

Name. _____		<b>Printed Pages:01</b>		
Student Admn. No.: _____				
<b>School of Civil Engineering</b> <b>Department of Civil Engineering</b> <b>Backlog Examination, June 2023</b>  <b>[Programme: B.Tech Civil Engg. ] [Semester: VI ] [Batch: ]</b>				
<b>Course Title: Pollution Control and Monitoring</b>		<b>Max Marks: 100</b>		
<b>Course Code: BTCE3026</b>		<b>Time: 3 Hrs.</b>		
<b>Instructions:</b>	1. All questions are compulsory. 2. Assume missing data suitably, if any.			
		K Level	COs	Marks
<b>SECTION-A (15 Marks)</b>		<b>5 Marks each</b>		
<b>1.</b>	Write a note on lapse rate, temperature lapse rate and adiabatic lapse rate.	K1	CO1	5
<b>2.</b>	Assess the role of governmental policies and regulations in controlling water pollution and suggest potential improvements.	K2	CO1	5
<b>3.</b>	Define water pollution and provide three examples of water pollutants.	K3	CO1	5
<b>SECTION-B (40 Marks)</b>		<b>10 Marks each</b>		
<b>4.</b>	Define primary and secondary air pollutants and provide three examples of each.	K2	CO1	10
<b>5.</b>	Explain the causes and consequences of acid rain and its effects on ecosystems, buildings, and human health.	K2	CO1	10
<b>6.</b>	Define eutrophication and explain how excessive nutrient runoff contributes to this form of water pollution.	K3	CO2	10
<b>7.</b>	Explain the mechanisms by which air pollutants are transported and dispersed in the atmosphere. <p style="text-align: center;">OR</p> Explain the impact of air pollution on human health and discuss the specific respiratory and cardiovascular diseases associated with exposure to pollutants.	K3	CO2	10
<b>SECTION-C (45 Marks)</b>		<b>15 Marks each</b>		
<b>8.</b>	Illustrate three common hazardous waste materials and explain the specific risks they pose to human health and the environment.	K3	CO3	15
<b>9.</b>	Assess the effectiveness of current waste management policies and regulations in promoting sustainable waste practices, and suggest potential improvements or additional measures.	K3	CO3	15
<b>10</b>	Compare and contrast the advantages and disadvantages of different noise control methods, such as sound insulation, noise barriers, and use of low-noise technology in transportation. <p style="text-align: center;">OR</p> Analyze a noise control plan for a specific urban area or industrial site, considering measures such as sound barriers, noise reduction technologies, and zoning regulations.	K4	CO4	15