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Internal Assesment Test - I

Sub:	Operation And Maintenance of Solar Electric Systems							Code:	15EE832
Date:	07/03/2019	Duration:	90 mins	Max Marks:	50	Sem:	8	Branch:	EEE(A/B)

Answer Any FIVE FULL Questions

		Marks	OBE CO	OBE RBT
1 a	Explain the effect of the Earth's atmosphere on solar radiation with neat diagram.	[6]	CO1	L2
1 b.	What is Peak sun hours (PSH)? Explain in brief about them.	[4]	CO1	L1
2	Differentiate between PV Solar cell, solar Module and PV Solar array with a neat diagram.	[10]	CO2	L2
3	Explain in brief about (i) Mono-crystalline, (ii) Poly-crystalline and (iii) Amorphous silicon used in PV Cells.	[10]	CO2	L1
4	With a neat block diagram explain Grid interactive inverters and Battery inverters.	[5]	CO3	L2

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5.	Explain the Emerging technologies for the development of PV Solar Cell.	[10]	CO2	L2
6a	Draw and explain the I-V and power curve Characteristics of PV cells.	[5]	CO2	L2
6b.	What are the various standards and precautions required to purchase solar modules for house hold requirements.	[5]	CO2	L2
7	Evaluate the Photovoltaic array performance for (i) Temperature, (ii) Irradiance and (iii) Shading conditions	[10]	CO2	L2

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