| Course Code: EIPS - 202  |              |  |
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| Course Title: Digital Electronics- I lab   |              |  |
| Number of Credits: 03 Total Hours: 84 Tota   | al Marks: 75 |  |
| Prerequisites for the course   |              |  |
| Student should have working knowledge of basic digital electronics.  |              |  |
| Objectives of Course   |              |  |
| Students will be able to understand the basic block of digital electronics. He/she will able to design different   |              |  |
| digital electronics circuits.  |              |  |
| Course Content   | 84 Hours     |  |
| <b>Expt. 1:</b> Astable multivibrator  |              |  |
| Expt. 2: Monostable multivibrator  |              |  |
| Expt. 3: Bi-stable multivibrator   |              |  |
| Expt. 4: DTL logic gate using transistors  |              |  |
| <b>Expt. 5:</b> TTL logic gate using transistors   |              |  |
| Expt. 6: Verification of logic AND, OR, NOR, NAND, EX-ORE and EX-NOR gates   |              |  |
| Expt. 7: Universal logic gates   |              |  |
| Expt. 8: Half adder and full adder circuits  |              |  |
| Expt. 9: Multiplexer/Demultiplexer   |              |  |
| Expt. 10: Encoder/decoder  |              |  |
| Pedagogy   |              |  |
| Lab experiments/Assignment   |              |  |
| Course Outcome   |              |  |
| Should be able to design and construct digital electronic circuits by identifying different integrated circuits. Plot the graph and analyse the results. |              |  |