

**Department of Computer Engineering**  
**TE Computer-A (2020-21 Sem I)**  
**Computer Networks**  
**Practical Assignment 2 [Max Marks: 10]**

**Instructions:**

**Software Required**

- **OS: Linux (Ubuntu/Fedora)**
- **Language: C/C++**
- **Tool: Wireshark**

Upload separate files **with comments** for each option

**Example: For 2a option: RollNo\_2a\_Server.cpp and RollNo\_2a\_Client.cpp RollNo\_2a.cap (Wireshark capture file)**

Total No. of files required=10 (3files for each option -2a, 2b, 2c or 2d + RollNo\_2output.pdf (screen shots of all three options-2a, 2b and 2c))

**Assignment Questions:**

**Lab Assignment on Unit V: (Mandatory Assignment) (Use C/C++)**

Write a program using TCP socket for wired network for following

- a. Say Hello to Each other (For all students)
- b. File transfer (For all students)
- c. Calculator (Arithmetic) (**50% students**) (**Batch T1-Roll No. 3301-3311, Batch T2-Roll No. 3323-3333, Batch T3-Roll No. 3345-3355** )
- d. Calculator (Trigonometry) (**50% students**) (**Batch T1-Roll No. 3312-3322, Batch T2-Roll No. 3334-3344, Batch T3-Roll No. 3356-3365** )

Demonstrate (Analyze) the packets captured traces using **Wireshark Packet Analyzer** Tool for peer to peer mode.

**Rubrics for Evaluation (Example)**

Question No.	Criteria	Best [4]	Good [3]	Average [2]	Poor [1]
<b>Q1</b> <b>[10 marks]</b>	Completeness [4]	Perfect	Can be better	Satisfied	Poor
	Uniqueness [3]	Perfect	Can be better	Satisfied	Poor
	Documentation/Comments [3]	Perfect	Can be better	Satisfied	Poor

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