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Enroll No.....

EE-103

M.Tech.(PS)–I Sem. (Reg./ Ex.)

Examination, March.-2021

Power Electronics Applications to Power Systems

Time: Three Hours

Maximum Marks:70

Note: Attempt any five questions. (Each question carries equal marks)

- Q.5 (a) Discuss briefly about proximity indicators.
(b) Discuss about Jacobian participation factors based on model analysis and application.

- Q.6 (a) Give--a brief description and definition of FACT'S controllers.

- (b) Discuss the configuration and operating characteristics.

- Q.7 (a) Give the basic principle and different mode of operation of TCSC.

- (b) Analyse variable reactance model and transient stability model of TCSC.

- Q.8 Write short notes on any two of the following:

- (a) Regulated shunt compensation
(b) Load flow study
(c) Compare SVC's

- Q.1 (a) Discuss about reactive power capability of an alternator.

- (b) Discuss about reactive power transmission and associated difficulties.

- Q.2 (a) Explain transmission line model and loadability.

- (b) Discuss about models of OLTC and phase shifting transformer.

- Q.3 (a) Discuss about generation shift distribution factors.

- (b) Discuss about power systems security levels.

- Q.4 (a) Discuss about contingency selection and evaluation.

- (b) Discuss about pre contingency corrective rescheduling.
