

Code No. B5601

JAWAHARLAL NEHRU TECHNOLOGY UNIVERSITY, HYDERABAD

M .Tech. II Semester Supplementary Examinations, March – 2009

HIGH VOLTAGE TESTING TECHNIQUES

(Power Systems (High Voltage))

Time: 3 hours

Max.Marks.60

Answer any Five questions

All questions carry equal marks

- 1.a) Explain the performance of transformer ratio arm bridge in high voltage and high current applications.
b) Discuss briefly the importance of measuring DC resistivity.
- 2.a) What are the parameters considered in implementing testing standards?
b) What are the tests performed on cap and pin porcelain insulators?
3. Discuss the over voltage tests on insulators and circuit Breakers.
- 4.a) Discuss the effect of contaminator severity.
b) Briefly bring out a case study in contamination tests in a laboratory and in service performance.
5. Describe the impulse testing of surge diverters.
- 6.a) Define the important PD quantities.
b) How do you estimate the PD in power apparatus and discuss the calibration of PD detectors.
7. Explain the different arrangements for measuring RI and RIV. What are the limitations?
- 8.a) What are the ways of working insulators in contaminated environment?
b) How is the line voltage reduction takes place and modification of insulator design helps in this process?

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