

Roll No

EE/EX-7005 (2) (CBGS)

B.E. VII Semester

Examination, November 2019

Choice Based Grading System (CBGS)

EHVAC/DC Transmission

Time : Three Hours

Maximum Marks : 70

- Note:* i) Attempt any five questions.
 ii) All questions carry equal marks.

1. a) Explain the advantages and disadvantages of HVDC Transmission.
 b) Explain the problems involved in EHV transmission.
2. a) Describe series compensation and list its merits and demerits.
 b) Explain the problems associated with A.C interconnection. How they can be overcome?
3. a) What are the basic requirements for the firing pulse generation of HVDC valve? Describe any one method of firing angle control.
 b) Explain various kinds of D C links.
4. a) What are FACTS devices? Explain its importance.
 b) Describe the working principle of STATCOM.

5. Explain the following
 - a) UPFC
 - b) Thyristor Controlled Phase Shifting Transform (TCPST)
6. a) Discuss the problems associated with the harmonics introduced by HVDC converters. Also explain the characteristics of Harmonics.
 b) Explain the following
 - i) Commutation failure
 - ii) Multi terminal D.C lines
7. Explain the parallel operation of HVDC and HVAC operation. Discuss the problem and advantages in parallel operation.
8. Explain the following
 - a) Over voltage in transmission system
 - b) Ignition angle control
 - c) Converter analysis Graetz circuit
 - d) Adverse effects

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