

THE KAVERY ENGINEERING COLLEGE*(An Autonomous Institution)***B.E/B.TECH DEGREE END SEMESTER THEORY EXAMINATIONS, NOV/DEC 2025***Fifth Semester**Civil Engineering***CE3015- Geo Environmental Engineering***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>BTL</i>	<i>CO</i>	<i>Marks</i>
1.	What are the roles of Geo-environmental engineering?	L1	1	2
2.	What are the causes of soil pollution.	L1	1	2
3.	Write about biodegradation.	L1	2	2
4.	Give a short note on sorption.	L1	2	2
5.	Define solidification.	L1	3	2
6.	Give a short note on Soil Vapor Extraction.	L1	3	2
7.	What is meant by Land Fill?	L1	4	2
8.	Write about Leachate Collection.	L1	4	2
9.	Give a short note on blast furnace slag.	L1	5	2
10.	Summarize the physical properties of Fly Ash.	L2	5	2

PART – B (ANSWER ALL QUESTIONS) (Marks 5*16 = 80)

<i>Q.No</i>	<i>Questions</i>	<i>BLT</i>	<i>CO</i>	<i>Marks</i>
11.	a Briefly explain the Sources, generation and classification of wastes.	L2	1	16
	Or			
	b Briefly explain about chemical and engineering properties – physical and physiochemical mechanisms of soil waste interaction.	L2	1	16
12.	a Explain in detail about Transport of contaminant in subsurface – advection, diffusion, dispersion with neat sketch.	L2	2	16
	Or			
	b Discuss in detail about characterization of contaminated sites.	L2	2	16
13.	a Explain in detail about vertical, horizontal barrier and surface cover.	L2	3	16
	Or			
	b Discuss in detail about soil waste stabilization, solidification of soils.	L2	3	16
14.	a Discuss in detail about site selection for landfills and components of landfills.	L2	4	16
	Or			
	b Explain in detail about Environmental laws and regulations.	L2	4	16

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| 15. | a | Explain in detail about potential reuse and utilization of waste and soil stabilization using fly ash. | L2 | 5 | 16 |
| | | Or | | | |
| | b | Briefly explain the physical, chemical and biological characteristics of different types of waste. | L2 | 5 | 16 |