Mid Term Test : B.Tech(AI-DS/AI-ML/IIOT) – 3rd Sem

Paper Code: ARM 205   Max. Marks: 30
Subject: COMPUTER NETWORK   Duration : 90 minutes

NOTE : 1. Q1 contains 4 parts and it is compulsory.   (4x2.5=10 Marks)
    2. Attempt any four questions from remaining 5 questions.   (4x5=20 Marks)

Q1) a) What is Bit Stuffing. Which protocol uses it ?

    b) With 'GGSIPU' as plaintext, execute the VRC and LRC technique to compute Parity bit.

    c) What is Sliding Window Protocol ? Why is it used ?

    d) Explain the frame format of the HDLC Protocol (I frame only).

Q2) Explain layers of the OSI Model, with proper functionality.

Q3) With example, compare and contrast between Circuit Switching and Packet Switching.

Q4) With Data stream as 1001101,and assuming error occurs at 7th bit position, use the Hamming Error Detection and correction technique to show that it is able to detect the error.

Q5) Schematically, show the difference between Synchronous and Asynchronous TDM.

Q6) Write Short Note on :- (a) ATM (b) SONET