

Total No. of Questions : 8]

[Total No. of Printed Pages : 2

Roll No

EX-8303-GS
B.E. VIII Semester
Examination, December 2020
Grading System (GS)
FACTS
(Elective - III)
Time : Three Hours

Maximum Marks : 70

Note : i) Attempt any five questions.

ii) All questions carry equal marks.

1. a) Explain the objectives of FACTS controller in Power System Network.
b) Explain uncompensated transmission line.
2. a) What are the objectives of static VAR compensator in power system? Explain.
b) Draw and explain static VAR compensation.
3. Describe the fixed capacitor thyristor controlled reactor type VAR generator with necessary characteristics and expression.
4. a) Explain the power oscillation damping with shunt compensation.
b) Discuss the capabilities of shunt compensation in improving transient stability.
5. What is a STATCOM? What are its applications? Explain its operations?

EX-8303-GS

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[2]

6.
 - a) Explain the control co-ordination of multiple controllers using linear control technique.
 - b) Explain in detail about the different factors of SVC-SVC interaction.
7.
 - a) What do you know about modeling of GCSC.
 - b) Describe the application of GCSC.
8. Write Short Notes (Any two):
 - a) SVC voltage regulator
 - b) SSR mitigation
 - c) Prevention of voltage instability
 - d) Need for Reactive Power Compensation in Power System.
