unacademy

Course on Power System

Introduction to Power Systems

Ground rules

1. For doubt solving group, msg me on fb : ssgiit
2. Any doubts during class, ask when i give time
3. Don't disrupt flow of class
4. DPP is added in class notes
5. Class notes can be downloaded from unacademy
6. Don't write notes
7. Make short notes after class

Q What about machines?

Ans
- Cover machines on Sundays & 1 or 2 sessions every day
- Synchronous m/c must be covered before we reach fault analysis.
- Start from sync. m/c

Q Progress of batch?

Apr-8 – June-8 : machines & maths (english)

May 1 - June 8 : n/w & control (hindi)

Plan for june

English : Power systems (8th June – 18th July)
7am- 10:30 am

Measurement 5pm- 6:30pm : Prameet

Digital + up 7pm- 9pm : Sankar

Hindi : Signals & system. Vishal sir : 7am

Analog elex : Kamesh sir : 7pm

Schedule

6 - 7 hrs : technical class

1 - 2 hrs : GS (recorded) : ESE

4 - 5 hrs : practice (DPP + PYQ)

- follow one batch (english or hindi)

GS english batch will be launched this month

Syllabus & strategy

1. Transmission & Distribution

   (a) Transmission line parameters

   (b) TL performance

   (c) Surges

   (d) Voltage & freq. control

   (e) UG Cable

   (f) Insulators

   (g) Dist. system

   (h) HVDC & FACTS (X)

   (i) Corona (topic) (X)

② load flow analysis
- ↳ power system matrices
- ↳ load flow solution

③ fault analysis
- ↳ representation of PS
- ↳ symmetrical comp.
- ↳ sequence n/w
- ↳ symmetrical fault
- ↳ unsymmetrical fault

④ Stability
- ↳ steady state stability
- ↳ Transient
- ↳ equal area criteria

⑤ Protection
- ↳ Circuit Breaker
- ↳ Relay

⑥ Power system economics

↳ economic load dispatch

↳ economic power generation

⑦ Power plants → (Rahul sharma)

Strategy

1. In first few classes, no numericals → cover pending work
2. Solve homework problem & previous year Qn.
3. Don't refer any standard book for theory.
4. Self study → practice of Qns