## C.U. SHAH UNIVERSITY Summer Examination-2019

## Subject Name: Energy Management & Audit

Subject Code: 4TE08EMA1		Code: 4TE08EMA1 Bi	Branch: B. Tech (Electrical)					
	(2) 1 (3) 1		are strictly to be obe	ment is prohibited.				
Q-1		Attempt the following questions:(14)Choose appropriate non-conventional power plant from the following.						
	1)	A) Gas B) Thermal C) C	il D) Solar					
	2)country serves the highest reservation of coal.							
		A) India B) Russia C) C	hina D) USA					
	3)	Chemical energy is in the form of	energy.					
		A) Kinetic B) Potential						
	4)	Electrical energy can be categorised as	energy					
		A) Low grade B) High grade						
	5)	The process of converting liquid into a vapour is known as						
		A) Condensation B) Absorption	C) Evaporation	D) None of the above				
	6)	The type of energy audit depends on						
		A) Function of industry	B) Type o	f industry				
		C) Magnitude of cost reduction required	D) All of t	the above				
	7)	Carbon-dioxide is responsible for 60%	of greenhouse effect.					
		A) True B) False						
	8)	instrument is used to measure various gases.						
		A) Power analyser	B) Fuel effic	iency monitor				
		C) Fyrite	D) Combust	tion analyser				
	9)	1 Pascal= $1N/m^2$						
		A) True B) False						



10)	Coal comes in the category of primary energy source.	
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A) True B) False

- **11**) Write the name of gases released due to burning of coal.
- 12) Which instrument is used to measure the power factor directly?
- **13**) What is the function of Lux meter?
- 14) List any three states where coal deposits are concentrated in india.

## Attempt any four questions from Q-2 to Q-8

Q-2	a)	Attempt all questions Discuss the energy supply for the following resources in India.	
		i) Coal ii) Oil iii) Natural Gas	
	b)	Explain the effect of green house gases on atmosphere.	(7)
Q-3	a)	Attempt all questions Discuss on the immediate term and medium term energy strategies for future	
		energy conservation.	
	b)	Give any seven functions of Bureau of energy efficiency (BEE).	(7)
Q-4	a)	Attempt all questions Define energy audit? Discuss on the need of energy audit.	
	b)	Discuss the method to be followed for preliminary energy audit.	(7)
Q-5	a)	Attempt all questions Write a short note on the below instruments.	
		i) Fyrite ii) Fuel Efficiency Monitor	
	b)	What are pre-audit phase activities for detailed energy audit in any industry?	(7)
Q-6	,	Attempt all questions	(14)
	a)	Explain the following terms for energy performance assessment.	(7)
		i) Data Collection ii) Data Normalization	
	b)	What are the responsibilities and duties of an energy manager ?	(7)
Q-7	a)	Attempt all questions What are the improvements required to be made in motors to achieve the energy	(14) (7)
		efficiency?	
	b)	Write a short note on soft starter? Give the advantages of soft starter.	(7)





Q-8	a)	Attempt all questions Explain the following air conditioning process.			(14) (7)	
		i) Heating	ii) Cooling	iii) Ventilating	iv) Humidifying	
	b)	) Write a short note on maximum demand controller.		(7)		

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