

Total No. of Questions : 8]

[Total No. of Printed Pages : 2

Roll No

EX-702(A)-CBGS

B.Tech., VII Semester

Examination, December 2020

Choice Based Grading System (CBGS)

Power Electronics Application to Power System

Time : Three Hours

Maximum Marks : 70

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

1. a) Explain merits and demerits of HVDC transmission. 7
b) Explain interconnection of renewable energy source to utility grid. 7
2. a) Explain static directional over current relay. 7
b) Write note on solar power generation. 7
3. a) Draw diagrams of series and shunt compensation and explain in detail. 7
b) Give classification of FACTS controllers. 7
4. a) Explain TSC with necessary diagrams. 7
b) Explain basic 12 pulse converter topology for HVDC transmission. 7
5. a) Give comparison of active and passive filters. 7
b) Explain various configurations of active filters. 7

EX-702(A)-CBGS

PTO

[2]

- | | | | |
|----|----|---|---|
| 6. | a) | What are Active Power Controllers. | 7 |
| | b) | Describe Energy Storage Systems in detail. | 7 |
| 7. | a) | Write short notes on AC voltage regulators. | 7 |
| | b) | What are the Control strategies to improve system stability. | 7 |
| 8. | a) | Explain Unified Power Flow Controller (UPFC). | 7 |
| | b) | Write short notes on Steady state and dynamic problems in AC systems. | 7 |
