

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

1/1

Flexible AC Transmission System

Q. P. Code: 40564

Duration - 3 Hours

Total Marks - 80

- N.B i) Question No. 1 is compulsory.  
ii) Attempt any **three** questions from remaining.  
iii) Assume suitable data and mention the same.  
iv) Figures to the right indicate full marks.
- Q.1 Attempt any **Four**
- A) Compare HVDC with FACTS. (10)  
B) Write short note on ideal compensation (10)
- Q.2
- A) Explain thyristor controlled voltage regulator. (10)  
B) Explain switching converter VAR generator. (10)
- Q.3
- A) Explain TSSC in series compensation with circuit diagram and V-I characteristics. (10)  
B) What is reactive power bias in reactive power characteristics? (10)
- Q.4
- A) Draw & Explain basic type of FACTS controller. (10)  
B) Explain the UPFC in detail. (10)
- Q.5
- A) Explain the objective of shunt compensation. (10)  
B) Explain voltage regulation in single phase system. (10)
- Q.6
- A) Explain with circuit diagram and waveform. (10)
1. TCR
  2. TSR
  3. TSC
- B) Explain switching converter based voltage and phase angle regulator. (10)