

APJ Abdul Kalam Technological University
Second Semester M. Tech Degree Examination, May 2017

Cluster: **Kollam**

Branch: **Electrical & Electronics Engineering**

Specialisation: **Power Systems**

Subject: **02EE6252.3 DISTRIBUTED GENERATION**

Time: 3 Hrs

Max. Marks: 60

Instructions: *Answer All Questions from Part A.*
 Answer Two Full questions from Part B.

PART A

1. Discuss about energy balance equation and collector efficiency of a solar collector system.
2. Write notes on solar thermal applications
 - (i) Water heating.
 - (ii) Space heating.
 - (iii) Drying
3. What are the factors depend on design & structure of PV modules?
4. Discuss about MHD systems and its design problems. Also mention its advantages.

(4 x 9=36)

PART B

5. What are the factors depend on design of wind turbine rotor ?
6. Discuss about methods for obtaining energy from biomass.
7. (a) What are the different modes of wind power generation? (6 marks)
(b) Discuss about closed cycle OTEC system. (6 marks)

(2 x 12=24)
