

23260

M. Tech. 1st Semester Electrical Power System

Examination, May–2015

**REACTIVE POWER COMPENSATION AND
MANAGEMENT**

Paper–MTEPS-104

Time allowed : 3 hours]

[Maximum marks : 100

Note : Attempt any five questions.

1. Explain phase balancing and power factor correction of unsymmetrical loads. 20
2. Explain passive shunt and dynamic shunt compensation. 20
3. Explain compensation using synchronous condensers. 20
4. How can we maintain the quality of power supply ? Explain the effect of harmonics and how can we minimize it. 20
5. How we can do operation planning with mathematical modeling ? 20
6. Explain economic planning capacitor placement. 20
7. How can we achieve the requirement of KVAR for domestic purpose. 20
8. Explain the typical layout of traction system. 20