

Roll No.

23289

**M. Tech 2nd Semester (Electrical
Power Systems)
Examination – May, 2018**

ADVANCED POWER SYSTEM PROTECTION

Paper : MTEPS-204

Time : Three Hours]

[Maximum Marks : 100

Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard, will be entertained after examination.

Note : Attempt any *five* questions. All questions carry equal marks.

1. (a) Explain comparison of static relay with electromagnetic relay. 20
(b) Explain the principle of duality.
2. (a) What do you mean by insulation Co-ordination ? Explain the protection of station against direct lightning strokes. 20
(b) Explain microprocessor based protection directional reactance relay. 20

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3. Explain directional IDMT relay in details ? 20
 4. Explain operating principle of distance protection and characteristics of impedance relay. 20
 5. Explain static reactance relay with its characteristics and application. 20
 6. What is the effect of line length and source impedance on performance of distance relay ? 20
 7. Explain circulating current and balanced voltage scheme protection. 20
 8. Explain different protection of alternator. 20
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