**University of Asia Pacific**

**Department of Computer Science and Engineering**

**Class Test-02 Spring-2020**

**Program: BSc in Computer Science and Engineering**

**Course Title:** Data Communications **Course No.:** CSE 303 **Credit:** 3.00 **Time:** 30 minutes. **Full Mark:** 20

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| 1.a) | Suppose, your birthday is written in this format DD/MM/YYYY. Here, D= Date, M= Month and Y= Year. For example, my birthday is 17/08/1992. Now take the value of first 4 digits from you birth date and convert it in binary format. In my case that will be: (1708)10 = (011010101100)2  Implement (if your ID is odd but not divisible by 3)   1. Manchester, 2. 2B1Q and 3. NRZ-I   or, Implement (if your ID is even but not divisible by 3)   1. Differential Manchester 2. 2B1Q and 3. AMI   Or, implement (if your ID is divisible by 3)   * 1. RZ   2. 2B1Q   3. Pseudoternary   You can use the following table to implement 2B1Q scheme: | 15 |
| b) | Compare among the three line coding schemes and write down which one seems better to you? | 5 |