

ADMISSION NUMBER

School of Engineering B.TECH Mechanical Engineering

Semester End Examination - Nov 2023

Duration: 180 Minutes Max Marks: 100

Sem VII - BME024 - Solar Energy Systems

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)	Define solar pond.	K1 ,K1 (2)
2)	Illustrate the role of batteries in energy storage for solar power.	K2 ,K2 (4)
3)	Extend on the photovoltaic applications such as battery chargers and domestic lighting.	K2 ,K2 (6)
4)	Utilize solar energy in a theoretical scenario of solar-powered transportation.	K3 ,K3 (9)
5)	Organize an experiment to identify the most efficient solar cell type.	K3 ,K3 (9)
6)	Justify the need for government support in promoting solar energy.	K5 ,K5 (10)
7)	Classify solar dryers based on their design and operation.	K4 ,K4 (12)
8)	Appraise the cost-effectiveness of solar energy installations.	K5 ,K5 (15)
9)	Prove the value of solar distillation in water-scarce regions.	K5 ,K5 (15)
10)	Create a blueprint for a solar-powered water desalination plant.	K6 ,K6 (18)