

## **B.SC SEM-II**

### **GENERIC ELECTIVE -2**

#### **SHORT QUESTION**

- 1) What is the physical meaning of divergence and curl of a vector?**
- 2) Derive energy per unit volume in electrostatic field.**
- 3) Give relation between electric field and potential.**
- 4) What is Biot-Savart's law?**
- 5) What is Displacement current?**

#### **LONG QUESTION**

- 6) State and prove Gauss-Divergence theorem.**
- 7) Define electric dipole. Find field at a point due to electric dipole.**
- 8) What is capacitor? Find capacity of a parallel plate capacitor.**
- 9) What is solenoid? Find magnetic induction at a point due to solenoid at a point inside it.**
- 10) What is coefficient of self –induction? Find self induction of a solenoid.**
- 11) Derive Maxwell's Equation of electromagnetic field.**