

[M19 PS1102]

**I M. Tech I Semester (R19) Regular Examinations  
 POWER SYSTEM DYNAMICS AND STABILITY  
 (ELECTRICAL & ELECTRONICS ENGINEERING)  
 MODEL QUESTION PAPER**

**TIME: 3 Hrs.**

**Max. Marks: 75 M**

Answer **ONE Question** from **EACH UNIT**

All questions carry equal marks

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			CO	KL	M
		<b>UNIT - I</b>			
1.	a).	Explain abt the different subsystems of a power system and associated controls and operating states of power system.	1	K2	8
	b).	Explain the classical methods of analysis of power system stability.	1	K2	7
		<b>OR</b>			
2.		Explain abt the modelling of Synchrons machine using park's transformation.	2	K3	15
		<b>UNIT - II</b>			
3.		Draw the functional and standard block diagram of excitation system and explain.	3	K4	15
		<b>OR</b>			
4.		Explain abt the modelling of Synchrons machine with model 1.1	2	K3	15
		<b>UNIT - III</b>			
5.		Explain abt the small signal stability of system by eigen value approach.	2	K3	15
		<b>OR</b>			
6.		Draw the block diagram and Explain abt the small signal stability for SMIB system with RH criterion.	2	K3	15
		<b>UNIT - IV</b>			
7.		Explain abt the Power system stabilizer with each component in PSS.	3	K4	15
		<b>OR</b>			
8.		Draw and explain the modelling of SMIB system with and witht PSS.	3	K4	15
		<b>UNIT - V</b>			
9.		Explain abt the concepts of multi machine stability	2	K3	15
		<b>OR</b>			
10.		What are different solution techniques for transient stability and explain the modified Euler method for the determination of transient stability.	2	K3	15