

**School of Electrical Engineering**

**TYBTech (Electrical and Computer Engineering)**

**AY 2023 - 24**

**Communication Networks**

**Assignment No. 1**

**Semester: V (2023-24) Subject: Communication Networks**

**Name: Shreerang Mhatre Class: T.Y.B.Tech. El&CE**

**Roll No: 52 Batch: A3**

Date of Submission: Oct 10, 2023

**Note:**

1. All students should submit handwritten assignments in the form of scanned copies.
2. All copied/plagiarised assignments would be rejected.
3. Scanned copies of assignments should be submitted through a shared folder on Google Drive (CN\_2023/Theory Assignments). Each student to create their own folder (Folder name: Roll No\_first name.last name and keep the assignment copy in it (File name: Roll No.\_first name.last name\_1)

**Q. 1.**

Describe in detail the concept and necessity of subnetting in computer/communication networks? Design and discuss in detail your own network without and with subnetting by taking appropriate IPv4 IP addresses.

Roll No 1 – 20: Use suitable Class A Public IPs (Different for each student)

Roll No 21 – 40: Use suitable Class B Public IPs (Different for each student)

Roll No 41 onwards: Use suitable Class C Public IPs (Different for each student)

**Q. 2**. Differentiate in tabular format the features and differences in between IPv4 and IPv6 addresses.

**Q. 3**. Discuss the steps of DORA process used by DHCP.













