NR

Code No: B0703

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
M.Tech II Semester Examinations, October/November 2011
HVDC TRANSMISSION
(ELECTRICAL POWER SYSTEMS)

Time: 3hours **Max. Marks: 60**

Answer any five questions
All questions carry equal marks

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1. Explain the advantages and disadvantages of HVDC Transmission, also state different applications of HVDC Transmission. [12]

2. Draw the Graetz circuit and analysis this circuit without overlap angle condition. [12]

3. What is meant by individual phase control and what are the draw backs of this control and explain how these drawbacks can be eliminated? [12]

4. Explain the significance of commutation margin angle and extinction angle. [12]

5. Explain the role of VDCOL in HVDC control and explain the circumstances under which the VDCOL control is initiated. [12]

6. Explain the response of HVDC system for inverter side AC system faults. [12]

7. What is the significance of short circuit ratio and effective short circuit ratio and explain the impact of SCR on the performance of the HVDC system? [12]

8.a) What is the purpose of filters in HVDC systems?
b) Write short notes on HVDC circuit Breaker. [12]

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