

Reg. No.:



Name:

University of Kerala

W8010

First Semester FYUGP Degree Examination, December 2025

Multi-Disciplinary course

CHEMISTRY

UK1MDCCHE100 - FUNDAMENTAL ASPECTS OF ENVIRONMENTAL CHEMISTRY

Academic Level: 100-199

2025-Admission

Time: 1 Hour 30 Minutes(90 Mins.)

Max. Marks: 42

**Part A. 6 Marks.Time:6 Minutes.(Cognitive Level:Remember(RE)/Understand(UN)) Objective Type. 1 Mark
Each.Answer all questions**

Qn No.	Question	CL	CO
1	Name two heavy metals in polluted water that are harmful to life.	RE	3
2	Mention the gas is mainly responsible for global warming.	RE	2
3	Give any two secondary pollutants.	UN	2
4	The amount of oxygen required by microorganisms to decompose organic matter in water is called _____.	UN	3
5	Name one example for manmade disaster.	UN	4
6	Give an example for primary consumer	UN	1

Part B.8 Marks.Time:24 Minutes.(Cognitive Level:Understand(UN)/Apply(AP))Short Answer. 2 marks each.Answer all questions

Qn No.	Question	CL	CO
7	Suggest any two methods for the treatment of waste water.	UN	3
8	Define succession and explain the different types of ecological succession.	UN	1
9	Explain practical measures for disaster mitigation and predict how they can minimize damage to life, property and the environment.	AP	4
10	The Taj Mahal has undergone recent renovation. What factors could have contributed to its tarnishing? Explain.	AP	2

Part C. 28 Marks.Time:60 Minutes (Cognitive Level:Apply(AP)/Analyse(AN)/Evaluate(EV)/Create(CR)) Long Answer.7 marks each.Answer all 4 Questions choosing among options * within each question

Qn No.	Question	CL	CO
11	A) Apply the concept of biotic and abiotic components to explain how they interact in an ecosystem. Support your answer with examples. OR B) Take a pond as an example. Explain how producers, consumers, and decomposers work together in the ecosystem. Give a food chain.	AP	1, 1
12	A) Examine the effects of air pollution on climate, living organisms, and ecosystems. Analyze the role of major air pollutants in causing acid rain and greenhouse effect. OR B) Explain ozone layer depletion and analyse how chlorofluorocarbons and oxides of nitrogen contribute to ozone layer depletion.	AN	2, 2
13	A) Predict the possible environmental and health consequences if water pollution is left uncontrolled. OR B) Assess the role of recycling in reducing the burden on landfills and incineration plants. Can recycling alone be sufficient for sustainable solid waste management? Provide reasoning with examples?	EV	3, 3
14	A) Create an illustration on various man-made and natural disasters; a special focus on Chernobyl and Bhopal tragedy. OR B) Develop a model with four phases of disaster management for the recent Kerala floods.	CR	4, 4