**BF4**

**First Semester B.Tech Engineering, Examination Aug/Sep-2015**

**Electrical Technology**

**(Chemical/ Civil/ Elect/CS/**

**E & T/ Mech/ Aeronautics/IT/Automobile)**

**Time:-3Hours Max. Marks: - 80**

**SECTION-A**

**Answer any five questions. (6\*5)**

1. Clarify the term Force.
2. What is an Electric Current?
3. Define the concept of Potential Difference.
4. Write a short note on Electrostatics.
5. What do you mean by Free Electrons?
6. How can Electric Current be classified?
7. Briefly write about the Inductor.

**SECTION-B**

**Answer any two questions. (10\*2)**

1. Elaborate the theory of Power and Power Factor.
2. Critically evaluate the Coulomb’s Law.
3. Give a detail account of Biot Savart Law.

**SECTION-C**

**Answer any two questions. (15\*2)**

1. Discuss Ampere’s Law in detail. How Magnetic Shielding is done?
2. Explain Faraday’s law of electromagnetic induction. Differentiate between statically and dynamically induced emf. How can the direction of this induced emf be found? What is lenz’s Law?
3. What is Lead acid battery? Describe its construction and chemical reactions during charging and discharging.