

Assignment Set for Internal Evaluation

Semester-II

Subject: Electricity and Magnetism (CC-3)

Total Marks: 30

Gr A, Theory 20

Answer any one question from the following

1. (a) What is Lorentz force?

(b) State and explain Biot-Savart law.

(c) Using the Biot-Savart law, calculate the magnetic field due to a long straight current carrying conductor.

Or

2. (a) What is an electric dipole? Define its dipole moment.

(b) Find expressions for the field and potential due to a short electric dipole.

Or

3.1 (a) State Gauss's law in electrostatics.

(b) Using this law calculate the electric field at an external point due to a uniformly charged sphere.

(c) Draw the electric lines of force for an electric dipole.

3.2 Find out the interaction force between the current carrying conductor .

Gr B , Practical 10

1.1 Discuss the theory of moving coil galvanometer with circuit diagram.