

Code.No: 52111/ MT

NR

M.Tech. I-Semester Regular Examinations, March-2008.

HVDC TRANSMISSION
(Common to Power System Control & Automation, Power Electronics, Electrical Power Engineering, Power Engineering & Energy Systems and Power Systems (High Voltage))

Time: 3 hours

Max. Marks: 60

Answer any FIVE questions
All questions carry equal marks.

1. Compare AC and DC transmission system based on economic aspects, technical performance and reliability?
2. Explain about the Gretz circuit analysis for without overlap case and also derive the expression for direct current magnitude?
3. Explain the characteristics of harmonics? And derive expression for harmonic voltages and current for 12-pulse converter unit?
4. Explain about equidistant firing angle control method?
5. Explain about DC power modulation in HVDC system.
6. Explain different types of MTDC in brief?
7. Discuss about protection against over voltages.
8. Discuss about commutation failure in HVDC converter?

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