

No. of Printed Pages : 03

Roll No.

AA-42

M. Tech. EXAMINATION, Dec. 2018

(First Semester)

(B. Scheme) (Re-appear Only)

EE(PS)

MPS503B

POWER SYSTEM CONTROL AND
INSTRUMENTATION

Time : 3 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 *Five* questions in all, selecting at least *one* question from each Unit. All questions carry equal marks.

(3-41/18)M-AA-42

P.T.O.

Unit I

1. Describe the concept and layout of control and instrumentation in thermal power plant in power system.
2. Describe the different modes of operation of Piezo-electric transducers. Derive the expression for impulse response. Sketch the response curves.

Unit II

3. What are the various devices used for the measurement of temperature ? Describe them in brief.
4. Describe the method for measurement of flow rate. Describe the working of an anemometer when used for measurement of flow of fluids.

Unit III

5. What is the need of SCADA ? Describe its Hardware and Software Structure.

6. Compare SCADA system and distribution control systems. Describe PLC Vs RTU. Describe the concept of configuring applied to MTU and MTU communication interface.

Unit IV

7. What do you mean by DMS ? Describe Distribution Automation and Substation Automation.
8. What are the various methods of load forecasting ? Describe any *one*.