

UNIT-II SOLAR RADIATION

S.NO	Questions	BT	CO	PO
	Part–A(Short answers questions)			
1	Define solar radiation and its importance in solar energy systems.	L1	CO2	1,2,3,7
2	Explain the difference between solar photovoltaic(PV)and solar thermal technologies.	L1	CO2	1,2,3,7
3	What are the factors affecting the availability of solar radiation?	L2	CO2	1,2,3,7
4	How is solar radiation measured? Mention any two instruments used for its measurement.	L1	CO2	1,2,3,7
5	What are the main components of a solar thermal conversion system?	L2	CO2	1,2,3,7
6	List two applications of solar thermal energy.	L1	CO2	1,2,3,7
7	What is a solar photovoltaiccell? Briefly explain its working principle.	L1	CO2	1,2,3,7
8	What are the advantages of using solar energy over conventional energy sources?	L1	CO2	1,2,3,7
9	Explain the role of storage systems in solar energy applications.	L2	CO2	1,2,3,7
10	Mention any two real-life applications of solar energy systems.	L2	CO2	1,2,3,7

S.NO	Part-B(Long answer questions)	BT	CO	PO
1	Explain the working principle of photovoltaic(PV)? And discourses Their components and applications and advantages in detail	L2	CO2	1,2,3,7
2	Disccurss their measurements and estimation of solar radiation.How do parameters effect the performance of solar energy system?	L3	CO2	1,2,3,4,7
3	Disscurse solar thermal convention system their types and applications in various systems?	L3	CO2	1,2,3,7
4	What are key challenges in implementing solar energy systems are in large scale?	L2	CO2	1,2,3,7
5	Explain the energy storage system in solar energy applications ?discuss various storage methods used in isothermal and PV cells?	L3	CO2	1,2,3,7

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