

# **Dar es Salaam Institute of Technology**



**DEPARTMENT OF ELECTRONICS AND TELECOMMUNICATION ENGINEERING**

## **Communication Switching Systems Course**

**Course Code: ETU07402**

**Assignment 04**

## Assignment 04

Design and implement an IP based PBX (VoIP) system using open-source software for use in a small enterprise office. Use the system to Develop and deploy an IVR for [ choose an organization/institute of your choice] for [enter the reason for the choice] for example Interactive Voice Response System for DIT automation.

### Guide lines

1. Use open software of your choice ie Asterisk, an open source VoIP software, Switchvox or Free SWITCH
2. Use any free online Android or window based voip/SIP client ie Zoiper, X-Lite Softphone, or MicroSIP
3. You can use window or Linux OS as your platform
4. The assignment should be done in group of at least four (4) students.
5. The system should be very minimum at least for 20users
6. Prepare a report (Ms word & PowerPoint) with the following format
  - a) Abstract
  - b) Introduction
  - c) Literature review
  - d) Design criteria (assumptions and traffic estimate if any)
  - e) Summary of outcomes
  - f) Recommendation and conclusion
  - g) *Note: use provided writing guidelines*