Paper / Subject Code: 42288 / Energy Audit & Management

1T00837 - B.E.(Electrical Engineering)(SEM-VII)(Choice Base Credit Grading System) (R- 19) ('C'

Scheme) / 42288 - Energy Audit & Management

QP CODE: 10030039 DATE: 26/6/2023.

3 Hours 80 Marks

Instructions

1.	Ouestion	number	1	is	compulsor	V

- 2. Attempt any THREE Questions out of remaining FIVE Questions.
- 3. Use illustrative diagrams wherever required.

Q 1)		Attempt any Four.	3
	a)	Discuss the present energy scenario in the world.	05
	b)	Give examples of energy conservation and energy efficiency.	
	c)	Differentiate between high-grade energy and low-grade energy.	05
	d)	Enlist any five energy audit instruments.	05
	e)	Define Net Present Value (NPV). Write the formula to find NPV.	05
	f)	What do you mean by the term LEED rating of building?	05
Q2)	a)	What do you mean by energy management? Explain the types of energy audit.	10
	b)	Define energy audit. What are the duties and responsibilities of energy auditor?	10
Q3)	a)	Explain Energy Conservation Act- 2001 and its Features.	10
	b)	Explain the Elements of monitoring & targeting.	10
Q4)	a)	Define power factor. What are the benefits of power factor improvement?	10
	b)	List any TEN Energy conservation measures in lighting system.	10
Q5)	a)	Explain any FIVE energy conservation measures in pumping system.	10
750	b)	Discuss general fuel economy measures in Boilers and furnaces.	10
Q6)	a)	Enlist five energy saving measures in a commercial building.	05
	b)	List the steps to evaluate performance of HVAC system.	05
(2) (2)	c)	List the steps to evaluate performance of lighting system.	05
	a) 🗸	Explain ECRC code of buildings	05

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