





	<p>D = 1010001101</p> <p>P(x) = <math>x^5+x^4+x^2+1 \Rightarrow 110101</math></p> <p>So, T/P = 101000110100000 / 110101</p> <p>Check the Division, and the remainder</p> <p>R = 01110</p> <p>codeword = 101000110101110</p> <p>Now,</p> <p>in the receiver side T/P must be 0.</p> <p>Student must show the division on transmitter and receiver side.</p>			
5.	<p>A four bit message, 1101 is transmitted through a network with even parity. Now, according to Hamming code policy, examine the following:</p> <p>a) The code-word of the transmitter side.</p> <p>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.</p> <p>a) Student must show the entire process of codeword generation. Codeword generated by the method is 1100110</p> <p>b) If we flip then the Code word received is 1110110 and then they must show the process of detection of error in 5<sup>th</sup> bit. The answer must end with showing the corrected codeword.</p>	4 6	CO3	BL4

$$T_t^1 + T_p^1 + T_t^2 + T_p^2 + T_t^3 + T_p^3$$

$$=(10000 \div 10000) + (2000 \div (2.4 \times 10^8)) + (10000 \div 100000) + (1000000 \div (2.4 \times 10^8)) + (10000 \div 10000) + (3000 \div (2.4 \times 10^8))$$

$$=1.2041875$$