R.V.R. & J.C.COLLEGE OF ENGINEERING, GUNTUR-522019

(Autonomous)

DEPARTMENT OF ELECTRICAL ENGINEERING

Subject code & Title: **CM325(EEOL1) RENEWABLE ENERGY RESOURCES**

AY: 2025-2026 Semester VI [Third Year] Max. Time: 135 Min.

Assignment Test II Max. Marks:12

		Marks	CO	Blooms Level
1.	Derive the expression for total power in wind.	6 M	CO3	L1
2.	Classify and explain about wind turbines.	6 M	CO3	L1
3.	How energy from wind can be extracted? Explain the process by using suitable diagram.	6 M	CO3	L3
4.	Explain the working of biogas digester with the help of diagram.	6 M	CO4	L2
5.	With a neat sketch explain the devices employed for wave energy.	6 M	CO4	L3
6.	What is geothermal energy? Explain about different types of geothermal resources.	6 M	CO4	L1

Sessional Test II Max. Marks: 18

Answer ALL questions

1.	a.	Define cut-out velocity.	1 M	CO3	L1
	b.	What is Pitch control?	1 M	CO3	L1
	c.	What is Betz's limit?	1 M	CO3	L1
	d.	Define tidal range.	1 M	CO4	L1
	e.	What is aerobic digestion?	1 M	CO4	L1
	f.	What are the limitations of geothermal energy?	1 M	CO4	L1
2.		Illustrate operation of a wind turbine with the help of a schematic diagram.	6 M	CO3	L4
		OR			
3.		Discuss in detail the advantages and disadvantages of horizontal axis and vertical axis wind mills.	6 M	CO3	L1
4.		Illustrate working principle of simple single pool tidal system.	3 M	CO4	L3
		OR			
5.		Describe working principle of closed cycle OTEC power plant.	6 M	CO4	L3