



**Morigaon College**  
Affiliated to Gauhati University  
NAAC Accredited B Grade Institute with CGPA 2.47

## DEPARTMENT OF PHYSICS, MORIGAON COLLEGE, MORIGAON, ASSAM

### 30 Hrs. Certificate Course

The department of physics organize a certificate course on “**LEARNING TO REPAIR HOUSE-HOLD ELECTRICAL APPLIANCES**”.

Now a days, as each family has the unit or appliances that need to be fix or repair or to be serviced periodically. It needs repairing of their home appliances such as electric fan, electric iron, tube-light, water-pump(motor), mixer, grinder, washing machine etc.

The course is designed into two parts- namely theoretical and practical part. Both parts of the course should be in easy manner, understandable resources and has covered testing of internal parts, fault finding, replacing the entire wiring commonly used home appliances in every house-hold.

#### **BENEFITS:**

Acquiring the successful knowledge, students can get scope to learn some of the major or minor fault finding of home appliances so that they can able to repair the fault easily staying at home and thereby they can save money and help the family economically by earnings.

Any fresher can easily learn this course and even they can start with his own small business. The successful knowledge of this course can help a student: -

1. Lifetime support
2. Apply verified government and private employment exchange jobs
3. Competitive exam guideline and preparation
4. Employment and self-employment assistance

N. I. Ali Ahmed  
H.O.D, Physics.



**SYLLABUS (THEORITICAL PART):**

**UNIT-1:** Electrostatics 1(a): Electrostatic charges

1(b): Electric field

1(c): Electrostatic potential and flux

1(d): Capacitance

**UNIT-2:** Current Electricity 2(a): Insulator and Conductor

2(b): Electric current and resistance

2(c): Heating effect of electric current

**UNIT-3:** Magnetism and Magnetic effect of current

3(a): Magnetic field due to current

3(b): Forces on charged particles in Electric & Magnetic fields

3(c): Magnets and Earth's Magnetism

3(d): Classification of Magnetic Materials

**UNIT-4:** Electromagnetic induction & alternating currents

4(a): Electromagnetic induction

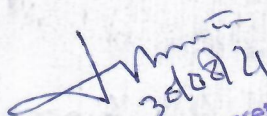
4(b): Alternating Currents

4(c): Electrical devices

**UNIT-5:** Electronic Devices 5(a): Semiconductor and semiconductor device

**SYLLABUS OF ELEMENTS OF PRACTICAL PART:**

1. Use of Multimeter
2. Soldering process
3. Identification of resistors, capacitors, IC, junction diode and transistor

  
Principal & Secretary  
Morigaon College

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