STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI – 86 (For candidates admitted from the academic year 2023 - 2024)

BACHELOR OF VOCATIONAL DEGREE EXAMINATION, APRIL 2024 DEPARTMENT OF SUSTAINABLE ENERGY MANAGEMENT SECOND SEMESTER

COURSE ELECTIVE

PAPER ENERGY MANAGEMENT AND ENERGY AUDIT

SUBJECT CODE : 23VS/VE/EM25 TIME : 3 HOURS **MAX. MARKS: 100**

	SECTION A		
Q. No.	All Questions To Be Answered: $(10 \times 2 = 20)$	CO	KL
1	Why is Energy Management Important?	1	1
2	State any two non-commercial energy sources.	1	1
3	What is natural gas?	1	1
4	What do you understand about energy targeting?	1	1
5	List the advantages of Energy Labeling.	1	1
6	State the primary role of an Energy Manager.	1	1
7	Name the two types of Energy audit.	1	1
8	Define investment cost.	1	1
9	Write any two important features of Energy Conservation	1	1
	Act 2001.		
10	Which Sector consumes more energy in India?	1	1
Q. No.	SECTION B (8x 5=40)	CO	KL
11	Answer any FOUR:		
	(11a) Differentiate between Primary and Secondary Energy.	2	2
	(11b) Infer the elements of Energy monitoring.	2	2
	(11c) How Energy efficiency differs from energy	2	2
	Conservation?		
	(11d) Express the Economic benefits of Energy conservation schemes.	2	2
	(11e) How can one calculate the total energy consumption of a house?	2	2
	(11f) Summarize the advantages of studying load curves.	2	2
12	Answer any FOUR:		
	(12a) Explain in short about the basic need for energy	3	3
	management for an industry.		
	(12b) Analyze in short about the future of natural gas.	3	3
	(12c) Discuss about the variation of energy pricing between	3	3
	the countries.		
	(12d) How does the energy consumption behavior change?	3	3
	(12e) Why one has to study about the load assessment detail	3	3
	before installing a solar production plant?		
	(12f) Discuss the sector wise consumption of energy with	3	3
	respect to INDIA.		

	SECTION C		
Q. No.	Answer any TWO: $(2 \times 10 = 20)$	CO	KL
13	(13a) Explain in detail about the different types of Energies	4	4
	with examples and explain their advantages and		
	disadvantages.		
	(13b) Write in detail about the Energy Management	4	4
	Information System.		
	(13c) What are the Roles of an Energy Manager in an	4	4
	Industry?		
	(13d) Predict the advantages of energy efficiency policies.	4	4
	SECTION D		
Q. No.	Answer any TWO: $(2 \times 10 = 20)$	CO	KL
14	(14a) Write in detail about the Industrial Energy	5	5
	Management System.		
	(14b) Demonstrate with an example for an economic	5	5
	analysis an energy manager used to follow in an		
	industry.		
	(14c) Review in detail about the Energy Conservation Act	5	5
	2001.		
	(14d) Access in detail about the economics of depleted	5	5
	energy sources.		
