

Answer any **FIVE** Questions

All Questions carry equal marks

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1. Draw the flow chart for obtaining optimal scheduling of generating units by neglecting the transmission losses.

2. What are the B-coefficients? Derive them.

3. Explain briefly about:
(a) Long-term coordination
(b) Short-term coordination.

4. Draw the schematic diagram of a speed-governing system and explain the function of its components.

5. (a) Distinguish between load frequency control and economic dispatch control.
(b) Explain the dynamic response of ALFC loop with first order approximation.

6. (a) Explain how the proportional controller in load frequency control forms primary loop.
(b) Explain how reset of frequency control is achieved in load frequency control.

7. Differentiate between series and shunt compensations with proper examples.

8. (a) Explain the models of electricity markets.
(b) What is the role of transmission expansion in deregulated market?