

### **Q No.1**

1. Define Electrostatics? Explain the importance and application of electrostatics.
2. Explain Coulomb's Laws of Electrostatics
3. Explain Gauss's law and Electric Potential Energy
4. Explain Permittivity in detail.
5. Explain breakdown voltage or dielectric strength. Also discuss uses of dielectrics

#### **All the problem of PPT 1 (Electrostatic)**

### **Q No.2**

6. Define Capacitor? Explain the how does a Capacitor store charge.
7. Derive the expression for capacitance of parallel-plate capacitor with uniform medium.
8. Derive the expression for capacitors in series.
9. Derive the expression for capacitors in parallel.
10. Derive the expression for Energy Stored in a Capacitor

#### **All the problem of PPT 2 (Capacitors)**

### **Q No.3**

11. Define Magnetism and discuss importance of Magnetism.
12. Explain how materials become magnetized.
13. Explain types of Magnetic Materials.
14. Describe Magnetic Effect of Electric Current

