

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

MSc DEGREE EXAMINATION MAY 2018
(Fourth Semester)

Branch – PHYSICS

CORE ELECTIVE-II APPLIED SOLAR ENERGY

Time: Three Hours

Maximum: 75 Marks

Answer ALL questions

ALL questions carry EQUAL marks (5 x 15 = 75)

- 1 a What are the advantages and limitations of renewable energy sources? Explain the prospects of non-conventional energy sources.
OR
b What are the difference between a Pyrheliometer and a Pymometer? Describe the principle of angstrom type Pyrheliometer.
- 2 a What are the main component of a flat-plat solar collector? Explain the function of each component.
OR
b What are the advantages and disadvantages of concentrating collector over a flat-plate collector?
- 3 a Explain in detail solar disc and solar concentrators.
OR
b Write a note on (i) sun tracking system (ii) basin type solar still.
- 4 a Explain the solar cell array system with main element of photovoltaic system.
OR
b Write an essay on the photovoltaic solar energy conversion and give the uses.
- 5 a Describe the principle of working of a box type solar cooker.
OR
b Illustrate the passive solar space heating systems with any mention the applications.

Z-Z-Z

END