

### Instruments Transformers class learning outcomes

- What is instrument transformer? Why they are needed? What are the different types of instrument transformers (CT and PT)? How power transformers are different than instrument transformers.
- Why shunt and multipliers are can't be used for measuring high currents and voltages? Write down the advantages of instruments transformers.
- What is CT and PT? Show their connection in electrical measurements. Why secondary of a CT should never be opened while primary is kept energised?
- What is ratio and phase angle error of CT and PT? Derive their equations.
- Explain the factors affecting the errors and techniques to minimise the error.
- Practice math problems: 9.1-9.19, 9.13 (Examples) and 2,3,4,5 (Exercise) in scended pdf version of the book

N.B. I will let you know if something is missed here