Exam. Code: 0943 Sub. Code: 6745

## 2063

## B.E. (Mechanical Engineering) Seventh Semester Elective - I

MEC-705: Renewable Energy Sources

Time allowed: 3 Hours

Max. Marks: 50

NOTE: Attempt <u>five</u> questions in all, including Question No. I which is compulsory and selecting two questions from each Section.

x-x-x

1	( ) Will	
1	(a) What are primary energy sources?	1 10
	(b) Classify the methods of solar energy storage	10
	(c) Give a list of the materials used for biogas generation	
	(d) What is meant by anaerobic digestion?	
	(e) Write any two annications of the	
	(e) Write any two applications of wind energy.	
	Section A	<u> </u>
2	(a) Explain enploy type and 1:	
_	(a) Explain eppley type pyrheliometer.	(5)
	(b) What is the principle for collection of solar energy used in a non convective solar pond?	
	pond;	(5)
3 .	Describe a solar heating system using water heating solar collectors. What are the advantages and disadvantages of this method?	
	disadvantages of this method?	(10)
	S and invition:	
4	(a) What are the main problems in street 6	
	(a) What are the main problems in straw fermentation? How they are minimized?  (b) Explain different types of hierarchy.	(5)
	(b) Explain different types of bioreactors.	(5)
		(5)
-	Section B	
5	(a) Explain the factors, which affect the size of the biogas plants?	(5)
	(b) Describe with a neat sketch the working of a wind energy system with main components.	(5)
	with main components.	(5)
5.	Explain with sketches the various methods of tidal power generation. What are the limitations of each method?	
	method? what are the limitations of each	(10)
7		
	(a) Describe a hinary evolo greater for 1' 111	
	(a) Describe a binary cycle system for liquid dominated system.	(5)
	(b) What are the main applications of geothermal energy?	
		(5)
	(요) 부탁하면 하게 살아들는 전 경기 되었다. 그는 이 회에 전 사람이 교육하면 하게 하는 하는 하는 하는 것이 하는 것이 하는 것이 하는 것이 없는 것이 없는 것이 없습니다. 그렇게 하는 그리다.	

