SRM Institute of Science and Technology
College of Engineering and Technology
School of Computing

SRM Nagar, Kattankulathur – 603203, Chengalpattu District, Tamilnadu

SET-A

Academic Year: 2023-24 (ODD)

Test: CLA-T2 **Date: 06-11-2023**
Course Code & Title: 18EEO301T SUSTAINABLE ENERGY **Duration:** 2 Periods
Year & SEM: IV Year / VII SEM **Max. Marks:** 50

Course Articulation Matrix:

S.No.	Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
1	CO1	3	2	2				1					
2	CO2	3	2	2				1					
3	CO3	3	2					1					
4	CO4	3	2					1					
5	CO5	3	2	2				1					

Part - A
(5 x 4= 20 Marks)

Instructions: Answer any five questions

Q. No	Question	Marks	BL	CO	PO
1	State the principle of ocean thermal energy conversion and mention any two advantages.	**4**	**2**	**4**	**1**
2	How to select a site for tidal power plant?	**4**	**3**	**4**	**2**
3	What are the types of fuel cell? Compare based on their electrolyte and operating temperature.	**4**	**2**	**4**	**1**
4	Show the performance characteristics of fuel cell and comment on it.	**4**	**3**	**5**	**2**
5	Write short notes on Dolphin type wave machine.	**4**	**2**	**5**	**1**
6	Compare batteries and fuel cell.	**4**	**3**	**5**	**2**
	Part – B **(15 x 2 = 30 Marks)**				
	Instructions: Answer any one Question				
7	(a) Discuss the role of various components and working of closed cycle OTEC System with neat diagram. (OR) (b) Discuss the role of various components and working of dual basin type tidal power plant with neat diagram.	**15**	**2**	**4**	**1**
8	(a) Comment on the criteria for selection of fuel cells and explain about fuel cell power plant with neat diagram. (OR) (b) Comment on the role of various components of fuel cells and explain the principle of working of fuel cell with neat diagram	**15**	**3**	**5**	**2**