PSG College of Technology, Coimbatore-641004

Dept. of Applied Mathematics and Computational Sciences

18XW42 Computer Networks and TCP/IP

Tutorial-1

Duration: 45 Minutes   Marks: 15

1. In a scheme meant for correcting a 3-bit burst error, the following 21-bit bit stream was received by the Receiver.

    001 110 010 100 111 100 000

    Help the receiver extract the 12-bit actual message by correcting the burst error.
    Hence obtain the same.   (3.0)

2. Construct the Hamming Code meant for correcting a single bit error for the 5-bit message 10011.   (4.0)

3. If the Generator Polynomial meant for Error Detection is **G(X) = X^4 + X^2+X+1** and the message to be transmitted is 11001, find out the 4-bit CRC Check Sum.   (5.0)

4. If the message received is 110011 and the Generator Polynomial is 1001. Check whether there was Transmission Error.   (3.0)