

**DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE**  
**Semester Examination – May - 2019**

**Branch: Electrical Engineering**

**Sem.:-IV**

**Subject with Subject Code: INTRODUCTION TO NON CONVENTIONAL ENERGY SOURCES (BTEEOE407B)**

**Marks: 60**

**Date: 27-05-2019**

**Time:-3 Hr.**

**Instructions to the Students**

1. Each question carries 12 marks.
2. Attempt **any five** questions of the following.
3. Illustrate your answers with neat sketches, diagram etc., wherever necessary.
4. If some part or parameter is noticed to be missing, you may appropriately assume it and should mention it clearly

	(Marks)
<b>Q.1. Solve any Two</b>	
a) Explain the classification of energy resources?	(6)
b) Explain the Indian energy Scenario?	(6)
c) What are the merits and demerits of nonconventional energy sources?	(6)
<b>Q.2. Solve any Two</b>	
a) Explain any one of the solar collectors with the aid of neat sketch?	(6)
b) Explain the solar pond with neat diagram and application?	(6)
c) Describe briefly about photo voltaic system?	(6)
<b>Q.3. Solve any Two</b>	
a) Explain the vertical axis wind mills with neat sketches?	(6)
b) What's are different points are the site selection for wind energy?	(6)
c) What's the different component of wind system (Turbine)? Explain all the component parts?	(6)
<b>Q.4. Solve any Two</b>	
a) Define the geothermal energy? Explain the dry steam power plant?	(6)
b) What are the components of Tidal Power plant? Explain the single basin arrangement of tidal power plant?	(6)
c) What are the prospects of geothermal energy in India?	(6)
<b>Q.5. Solve any Two</b>	
a) What is the nuclear energy? What is difference between nuclear fission and nuclear fusion?	(6)
b) What is the basic Tokamak reactor?	(6)
c) What is the magnetic confinement?	(6)
<b>Q.6. Solve any Two</b>	
a) Explain the briefly biogas category?	(6)
b) Explain fixed dome type plant with the help of neat sketch?	(6)
c) Explain the pyrolysis scheme?	(6)

