Course Code: EITS - 103

Course Title: Maintenance and Repair of Home Appliances-I

**Total Hours: 42 Number of Credits: 03 Total Marks: 75** 

# Prerequisites for the course

Students should have basic understanding of electrical and electronic components.

### **Objectives of Course**

This course is intended to provide the knowledge of low power home appliances devices, their working principle and some basic troubleshooting procedures.

#### **Course Content**

Unit I **Heating based devices** 16 Hours

Working principle, parts, thermostat heat controls, wiring diagram of steam iron, Electric kettle, Geyser, Electric rice cooker.

**Unit II** Mixer Grinder and Hand blender 8 Hours

Various parts & functions of Mixer/Grinder, speed control circuit & automatic overload protector, wiring diagram, parts of hand blender.

Unit III Grill oven 5 Hours Principle of grill oven, parts of oven, heating rod, control knobs, wiring diagram 4 Hours **Unit IV** Electric fan Ceiling fan, motor, capacitor, table fan Unit V Electric drill 3 Hours Parts of electric drill, motor, wiring diagram

Unit VI **Water Purifier** 6 Hours

Types of water purifiers, Internal structure, electronics parts, sediment filters.

#### **Pedagogy**

Lectures/Tutorial/Assignments/

### **Course Outcome**

On completion of the course, students will have working knowledge of low power home appliances devices. Students will be able to identify the different parts and trace to the wiring diagram.

# References/Readings

- Troubleshooting and Repairing Major Appliances Hardcover by Eric Kleinert
- Complete Guide to Home Appliance Repair Hardcover June 1, 1990
- Electrical Appliances: The Complete Step-by-step Guide to the Repair and Maintenance of a Wide Range of Domestic Electrical Appliances (Haynes for Home DIY) Paperback – January 1, 1995 by Graham Dixon
- Handbook of Repair and Maintenance of Domestic Electronics Appliances Paperback by Shashi Bhushan Sinha