

Model Question Paper of Generic Physics Semester- II

1. What do you understand by gradient, divergence and curl of a field?
2. Obtain expression for the energy stored in a capacitor.
3. Obtain expression for the capacitance of a parallel plate capacitor.
4. State and explain the Lenz's law of electromagnetic induction.
5. State and explain the ampere's circuital law.
6. State and prove Gauss divergence theorem.
7. State and prove Stoke's theorem. Mention its importance.
8. Use Gauss law to find the electric field intensity due to a uniformly charged sphere.
9. Obtain expression for the electric potential due to an electric dipole.
10. State and explain the Faraday's law of electromagnetic induction.
11. Calculate the self-inductance of a solenoid of length L .
12. What do you understand by Dia, Para, and ferromagnetism?
13. Explain Langevin Theory of diamagnetism.