

00215 B.Tech. IN ELECTRICAL ENGINEERING
Term-End Examination
June, 2013

**BIEE-025 : POWER SYSTEM PLANNING AND
LOAD FORECASTING**

Time : 3 hours

Maximum Marks : 70

*Note : Attempt **any five** questions. All questions carry equal marks.*

1. (a) Discuss the objectives of planning in power systems. 7
(b) Describe long and short term planning with suitable examples. 7
2. (a) Describe the importance and execution of transmission system planning on long term basis. 10
(b) What are the methods of long term forecasting ? 4
3. (a) Describe the problems that electricity industry are facing in context of load forecasting. 7
(b) Compare isolated and inter-connected power system. 7

4. (a) What is the difference between forecasting and planning ? 4
- (b) Explain Box Jenkins time series method in detail. 10
5. (a) What do you mean by generation planning ? 4
- (b) Differentiate and compare distribution and transmission system planning. 10
6. (a) Explain time horizon effects on forecasting methods. 10
- (b) List the steps for fundamental economic analysis for generation planning. 4
7. Write short notes on *any four* of the following : **3½x4=14**
- (a) Regression Method
- (b) Peak load forecasting
- (c) Weather load model
- (d) Spatial load forecasting
- (e) Use of forecasting
- (f) Distribution automation
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