



B.Tech VIII Semester Regular/Supplementary Examinations, April 2023

Solar Energy Appliances
(Civil Engineering)

Maximum Marks: 70

Date:08.05.2023 Duration: 3 hours

- Note: 1. This question paper contains two parts A and B.
2. Part A is compulsory which carries 20 marks. Answer all questions in Part A.
3. Part B consists of 5 Units. Answer any one full question from each unit which carries 10M.
4. Each question carries 10 marks and may have a, b, c, d as sub questions.

Part-A

All the following questions carry equal marks

(10x2M=20 Marks)

- 1 Define solar cell.
- 2 What is solar Laterns.
- 3 Write the different types of solar cookers.
- 4 What are the factors affecting solar cookers.
- 5 What is the principle of solar dryer?
- 6 Write the features of solar dryers.
- 7 Write the necessity of desalination.
- 8 What is Solar disinfection?
- 9 What are the parameters affecting solar furnace
- 10 What are the components of solar furnaces.

Part-B

Answer All the following questions.

(5X10M=50Marks)

- 11 Explain the construction and working principle of a solar cell with diagram. [10M]
OR
- 12 Explain the solar street lighting systems and write salient features of system & its components. [10M]
- 13 Explain the performance evaluation of solar cookers. [10M]
OR
- 14 A. Write the application of solar cookers. [5M]
B. Write the Advantages of Solar cookers. [5M]
- 15 Explain the Direct type solar dryer & Mixed mode type solar dryer. [10M]
OR
- 16 Write the applications of solar dryers. [10M]
- 17 Compare between conventional and solar desalination. [10M]
OR
- 18 Explain the various desalination techniques. [10M]
- 19 Explain the Multiple heliostats solar furnace. [10M]
OR
- 20 Explain the types of solar furnaces in details. [10M]