No. of Printed Pages: 03 Roll No.

H27

B. Tech. EXAMINATION, 2020

(Eighth Semester)

(B Scheme) (Re-appear Only)

EE438B

RECENT TRENDS IN DEREGULATED POWER SYSTEMS

Time: 2½ Hours] [Maximum Marks: 75]

Before answering the question-paper candidates should ensure that they have been supplied to correct and complete question-paper. No complaint, in this regard, will be entertained after the examination.

Note: Attempt *Four* questions in all. All questions carry equal marks.

(2)M-H27 1

- 1. (a) What is the purpose of deregulation?

 How does it motivate the power industries?
 - (b) What do you mean by deregulation? Discuss its overview in brief.
- **2.** (a) Describe the major factors behind restructuring in power systems.
 - (b) Explain the benefits of competitive electricity market after the effects of deregulation.
- **3.** Describe the different theories of trading :
 - (a) Bilateral trading
 - (b) Pool + Bilateral trading
 - (c) Multilateral trading.
- **4.** Explain bidding mechanism model of ISO, and also discuss the functions and responsibilities of an ISO ?
- **5.** (a) Summarize the congestion management in deregulation.

- (b) Describe the transfer capability of transmission line.
- **6.** (a) Describe the security management in deregulated environment.
 - (b) Demonstrate the Pricing of power transmissions.
- **7.** (a) Describe the role of reliability in deregulated power systems.
 - (b) Explain in detail the formation of power pools.
- 8. Write short notes on the following:
 - (a) Optimal power flow as a basic tool
 - (b) Unit commitment.