

BIRLA INSTITUTE OF TECHNOLOGY, MESRA, DEOGHAR CAMPUS  
Quiz Test-II  
IT301 DATA COMMUNICATION & COMPUTER NETWORKS

CLASS: BTECH  
BRANCH: CSE  
TIME: 50 Min

SEMESTER: 5<sup>th</sup>  
SESSION: MO/25  
FULL MARKS: 10

Section -CS1

(2+3=5)

1. a) A seven bit hamming code is received as 1110101. Assuming the even parity then what will be the correct code?  
b) Show Manchester and differential Manchester encoding pattern for the bit stream 10101101110.
  
2. a) Find the checksum of the following message. (2+3=5)  
10110001,      10101011,      00110101,      10100001  
  
b) Calculate CRC for the frame 110101011 and the generator polynomial = $x^4+x+1$  and write the transmitted frame.

\*\*\*15.10.2025\*\*\*