

B. E (Electrical) - sem VIII - CBCGS - 22/5/18 May 2018

Flexible AC Transmission System

Q. P. Code: 40564

1/1

Duration - 3 Hours

Total Marks - 80

- N.B
- Question No. 1 is compulsory.
  - Attempt any **three** questions from remaining.
  - Assume suitable data and mention the same.
  - Figures to the right indicate full marks.

Q.1 Attempt any **Four**

- Compare HVDC with FACTS. (10)
- Write short note on ideal compensation (10)

Q.2

- Explain thyristor controlled voltage regulator. (10)
- Explain switching converter VAR generator. (10)

Q.3

- Explain TSSC in series compensation with circuit diagram and V-I characteristics. (10)
- What is reactive power bias in reactive power characteristics? (10)

Q.4

- Draw & Explain basic type of FACTS controller. (10)
- Explain the UPFC in detail. (10)

Q.5

- Explain the objective of shunt compensation. (10)
- Explain voltage regulation in single phase system. (10)

Q.6

- Explain with circuit diagram and waveform. (10)

- TCR
- TSR
- TSC

- Explain switching converter based voltage and phase angle regulator. (10)