Data Communication & Network

Tutorial session

01

(a). Explain what Is mean by an error in data communication

(b). Explain single bit error and burst error using an appropriate diagram.

(c). Explain odd parity and even parity.

2. A data transmission system uses an even parity error detection scheme. The transmitter transmits the following bit stream:

01011100

Due to noise in the transmission channel, the following bit stream was received by the receiver:

01011000

(i) Identify which bit(s) is(are) in error.

(ii)  Will this error be detected by the receiver? Explain.

(iii)  If detected, can this error be corrected by the receiver? Explain.