

THE KAVERY ENGINEERING COLLEGE*(An Autonomous Institution)***UG/PG DEGREE END SEMESTER THEORY EXAMINATIONS, APRIL-MAY 2026*****Second Semester******Environmental Engineering*****PEVT2422 - AIR AND NOISE POLLUTION CONTROL ENGINEERING*****Regulations - 2024******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.	Classify air pollutant into different categories	L2	1	2
2.	What is meant by emission inventory?	L1	1	2
3.	List out few applications of windrose diagram.	L2	2	2
4.	Mention the factors affecting plume behavior.	L2	2	2
5.	Identify any four criteria for selecting proper control equipment	L1	3	2
6.	What is meant by gas particle interaction?	L1	3	2
7.	Suggest the methods for controlling of gaseous pollutants.	L2	4	2
8.	Enumerate the operational parameters pertaining to incinerator for gaseous pollutant control.	L2	4	2
9.	Label the standards for air pollution due to automobiles.	L1	5	2
10.	Give the permissible limit of noise level at day time in residential and industrial zones	L1	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	Apply your knowledge and outline the effect of air pollutants on human beings and animals in detail.	L3	1	16
	Or			
b i	Demonstrate the facets of global warming and ozone layer depletion along with its impacts.	L2	1	8
ii	Summarize the national ambient air quality standards as CPCB.	L2	1	8
12. a i	Distinguish on air pollution climatology and stack sampling analysis.	L2	2	8
ii	Outline the effects of meteorology on air pollution.	L2	2	8
	Or			
b	Explain the various types of stack plume behaviour with respect to stability of atmosphere.	L2	2	16

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| 13. | a | i | Explain the factors affecting the selection of the particulate air control devices. | L2 | 3 | 8 |
| | | ii | Enumerate the particulate matter removal by gravity separator with a neat sketch. | L2 | 3 | 8 |

Or

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| | b | | With the neat sketch explain the working principle of Electrostatic Precipitators. | L2 | 3 | 16 |
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| 14. | a | | Explain working principle, design and performance equations of absorption and adsorption in controlling gaseous contaminants. | L2 | 4 | 16 |
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Or

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| | b | | Discuss the costing of APC equipment with case studies for stationary and mobile sources. | L2 | 4 | 16 |
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| 15. | a | | Analyze which statutory agency monitoring and assessing the vehicular population in the cities and how the vehicular emissions are monitored and regulated by them? What are the various types of emissions from an automobile? How it originates? What are the various sources? | L4 | 5 | 16 |
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Or

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| | b | | Narrate a case study by considering there is an issue due to excessive noise pollution produced by industry in your locality. As a engineer, inspect and analyse the problem and provide a solution for the same | L4 | 5 | 16 |
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