

Midsemester – October 2019

Course: B. Tech in Civil and Mechanical Engineering

Sem: I

Subject Name: Energy and Environmental Engineering

Subject Code: BTES105

Max Marks: 20

Date: - 09/10/2019

Duration: - 1 Hr.

Instructions to the Students:

1. Assumptions made should be clearly mentioned.
2. All the questions are compulsory.

	(Level/CO)	Marks
Q. 1 Solve all the questions:		6
1. PV cell gets energy from.....in light.	CO2	
a) Positrons b) Photons c) Neutrons d) Protons		
2. Steam is converted to water in.....	CO1	
a) Condenser b) Combustor c) Boiler d) Turbine		
3. Thermoelectric generators working is based on....	CO3	
a) Seeback effect b) Gravity effect c) Pressure effect d) Surface effect		
4. Compressor in gas turbine power plant is driven by.....	CO1	
a) Motor b) Combustor c) Boiler d) Turbine		
5. Which of the following is not a renewable energy source?	CO2	
a) OTEC b) Sun c) Coal d) Biomass		
6. Reaction that happens during preparation of biogas is.....	CO2	
a) Aerobic b) Anaerobic c) Fusion d) Fission		
Q.2 Solve Any Two of the following.		3 X 2
(A) Write a short note on Solar Energy collectors.	CO2	
(B) Explain the role of Boiler in steam power plant.	CO1	
(C) Write a short note on Geothermal Power.	CO2	
Q. 3 Solve Any One of the following.		8
(A) What is Biogas? Explain the generation and advantages of Biogas with suitable diagram.	CO2	
(B) Explain Hydroelectric power-plant in detail with suitable diagram, working , advantages and disadvantages.	CO1	

*** End ***

