PVP 12

Code: **EEPC2T4**

I M.Tech-II Semester-Regular Examinations-August 2014

ADVANCED POWER SYSTEM PROTECTION

(POWER SYSTEM CONTROL AND AUTOMATION)

Duration: 3 hours Marks: 5x14=70

Answer any FIVE questions. All questions carry equal marks

1 a) Give the classification of protective schemes . 7 M

b) Explain the principle of duality and prove it. 7 M

2. Explain different types of phase comparators with neat diagrams. 14 M

3. Explain about

a) IDMT relay. 7 M

b)Time current characteristics of over current relays . 7 M

4 a) Explain the effect of arc resistance ,power surges and line length on performance of distance relays. 7 M

b) Describe with neat diagram static impedance relay . 7 M

5 a) Explain about carrier current protection. 7 M

b) Describe the operational comparison of transfer trip and bloking schemes. 7 M

6 a) Write about the percentage differential protection in transformers . 7 M

b) Write about frame leakage protection . 7 M

7 Write about microprocessor based distance relays . 14 M

8 a) Explain various schemes for the protection of travelling waves on transmission line. 7 M

b) What is insulation coordination. Explain in detail. 7 M