



































































































































































































































































































**EE450B            POWER MANAGEMENT**  
**B.TECH. (ELECTRICAL & ELECTRONICS ENGG.)**  
**SEMESTER-VIII**

L    T    P    Credits  
4   -   -        4

Class-work Marks        : 25  
Exam Marks                : 75  
Total Marks                : 100  
Duration of Exam         : 3 Hrs.

---

**UNIT-I**

**INTRODUCTION:** Power Scenario, Power Development, Planning, Power resources, Environment-Power matters Plan, Pre-feasibility and feasibility studies, State relations for Power etc. **Aspects of Risk & Hazard Health & risk assessment visit to site.**

**UNIT-II**

**RESOURCES & PROCUREMENT:** Resources, Geophysical study, Seismic Considerations, Environmental Restraints, Resettlement and Rehabilitation. Contracting and Procurement, Consulting Services, Contracts, Project Management.

**UNIT-III**

**ENGINEERING:** Engineering & General Layout of Equipments, Generator, Transformer and Switch Gear and Control Equipment, Construction Methods, Operation and Maintenance Principle, Maintenance organization and planning, Availability, life cycle cost & future development. Visits to sites.

**UNIT-IV**

**POWER SECTOR & STATION:** Power sector structure in different states, Regulatory Regime in those states, Power utilities in Haryana, Grid management, Power financing, Visit to sites. Management of Fuel, water Resource Electricity deviend scenario storage and handling, Pricing, Contract etc, Human resource management, Visit to sites.State and Central Power boards / Power corporations.

**REFERENCE BOOKS:**

1. Electricity Bill, Safety & Conservation Act
2. Arora & Dom Kundwar, A Course in Power Plant Engineering, Pub.: Dhanpat Rai Pub, 2000.
3. Jain & Bala Subranmanyam, "Power Plant Engineering", Dhanpat Rai Pub.,
4. Butter Worth, A.B. Gill, "Power Plant Performance Management", Pub:1984.
5. P.C. Sharma, "Power Plant Engineering", Dhanpat Rai Pub.,
6. David A. Decenzo, Stephen P. Robbins, Human Resource Management. New Delhi: PHI Pvt. Ltd., 2004.
7. P.K. Nag, Power Plant Engg. N.Delhi: TMH, 2003.

**NOTE:**

1. In the semester examination, the examiner will set 08 questions in all selecting two from each unit. The candidates will be required to attempt five questions in all selecting at least one from each unit. All questions will carry equal marks.

---

The Subjects and Syllabus with EE, ECE codes recommended by the Board to FET Page 146

CHAIRMAN, BOS