

Dr. Babasaheb Ambedkar Technological University Lonere-Raigad
Mid Semester Examination: October 2018
Class: B. Tech. (Mech, Chem, Petro, Civil) Semester: I
Subject: Energy and Environmental Engineering (EEE)

Time: 1 hour

Maximum Marks: 20

Instructions: 1. All questions are compulsory however, there are few internal choices
2. Figures to the right indicate full marks

Solve the following:

- 1) Define the following: (2×4=8)
- a) Moderator in Nuclear power plant
 - b) Draft tube in Hydro electric power plant
 - c) Principle of OTEC
 - d) Anaerobic digestion in Biogas plant

Solve any Three of the following: (4×3=12)

- 2) What are the fossil fuels used for generation of conventional power? Explain the working of gas based power plant with a neat sketch.
- 3) Discuss the basic principle of operation of Magneto-Hydro-dynamic Generator. Draw a simple sketch.
- 4) Classify the various types of wind mills. Describe vertical axis wind mill showing its entire components.
- 5) Write the names of research organizations working for conventional energy and non-conventional energy sources. Three each.
