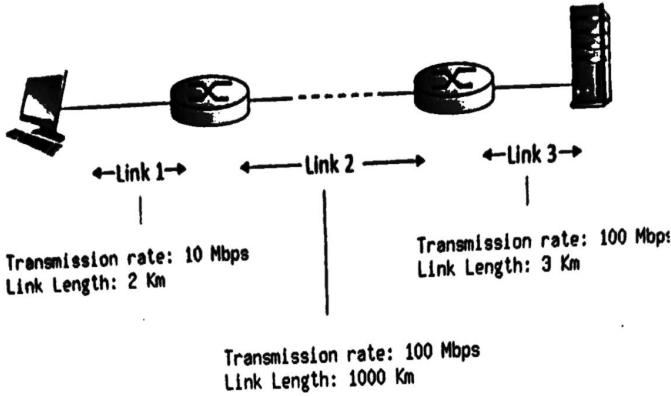




are in Km. Assume a packet length of 10000 bits. Give your answer in milliseconds.



b) Differentiate between Circuit switching and datagram packet switching. (Minimum 6 points)

4

A generator polynomial  $x^5+x^4+x^2+1$  is given. Encode the data bit sequence 1010001101 using the generator polynomial and construct the code-word on the transmitter side. Also, evaluate the code at the receiver end and prove that there is no error

10

A four-bit message, 1101 is transmitted through a network with even parity. Now, according to Hamming code policy, examine the following:

4

- a) The code-word of the transmitter side.
- b) If the receiver has received an error code where 5th bit is flipped then how the error is detected and corrected in the receiver side.

6