M.Sc.(Physics) (NEP Pattern) Semester-I

NEP-236-3 / 01MSCPH4.3 - (DSE-3) Paper-IV : Energy Physics

P. Pages: 1

Time : Three Hours

* 8 0 6 6 *

Max. Marks : 80

GUG/W/23/15139

		Either:	
1.	a)	Explain in details the types of energy sources.	8
	b)	What are the energy source and their availability.	8
		OR	
	e)	What are conventional or non-conventional energy source? Describe briefly.	8
	f)	What are the prospects of renewable energy sources?	8
		Either:	
2.	a)	Describe briefly thermal electric conversion from solar energy.	8
	b)	Explain the principle and working of a single crystal silicon solar cell.	8
		OR	
	e)	Explain the principle and working of polycrystalline silicon solar cell.	8
	f)	Explain in details Cadmium sulphide solar cell.	8
3.		Either:	ø
5.	a) b)	Briefly explain the principle and construction of a solar distillation. Explain the chemical and mechanical application of solar cell.	8 8
	0)	OR	0
	e)	Can solar energy be used for cooling? How?	8
	f)	Explain the terms:	8
		i) Solar pumping ii) Solar furnace	
		Either:	
4.	a)	Explain in brief the types of horizontal axis wind machine.	8
	b)	Discuss advantages and disadvantages of wind energy.	8
		OR	
	e)	Explain the working principle of generating electricity by using wind energy.	8
	f)	Explain the applications of wind energy.	8
5		Answer all the following	
5.		Answer all the following.a) What are the traditional sources of energy?	4
		b) Explain I-V characteristics curve for a solar cell explaining efficiency.	4
		c) Explain solar green house.	ч 4
		d) How does a WECS work?	4
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