Sanjay Ghodawat University, Kolhapur

2020-21

Established as State Private University under Govt. of Maharashtra. Act No XL, 2017

EXM/P/09/00

Year and Program: 2020-21 TY B.Sc.	**School of Science**	**Department: Physics**
Course Code: PHS 316	**Course Title: Elective SEC II (Renewable Energy and Energy Harvesting)**	**Semester : VI**
Day and Date:	**End Semester Examination**	**Time : 2 Hrs.** **Max Marks : 50**

Model Answer (Marking Scheme)

Q.1		**Answer/Solve the following (any two)**	**Marks**
	a)	Explanation of Solar pond	2
		Merits of Solar pond	1
		Demerits of Solar pond	1
		Explanation of Solar water heater	2
		Merits of Solar water heater	1
		Demerits of Solar water heater	1
	b)	Wind Energy and its Importance	2
		Conversion by Wind mill (Diagram)	2
		Principle	2
		Working	2
	c)	Comparison of Wind and Solar Energy. (Each bit carry 0.5 in individual type)	4
		Limitations of Wind Energy (Each bit carry 0.5)	2
		Limitations of Wind Energy (Each bit carry 0.5)	2
Q.2		**Answer/Solve the following (any two)**	
	a)	Explanation of Piezoelectric Effect	2
		Working for electricity generation	4
		Examples of material (Each bit carry 0.5 marks)	2
	b)	Explanation of Geothermal Energy.	1
		Principle	2
		Diagram	2
		Working	3
	c)	Explanation of Hydropower.	1
		Explanation of Dam.	2
		Principle	1
		Working	2

		Environmental impact (Each bit carry 0.5 marks)	2
Q.3		**Answer/Solve the following (any two)**	
	a)	Explanation of renewable energy Explanation of non renewable energy Difference (Each bit carry 1 marks) Examples of both types	2 2 4 1
	b)	Comparison of Geothermal and Hydropower Energy. (Each bit carry 0.5 in individual type) Limitations of Geothermal Energy (Each bit carry 0.5) Limitations of Hydropower Energy (Each bit carry 0.5)	4 2.5 2.5
	c)	Explanation of energy generated by Wind mill Neat labeled diagram of wind mill. Explanation of 3 Blade wind mill.	3 3 3

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