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Total No. of Pages : 02

Total No. of Questions : 09

B.Voc. (Solar System Technology) (Sem.-3)
SOLAR CELL AND PHOTOVOLTAIC TECHNOLOGIES

Subject Code : SST-303

M.Code : 93235

Date of Examination : 13-12-2023

Time : 3 Hrs.

Max. Marks : 30

INSTRUCTIONS TO CANDIDATES :

1. **SECTION-A is COMPULSORY** consisting of TEN questions carrying ONE mark each.
2. **SECTION-B** contains FIVE questions carrying TWO AND A HALF marks each and students have to attempt any FOUR questions.
3. **SECTION-C** contains THREE questions carrying FIVE marks each and students have to attempt any TWO questions.

SECTION-A

1. Write briefly :

- a) What is a solar cell?
- b) Sketch the schematic of a solar cell.
- c) What is the importance of solar radiation on solar energy generation?
- d) What is the basic principle for solar energy storage?
- e) List two extra terrestrial characteristics of solar radiation.
- f) What is solar passive heating?
- g) Why is maintenance of PV modules necessary?
- h) What are the safety measures to be considered while working with energy storage systems?
- i) What are solar collectors?
- j) Discuss the advantages of using a solar cooker.

SECTION-B

2. Discuss the applications of solar photovoltaic technologies.
3. How does a solar pond work?
4. Discuss about PV modules.
5. List the advantages of concentrating type collectors.
6. Discuss about the standards used for photovoltaic technologies.

SECTION-C

7. Define: Solar angle, angle of incidence.
8. Discuss flat-plate collectors with suitable diagram.
9. Write a short note on Greenhouse Technology.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.