M. Tech.-II (Electrical -Power System) (CBCS – 2015 Course) :
SUMMER - 2019
SUBJECT : POWER SYSTEM DYNAMICS

Date Monday **Time** 11.00 AM TO 02.00 PM
Date 03/06/2019 **Max. Marks : 60**

S-2019-3417

N.B.

1) All questions are **COMPULSORY**.
2) Figures to the **RIGHT** indicate **FULL** marks.
3) Assume suitable data, if necessary.
4) Answer to both the sections should be written in **SAME** Answer book.

SECTION – I

Q.1 Explicate state transition diagram. **(10)**

OR

Develop Clark diagram for two machine series reactance system.

Q.2 Explicate the state equation for small signal model of power system. **(10)**

OR

Explicate the improved model of synchronous machine.

Q.3 Interpret large signal stability analysis. **(10)**

OR

Illuminate modified Euler's method for stability studies.

SECTION – II

Q.4 Clarify the concept of control signal in power system stabilizers. **(10)**

OR

Write a note on various aspects considered in the design of power system stabilizer.

Q.5 Elucidate the analysis of large power system. **(10)**

OR

Explicate multi-machine system stability analysis.

Q.6 Clarify various methods for controlling voltage instability. **(10)**

OR

What is islanding? What are various methods of islanding?

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