

Code :R7410205

R7**IV B.Tech I Semester(R07) Supplementary Examinations, May/June 2011
HVDC TRANSMISSION****(Electrical & Electronics Engineering)****Time: 3 hours****Max Marks: 80****Answer any FIVE questions
All questions carry equal marks**

1. (a) Draw the schematic diagram of typical HVDC converter station and explain the function of various components available.
(b) Explain the different application of HVDC transmission system.
2. (a) Draw the schematic diagram of a 6 pulse converters along with necessary waveform.
(b) Explain briefly the analysis of Graetz circuit with neat diagram.
3. (a) Explain the principles of DC link control in HVDC system.
(b) Explain the effect of source inductance on the HVDC system.
4. Discuss in detail about the conventional control strategies and Alternate control strategies adopted in HVDC systems.
5. (a) Briefly discuss about sequential method of power flow analysis in AC/DC systems.
(b) Explain per unit system for DC quantities in AC/DC systems.
6. (a) Discuss the protection against over voltages in converter stations.
(b) Briefly discuss the Corona effect on DC lines.
7. (a) Discuss the adverse effects of Harmonic.
(b) Briefly discuss the effect of pulse number on Harmonic.
8. Discuss the design of High pass filters in detail.
