KONERU LAKSHMAIAH EDUCATION FOUNDATION
(Deemed to be University, Estd. u/s. 3 of UGC Act 1956)

Academic year: 2024-25

Home Assignment-I

B. Tech. (ECE, CSE, IOT, CSIT), 2023 Batch

II/IV, 2nd Semester

23EC2210R: NETWORK PROTOCOLS & SECURITY

1. Illustrate cyclic redundancy check (CRC). Show the calculation polynomial code checksum for frame 1101011011 using the generator (x4+ x+1)
2. Elaborate on the components of computer networks, detailing their functions and significance in the construction of a computer network.
3. Discuss in detail neat flow diagrams of Go-Back-N ARQ and justify the reason how window concept helps in flow control.
4. Given Message P = 7 1 4 2 6 9 8 3 5. Payload size of frames: F1 =2, F2 = 4, F3 = 3. Perform byte count method and write the final byte sequence.
5. Compare and contrast the client-server and peer-to-peer network models, highlighting their key differences, advantages, and disadvantages.
6. Outline the necessity of Error Control. Find the Hamming code for the data 101000110 for even parity with a detailed description.
7. Compute hamming code for the message M=101101 using even parity. Show the step-by-step process and justify the process of error detection by taking any bit change in the transit.