|  |  |  |  |
| --- | --- | --- | --- |
| **Department of Electrical Engineering**  **Assignment**  **Date: 20/04/2020**  **Course Details** | | | |
| **Course Title:** | Advance Computer Networks | **Module:** |  |
| **Instructor:** |  | **Total Marks:** | 30 |
|  |  |  |  |

**Student Details**

|  |  |  |  |
| --- | --- | --- | --- |
| **Name:** |  | **Student ID:** |  |

|  |  |  |  |
| --- | --- | --- | --- |
| Q1. | (a) | Explain Physical layer services and Transmission Impairments? | Marks 6 |
|  |
| (b) | Express a period of 1 ms in microseconds, and express the corresponding frequency in kilohertz and A sine wave is offset one-fourth of a cycle with respect to time zero. What is its phase in degrees and radians? | Marks 4 |
|  |
| Q2. | (a) | Explain the classification of digital to digital conversion? Difference between data element and signal element? | Marks 6 |
|  |
| (b) | We want to digitize the human voice. What is the bit rate, assuming 7 bits per sample? | Marks 4 |
|  |
| Q3. | (a) | Explain the responsibilities of different layers of TCP/IP in detail? | Marks 6 |
|  |
| (b) | Convert the following data 01110010 to Manchester coding and Bipolar AMI? | Marks 4 |
|  |