R09

Code No: D4909, D5605

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
M.Tech II - Semester Examinations, March/April 2011
POWER SYSTEM OPERATION AND CONTROL
(COMMON TO ELECTRICAL POWER ENGINEERING, POWER SYSTEMS HIGH VOLTAGE)

Time: 3hours **Max. Marks: 60**

Answer any five questions
All questions carry equal marks

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1. Explain the forward and backward algorithm of dynamic programming approach through suitable flow charts for solving unit commitment problems. [12]

2. Explain about load frequency control and economic load dispatch control with a suitable block diagram. [12]

3. Explain with a neat block diagram the importance of optimal load frequency control of a two-area system. [12]

4. Discuss the importance of dynamic programming method over priority list method and explain the principle of optimal unit commitment. [12]

5. Discuss the advantages and disadvantages of power pools. [12]

6. Discuss 'Take-or-Pay' fuel supply contract for generation with limited energy. [12]

7. What are the main reasons for the inter connection of electric utility systems? Discuss the interchange evaluation with unit commitment. [12]

8. Discuss fuel scheduling by linear programming for generation with limited energy supply. [12]

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