

## **Electrical and Electronics Design Laboratory**

<b>Sl. No.</b>	<b>Design Problems</b>
01	Designing a heating element with specified wattage, voltage and ambient temperature.
02	Designing an air core grounding reactor with specified operating voltage, nominal current and fault current
03	Designing the power distribution system for a small township
04	Designing a double circuit transmission line for a given voltage level and power (MVA) transfer.
05	Wiring and installation design of a multistoried residential building (G+4, not less than 16 dwelling flats with a lift and common pump)
06	Designing an ONAN distribution transformer.
07	Designing a three-phase squirrel cage induction motor.
08	Designing a three-phase wound rotor induction motor.
09	Designing a split phase squirrel cage induction motor for a ceiling fan or a domestic pump.
10	Designing a permanent magnet fractional hp servo motor.
11	Design the control circuit of a Lift mechanism
12	Design a controller for speed control of DC machine.
13	Design a controller for speed control of AC machine.
14	Electronic system design employing electronic hardware (Analog, Digital, Mixed signal), microcontrollers, CPLDs, and FPGAs, PCB design and layout leading to implementation of an application.
15	Design of Power Electronic based systems.