

AJAY KUMAR GARG ENGINEERING COLLEGE, GHAZIABAD
DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

SESSIONAL TEST – I

Course: B. Tech.
Session: 2020-21
Subject: Renewable Energy Sources
Max. Marks: 25

Semester: VIII
Section: All Sections
Sub Code: ROE-086
Time: 01 Hr

Note: Attempt all the sections.

OBE Remarks: All questions are related to CO1.

Section – A

A. Attempt all the parts. **(3×2 = 6)**

- (1) Give availability details of Wind Energy & Geothermal Energy Sources.
- (2) What are the different types of solar cells?
- (3) What are the conventional and Non-conventional energy sources?

Section – B

B. Attempt all the parts **(3×4 = 12)**

- (4) Describe the operation of a solar cell. Also explain Solar Cell Array in details.
- (5) Write detailed note on solar cell power plants.
- (6) Write the merits and demerits of the following type of non-conventional energy sources:
 - i. Tidal Energy
 - ii. Bio Energy

Section – C

C. Attempt all the parts **(1×7 = 7)**

- (7) Describe the principle of solar photovoltaic energy conversion. What are the advantages and disadvantages of photovoltaic solar energy conversion?