Reg. No.



II SEMESTER M.TECH (ENERGY SYSTEMS & MANAGEMENT / POWER ELECTRONICS & DRIVES) MAKE UP EXAMINATIONS, JUNE 2018

SUBJECT: DISTRIBUTED ENERGY SYSTEMS [ELE 5202]

REVISED CREDIT SYSTEM

Time: 3 Hours Date: 14 JUNE 2018		Max. Marks: 50	
Instructions to Candidates:			
	 Answer ALL the questions. 		
	 Missing data may be suitably 	v assumed.	
1A.	With a neat figure explain the	construction and working of sunshine recor	der (03)
1B.	With a neat diagram, explain the List out its advantages and disa	ne construction and working of Liquid flat pla advantages.	t collector. (04)
1C .	With a neat diagram, explain the	he working of Solar thermal water pump	(03)
2A.	Describe the construction and	working of Box-type Solar Cooke with a nea	it figure. (03)
2B.	Explain the working of standal	one solar PV system with a neat diagram.	(04)
2C.	Explain the working of Grid-In	teractive Solar PV System with a neat diagra	.m (03)
3A.	Describe the site selection con	sideration for wind turbine installation.	(03)
3B.	Explain the different Speed Co	ntrol Strategies for Wind Turbine systems.	(03)
3C.	With the help of block diagram	, explain the extraction of power from sugar c	ane waste. (04)
4A.	Describe the following process a. Incineration	s of biomass in the biogas generation.	
	d. Anaerobic		(03)
4B.	Explain the principle of operat	tion and power extraction from MHD Genera	ator with a
4C.	With a block diagram of solaharvester.	ar tracking system, explain the hybrid so	lar energy (04)
5A.	Describe the sizing optimizati Algorithm.	on of a standalone photovoltaic system usi	ng Genetic (04)
5B.	Describe the Impact of Distribution	uted Generators in Indian power system.	(03)
5C.	Explain the different voltage c Integration with DGs.	ontrol techniques in the distribution system	after Grid (03)