

**R09**

**Code No: D0703**

**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD**

**M.Tech II - Semester Examinations, March/April 2011**

**HIGH VOLTAGE DC TRANSMISSION**

**(ELECTRICAL POWER SYSTEMS)**

**Time: 3hours**

**Max. Marks: 60**

**Answer any five questions  
All questions carry equal marks**

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1. Draw the neat sketches of monopolar, bipolar and heteropolar DC transmission system and explain about it. [12]
2. Explain converts station functionally and terminal equipment commutation process. [12]
3. a) Explain the characteristics of harmonics.  
b) What are the adverse effects of harmonics? [12]
4. a) Explain constant – minimum ignition angle control.  
b) What is meant by constant Current Control? Explain it. [12]
5. a) Classify the solution methodology for AC – DC load flow and explain.  
b) Explain the percent systems for DC quantities. [12]
6. Explain about starting and stopping of DC link. [12]
7. a) What are the various faults exist in converter station ? Explain  
b) Define inductance and differential inductance state the function of smoothing reactor. [12]
8. Write state notes on  
a) Over current protection  
b) Surge arresters [12]

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