

Lab Practice - III (404192)

MC & BCS

Teaching Scheme:

Practicals: 4 Hrs/week

Examination Scheme: OR: 50Marks

TW:50Marks

Mobile Communication

1. Set up and carry out experiment on PSTN TST switch.
2. Set up and carry out experiment on analysis of telecommunication traffic.
3. Simulation of a wireless channel model.
4. Set up and carry out experiment on Mobile phone.
5. Set up and carry out experiment on GSM.
6. Set up and carry out experiment on AT commands.
7. Simulation of Speech coding and decoding.
8. Set up and carry out experiment on GMSK modulation.
9. Set up and carry out experiment on spreading Sequences.
10. Set up and carry out experiment on CDMA.
11. Set up and carry out experiment on 3G Mobile.
12. Set up and carry out experiment on VOIP implementation
13. Visit to Mobile Telephone Switching Office (MTSO).

Broadband Communication Systems

1. Estimation of Numerical aperture of fiber
2. Plot the characteristics of various sources and detectors
3. Measure attenuation of MMF and SMF fiber and comment on the result based on attenuation due to increase in length as well as loss due to bend
4. Set up a digital link and analyze.
5. Tutorial: Power budget and time budget analysis of optical fiber system.
6. Establishing a direct communication link between Uplink Transmitter and Downlink Receiver using tone signal.
7. To set up an Active Satellite link and demonstrate Link Fail Operation
8. To establish an AUDIO-VIDEO satellite link between Transmitter and Receiver
9. To communicate VOICE signal through satellite link
10. To transmit and receive three separate signals (Audio, Video, Tone) simultaneously through satellite Link
11. To transmit and receive PC data through satellite link
12. Tutorial: satellite link design
13. Students, as a part of their term work, should visit satellite earth station and submit a report of visit.(Optional)

Lab Practice - IV (404193)

Teaching Scheme:

Practicals: 4 Hrs/week

Examination Scheme: PR: 50Marks

TW:50Marks

Elective III

Experiments to be chosen based on Elective III.