

Course Code: EIPS - 204	
Course Title: Refrigeration and Air Conditioning Lab	
Number of Credits: 03	Total Hours: 84 Total Marks: 75
Prerequisites for the course	
Working knowledge of AC and refrigeration system	
Objectives of Course	
To provide students with working of domestic refrigeration. This course is intended to provide the hand on experience with refrigeration and air conditioning devices.	
Course Content	84 Hours
Expt. 1: Testing of Thermostats. Expt. 2: Experiment on an Evaporative Cooler. Expt. 3: Study of expansion-valves, testing and adjusting. Expt. 4: Pressure testing and leak detection methods. Expt. 5: Charging Procedure and charging a refrigerator correctly. Expt. 6: Study of low and high Pressure cut-outs. Expt. 7: Study of Capacitors, Relays, Overloads, Chokes, etc. Expt. 8: Study of different thermal insulating materials Expt. 9: Servicing of a Refrigerator. Expt. 10: Servicing of an Invertor and non-inverter air-Conditioner. Expt. 11: Wiring diagrams of an Air-Conditioner and central Plants. Expt. 12: Wiring diagrams of a Multi-cylinder Compressor for capacity control.	
Pedagogy	
Lab experiments	
Course Outcome	
He will be able to locate the faults in the non-working RAC system. Student should be able to identify the tools required to service and repair the RAC system.	