## Vivekananda College of Engineering & Technology, Puttur [A Unit of Vivekananda Vidyavardhaka Sangha Puttur ®] Affiliated to VTU, Belagavi & Approved by AICTE New Delhi

96

CRM08

Rev 1.10

<ME>

<18/07/2022>

## CONTINUOUS INTERNAL EVALUATION - 3

Dept:ME	Sem / Div: VI/ CS, EC, CV	Sub: Non Conventional Energy Sources	S Code:18ME651
Date:23/07/2022	Time: 9.30- 11.00AM	Max Marks: 50	Elective:Y

Note: Answer any 2 full questions, choosing one full question from each part.

Q	N	Questions	Marks	RBT	CO's
		PARTA			
1	a	Explain briefly the parameters affecting the solar flat plate collector.	10	L2	CO2
	b	Define the following w.r.t solar radiation geometry: latitude angel, declination angle, hour angel and solar azimuth angel.	8	L2	CO2
	c	Explain the working of photovoltaic energy conversion.	7	L2	CO3
		OR			
2	a	Discuss with a neat sketch the working of solar pond.	10	L2	CO2
	120,000	List the advantages and disadvantages of concentrating solar collector over flat plate collector.	8	L2	CO2
	c	Discuss the I-V charateristics of PV cell.	7	L2	CO3
		PART B			
3		Explain with a neat sketch the working of floating drum type biogas plant.	10	L2	CO5
	10000	Describe with a neat sketch the production of hydrogen by electrolysis of water.	10	L2	CO5

c List the advantages and disadvantages of geotherma plant.	5	L2	CO5
OR			
4 a Discuss the operational parameters of a biogas plant.	10	L2	CO5
b Describe fixed drum type biogas plant with a nea	10	L2	CO5
sketch. c Briefly explain energy plantation.	5	L2	CO5

Prepared by: Dr.Deepak KB

Page: 2 / 2