



DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING
Activity Supports Employability/Entrepreneurship/Skill Development

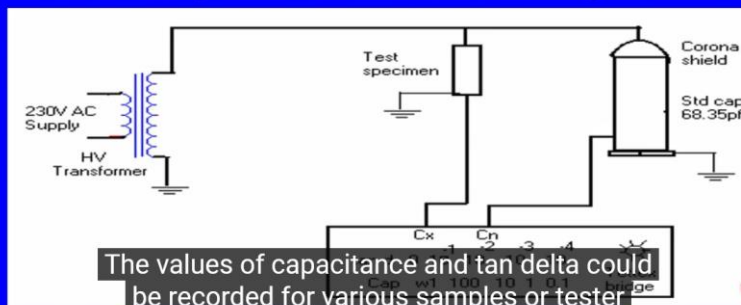
Course Code : 15UEE903
Course Name : High Voltage Engineering
Academic Year : 2020 – 2021 (ODD) Class : III Year

Category	Employability
Activity	NPTEL lectures
Topic	High voltage testing of electrical apparatus

(b) Measurement of Cap and tan δ using Schering bridge

Initially all the connections are checked including the battery-

- Energize the transformer using Variac in steps
- Adjust W1 factor to least value and achieve null balance
- When Capacitance balance is obtained then adjust tan δ value.
- Try to achieve minimum null deflection with the null detector
- The values of Cap and tan δ are recorded for various samples



Outcome	Increasing demands on power consumption and penetration of distributed generation of electrical energy, requires the use of power electronic circuits. To ensure system reliability, knowledge about the performance of electrical insulation systems under new types of stresses from the addition of sources that generate fast transients, is essential. Alternatively, the range of HV applications is no longer confined to the power industry; wide ranges of other industries use high voltage and often encounter problems needing diverse solutions High voltage testing of electrical apparatus help to understand the concepts in high voltage engineering.
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Course Instructor

HoD/EEE