

Q.P. Code : 25944

(3 Hours)

[Total Marks : 80

- N.B. :** (1) Question No.1 is compulsory.
 (2) Attempt any three from remaining.
 (3) Figures to the right indicate full marks.

1. Solve any four : 20
- ✓(a) Draw the different types of HVDC links.
 - (b) Give classification of HVDCT.
 - ✓(c) What is the necessity of DC reactor in HVDC.
 - ✓(d) Explain the importance of current margin.
 - ✓(e) State the causes and consequences of harmonics in HVDCT.
2. ✓(a) Explain with neat diagram & waveform 12 pulse converter. 10
- ✓(b) Explain single commutation with neat diagram and waveform. 10
3. (a) Discuss desired features of control of HVDCT and explain basic control characteristic. 10
- (b) Explain two methods of IPC (Individual Phase Control). 10
4. ✓(a) Write a note on advantages and disadvantages of ground return. 10
- (b) Explain overvoltage and overcurrent protection of HVDCT. 10
5. ✓(a) Write the note on harmonics and filter in HVDCT. 10
- ✓(b) Justify the statement "Converter Consume Reactive Power". 10
6. ✓(a) Explain hierarchical control of HVDCT system. 10
- ✓(b) Explain any two methods of EPC (Equidistance Pulse Control). 10
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