



Sardar Patel Institute of Technology

Bhavan's Campus, Munshi Nagar, Andheri (West), Mumbai-400058-India
(Autonomous Institute Affiliated to University of Mumbai)

| Course Code | Course Name | Teaching Scheme (Hrs/week) | | | Credits Assigned | | | |
|-------------|--|----------------------------|----|-----------|------------------|-------|---|-------|
| | | L | T | P | L | T | P | Total |
| ETL502 | Communication Engineering Laboratory-I | -- | -- | 2 | -- | -- | 1 | 1 |
| | | Examination Scheme | | | | | | |
| | | ISE | | ESE | | Total | | |
| | | | | Practical | Oral | | | |
| | | 40 | 10 | 10 | 60 | | | |

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|--|------------------------------|---|
| Pre-requisite Course Codes | ETC502: Analog Communication | |
| After successful completion of the course, student will be able to | | |
| Course Outcomes | CO1 | Demonstrate a clear understanding of different modulation and demodulation techniques used in analog communication. |
| | CO2 | Able to use basic circuit building blocks to create more advanced circuits. |
| | CO3 | Able to determine fundamental communication system parameters. |

| Exp. No. | Experiment Details | Ref. | Marks |
|---|---|------|-----------------------|
| 1 | Generation of DSB-FC signal on kit. AM generation and demodulation using IC AD633. | | 5 |
| 2 | Generation of SSB-SC signal. | | 5 |
| 3 | Generation of PWM signal using IC-741. | | 5 |
| 4 | Generation of PPM signal using IC-555. | | 5 |
| 5 | Generation of FM signal on Kit. Generation of FM signal using IC-555. | | 5 |
| 6 | Study of AM Broadcast receiver. | | 5 |
| 7 | Measurement of Sensitivity, Selectivity and Fidelity of Broadcast receiver. | | 5 |
| 8 | Generation of Demodulation of PAM signal using Transistor BC547B and IC CD4016. | | 5 |
| 9 | AM modulation and demodulation using SCILAB. | | 5 |
| 10 | Generation and Detection of PCM. | | 5 |
| 11 | Generation of DSB-SC using multiplier IC AD633. | | 5 |
| *Any 08 Experiments to be performed. | | | Total Marks 40 |

References

As per recommended by faculty.