**BEE5-1**

**Seventh Semester B. Tech Electrical Engineering**

**Examination Aug/Sep-2015**

**EHV Transmission**

**Time:-3Hours Max. Marks: -75**

**SECTION-A**

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

1. What do you understand by charging of Objects, Vehicles and human beings by Electric Field?
2. Clarify the principle of power Flow and Current Control.
3. Write short notes on the following:
4. Six Pulse Converter Bridge
5. Twelve Pulse Converter Bridge.
6. What do you mean by Corona Phenomena in HVDC?
7. Classify the Self-restoring and Non-Self restoring insulation.
8. Define the Semi-Analytical Method. What are RI formulae for Semi-Analytical Method?
9. Briefly write about the HVDC Breakers for MTDC System. What are the applications of MTDC System?

**SECTION-B**

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

1. Discuss the Reactive Power Requirement. What is the effect of delay angle α and extinction angle y on Reactive Power?
2. Give a detail account of the Short Circuit Ratio (SCR).
3. Enumerate the causes of Flashover through Air or Gases. Mention the characteristics of Air-Gap.

**SECTION-C**

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

1. Explain the Phase Control & Delay Control. What are the effects of Phase Control on DC voltage waveforms?
2. What are the Reactive Power requirements of HVDC Convertor and its substation?
3. Discuss Electrical, Mechanical and Thermal Design Aspects and Engineering Aspects. Also explain the voltage stability.