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School of Agriculture
Bachelor of Science Honours in Agriculture
Mid Term Examination - May 2024

Duration : 90 Minutes
Max Marks : 50

Sem IV - A1UA403B - Renewable Energy and Green Technology

General Instructions

Answer to the specific question asked

Draw neat, labelled diagrams wherever necessary

Approved data hand books are allowed subject to verification by the Invigilator

- 1) Explain Solar Thermal Energy Systems and their applications. K2 (2)
- 2) Define Solar Energy Systems? K1 (3)
- 3) Explain the solar pond, and how is it used in energy production? K2 (4)
- 4) Compare the solar drying and solar distillation processes. K2 (6)
- 5) Compare monocrystalline and polycrystalline PV modules. K3 (6)
- 6) A single solar cell on illumination by insolation of about 800 W/m² produces a voltage of 0.5 V and a current up to 2.0 A. The efficiency of the solar cell is 12.5%. The area of the cell is? K3 (9)
- 7) Compare the effectiveness of passive and active solar distillation methods. K4 (8)
- 8) Analyze the energy efficiency of a solar dryer versus conventional drying methods. K4 (12)

OR

- Discuss the advantages of using a solar still for water purification. K4 (12)