[Time: 3 Hours]

Please check whether you have got the right question paper.

[Marks:80]

	N.B	: 1. Question No.1 is Compulsory.	3
		2. Answer any three out of remaining five questions	
		3. Assume any suitable data wherever required but justified the same	25
		4. Illustrate answer with sketches wherever required	25 C
Q.1	Attem	pt any four	
~ ·-	-	How you will illustrate the comparison between base load plant and peak load	05
		plant.	94
	b.	Pertaining to the operation of the various types of nud lear power plants, explain	05
	c.	the role played by the Moderator and Coolant	05
	d.	Illustrate the principle of operation of Gas turbine power plant.	05
	_	Illustrate the Rankine cycle with reference to thermal power plant operation	05
	f.	Illustrate the principle of operation of Fuel cell.	
Q.2	0	Name and explain the essential elements of a hydroelectric power plant	10
Q. 2	a. b.	Illustrate in brief ash handling plant in steam power station	05
	о. С.	What is the significance of Super heater towards enhancement of performance of	05
	C.	thermal power plant?	03
Q.3	a.	Explain BWR type nuclear reactor with neat sketch. Give its advantages and	10
		disadvantages.	
	b.	Illustrate the induced draught fan and forced draught fan in a thermal power plant.	10
Q.4	a.	A power plant has following annual factors:	10
		Load Factor = 0.6	
		Plant Use Factor = 0.45	
		Plant Capacity Factor = 0.4	
	40.2	If Maximum demand is 30MW, find the following:-	
	67.7	i) Annual energy consumed in 365 days in a year	
	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	ii) Reserve capacity of plant	
	3007	iii) No. of ms. per year during which the plant is not working	
	(2) (2) (p)	Draw and illustrate the operation of Diesel power, plant	40
967			10
Q.5	\mathbf{a}	Illustrate horizontal axis and vertical axis wind turbine power plant	10
0000	b.	Describe the operation of Solar pond power plant.	10
Q.6	Write short note on		20
2000	i) Surge Tank		20
	o o o o o o o o o i o	3° (D1A) 70° 13° (2° N-X° 'D1A)	
	iii)		
62.45	iv)	\\\ \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	
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