

Semester 1 & 2
Course: B.Sc. (Hons) IT
Paper Code: BSIT-209 (IT LAB-III)
Nomenclature: Electronic Communication (Practical)

M.M: 50
Time: 3 hrs

Instruction for the examiners: A candidate is required to perform one experiment out of the list below.

Note:-

1. This practical paper is to be studied during Semester 1 & 2. But the examination is to be held after Semester 2 only.
2. A candidate is required to perform 6 Experiments from the list given below.
3. The number of students in a group must not exceed 10.
4. Workload – 3 periods per week per group

Distribution of Marks

Experiment: 25
Practical Work Book: 15
Viva Voce: 10

LIST OF EXPERIMENTS

1. Study of Amplitude Modulation and demodulation and calculation of modulation index (using Kit)
2. Study of Frequency Modulation. Wave form tracing (using Kit).
3. Study of pulse Amplitude Modulation using IC 555 (using Kit).
4. Study Pulse width Modulation using IC 555 (using Kit).
5. Study of Pulse Position Modulation using IC 555 (using Kit).
6. Study of ASK Modulation and Demodulation (using Kit).
7. Study of FSK Modulation and demodulation (using Kit).
8. Design of IC-555 timer as Monostable Multivibrator.
9. Design of IC-555 timer as Astable Multivibrator.
10. Study of propagation in Optical fiber (using optical fibre kit).
11. Study of time Division multiplexing of voice and data (using optical fibre kit).
12. Study of Digital multiplexing (using optical fibre kit).
13. To calculate the attenuation of the signal transmitted through optical fibres of different length (using optical fibre kit).
14. Calculation of bit rate for digital link and bandwidth for analog link.
15. Manchester coding for fibre optic communication (using optical fibre kit).
16. Voice coding: A-law and Mu-law (using optical fibre kit).