

THE KAVERY ENGINEERING COLLEGE*(An Autonomous Institution)***UG/PG DEGREE END SEMESTER THEORY EXAMINATIONS, APRIL-MAY 2026****Second Semester****Power System Engineering****PPST2424 - RESTRUCTURED POWER SYSTEM****Regulations - 2024****Duration: 3 Hrs.****Maximum: 100 Marks****PART – A (ANSWER ALL QUESTIONS) (Marks 10*2=20)**

Q.No	Questions	BLT	CO	Marks
1.	List the need of restructuring of power system.	L2	1	2
2.	Differentiate PoolCo model and Bilateral Contract Model.	L2	1	2
3.	Why the congestion management is considered to be significant in restructured power systems?	L1	2	2
4.	Point out non market methods of congestion management.	L1	2	2
5.	Define Locational Marginal Prices and their significance.	L1	3	2
6.	Differentiate between FTR and FGR.	L2	3	2
7.	Distinguish different classification of ancillary service depending up the service requirement	L2	4	2
8.	Define marginal transmission pricing paradigm	L1	4	2
9.	Classify different reforms in Indian power sectors	L2	5	2
10.	List the salient feature of electricity act 2012.	L2	5	2

PART – B (ANSWER ALL QUESTIONS) (Marks 5*13 = 65)

Q.No	Questions	BLT	CO	Marks
11.	a Explain Long run Production cost with suitable example in restructured power system	L2	1	16
	Or			
	b Explain different entities involved in deregulated electricity market with suitable block diagram	L2	1	16
12.	a i Discuss in details about the effect of the congestion on ATC calculation.	L4	2	8
	ii Describe about PTDF and LODF.	L4	2	8
	Or			
	b i Analyze different capacity alleviation methods with the help of suitable examples and diagrams.	L4	2	8
	ii Analyze inter and intra zonal congestion management with suitable example	L4	2	8

13.	a	Discuss the mathematical model DCOPF and ACOPF for LMP calculation in the deregulated market	L3	3	16
Or					
	b	Discuss briefly about Financial Transmission Rights in power system under deregulated environment.	L3	3	16
14.	a	Formulate the voltage control and reactive power support in ancillary service in power system under deregulated nature	L3	4	16
Or					
	b i	Relate co-optimization of energy and reserve services in restructured power system	L3	4	8
	ii	Compare different method of loss allocation in transmission pricing	L3	4	8
15.	a i	Interpret different regulation framework in Indian power sector.	L2	5	8
	ii	Illustrate How the Availability-Based Tariff is recommended in a restructured power system.	L2	5	8
Or					
	b i	Identify the different issues in open access. Also explain the role of power exchange	L2	5	8
	ii	Explain the PJM and Nordic power market.	L2	5	8
