



Credit Hours System
Advanced Topics on Communications II (ELCN 456)
Communications and Computer Engineering
Spring 2019
Problem Set no. 5



DUE DATE: MAY 1, 2019 AT 1:00 PM

SUBMIT AT: [HTTPS://FORMS.GLE/VB8YRVxMKR8E9kFZA](https://forms.gle/vB8YRVxMKR8E9kFZA)

Question 1

A researcher who uses SIP-based VoIP needs the freedom to move among his college office, the lab and his home office. Draw a diagram that shows the SIP interactions that will enable a colleague of this researcher to locate and contact him at any time. Show all types of servers and messages involved.

Question 2

Two companies, A and B, use H.323 based VoIP telephone systems. They require the calls made externally by their employees to be fully monitored. Draw a diagram that illustrates the interactions involved in a phone call between an employee from company A and an employee from company B.

Question 3

List the main functions of each of the following types of nodes:

- SIP Proxy Server
- SIP Registrar Server
- SIP Redirect Server

For each of them, specify which of the H.323 network entities perform the similar functions.

Instructions

- This is an individual assignment
- No late assignments are accepted
- Both soft-copies and hard-copies are required
- Questions are equally weighted