

THE KAVERY ENGINEERING COLLEGE
(An Autonomous Institution)

B.E/B.TECH DEGREE END SEMESTER THEORY EXAMINATIONS, NOV /DEC 2024

Fourth Semester

GE3451 - Environmental Sciences and Sustainability

(Common to all Branches)

Regulations - 2021

Duration : 3 Hrs

Maximum : 100 Marks

PART - A (ANSWER ALL QUESTIONS) (Marks 10*2=20)

<i>Q.No</i>	<i>Questions</i>	<i>BLT</i>	<i>CO</i>	<i>Marks</i>
1.	Identify the threats faced by Indian biodiversity.	AP	1	2
2.	Define the term food chain. Give an example.	RE	1	2
3.	Recall the origin of hazardous waste.	RE	2	2
4.	Classify noise pollution with few examples.	AN	2	2
5.	List the growing energy needs.	RE	3	2
6.	Predict the important urban problems related to energy.	CR	3	2
7.	Outline the major causes for climate change.	RE	4	2
8.	Categorize the concept of carbon credit.	AN	4	2
9.	What are the limitations of environment impact assessment?	RE	5	2
10.	Interpret the importance of energy efficiency.	EV	5	2

PART - B (ANSWER ALL QUESTIONS) (Marks 5*13 = 65)

<i>Q.No</i>	<i>Questions</i>	<i>BLT</i>	<i>CO</i>	<i>Marks</i>
11.	a Define ecological succession. Write a note on the types of ecological succession.	UN	1	13
	Or			
	b i Comment on "India as mega diversity nation".	E V	1	7
	ii Summarize the strategies adopted to conserve biodiversity.	UN	1	6
12.	a Outline the effects of air pollution on human and animals. State its preventive methods with examples.	UN	2	13
	Or			
	b i Interpret the causes of solid waste. Write notes on the disposal method of waste.	EV	2	7
	ii Define water pollution. Briefly discuss the sources of water pollution.	RE	2	6

13.	a	With a neat sketch illustrate the generation of tidal energy. Mention its merits.	UN	3	13
Or					
	b i	How is geothermal energy harnessed? Explain with its limitations.	RE	3	7
	ii	What are the sources of energy? Explain with the help of a flow chart.	RE	3	6
14.	a i	Elaborate the concept, need and challenges for sustainability.	CR	4	7
	ii	Discuss the problems associated with climate change.	CR	4	6
Or					
	b	Summarize the environment management in an industry.	UN	4	13
15.	a i	Identify and suggest the methods of impact identification and assessment in detail.	AP	5	7
	ii	Discuss the importance of green building and green materials.	CR	5	6
Or					
	b	Elaborate the method of carbon capture and sequestration.	CR	5	13

*PART – C (Marks 1*15 = 15)*

<i>Q.No</i>		<i>Questions</i>	<i>BLT</i>	<i>CO</i>	<i>Marks</i>
16.	a i	Elaborately classify and discuss the types of biodiversity.	CR	1	8
	ii	Classify and list the major E-waste obtained from industries. How can it be managed and minimized.	AN	2	7
Or					
	b i	Discuss the applications of hydrogen energy.	CR	3	7
	ii	From unsustainable to sustainable development, the need of the hour- Comment.	EV	4	8