

23260

M.Tech 1st Semester Electrical Power Systems

Examination, December-2017

**REACTIVE POWER COMPENSATIONS &
MANAGEMENT**

Paper-MTEPS 104

Time allowed : 3 hours]

[Maximum marks : 100

Note : Attempt any five questions.

1. Explain the concept of phase balancing and power factor correction of unsymmetrical load. 20
2. Explain the compensation using synchronous condensers in detail. 20
3. Write short note on : 20
 - (a) Basic concept of quality of power supply.
 - (b) Radio frequency interference.
4. Explain KVAR based tariffs penalties for voltage flickers. 20
5. Explain the economic planning capacitor placement in details. 20
6. Explain the various criteria for selection of capacitor. 20

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[P.T.O.]

7. Write short note about electric arc furnaces on : 20
- (a) Remedial Measures
 - (b) Power factor of an arc furnaces.
8. Write short note on : 20
- (a) Filter requirements in arc furnace.
 - (b) Furnace transformer.

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