

- (b) Describe different types of emerging trends and techniques of DSM. 8

8. (a) Explain the term 'EC Act, 2001'. 6  
(b) Discuss the role of DSM on consumer side : 9

Industrial Sector, Agriculture Sector,  
Domestic Sector and Commercial Sector.

No. of Printed Pages : 04

Roll No. ....

**BB-43**

**M. Tech. EXAMINATION, May 2017**

(Second Semester)

(B. Scheme) (Main & Re-appear)

EE(PS)

MPS-506-B

ENERGY AUDIT IN POWER  
DISTRIBUTION SYSTEM

*Time : 3 Hours]*

*[Maximum Marks : 75*

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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.

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**Note :** Attempt *Five* questions in all, selecting at least *one* question from each Unit.

### Unit I

1. (a) State the classification of cables and discuss their general construction. 7  
(b) Explain different types of distribution system with the help of neat sketches. 8
2. (a) What do you mean by Grid ? Explain load scheduling and dispatching. 7  
(b) Discuss the different reasons for DT failures and their different testing. 8

### Unit II

3. (a) What is the need of energy accounting ? Explain the various types of problems occurred and types of energy accounting. 8  
(b) Explain different types of energy audit instruments with neat sketches. 7
4. (a) Explain the problems occurred while in energy audit. What are the solutions to overcome these problems in energy audit ? 7

M-BB-43

2

- (b) Discuss the information technology interventions for energy accounting and Energy conservation opportunities. 8

### Unit III

5. (a) Explain different types of transmission and distribution losses. Discuss their causes and effects on power system. 8  
(b) What are the factors contributing to high technical and commercial losses ? Discuss in brief some methods to mitigate these losses. 7
6. (a) Discuss metering and billing system in distribution system. Explain testing of energy meters. 7  
(b) What are the long term plans for AT&C losses ? Explain. 8

### Unit IV

7. (a) What do you mean by DSM ? Explain benefit and issues of DSM. 7

(2-09) M-BB-43

3

P.T.O.