



G H Raison College of Engineering and Management, Pune

(An Empowered Autonomous Institute affiliated to Savitribai Phule, Pune University, NAAC Accredited "A+" Grad.

First Year B. Tech.

(TERM-I)

CAE I Winter 2025 (2023 Pattern)

Environmental Chemistry (23UBSL1102)

(Time: - 01 Hour)

(Max. Marks:20)

Instructions to the students:

- i) All questions are compulsory.
- ii) Neat diagrams must be drawn wherever necessary.
- iii) Figures to the right indicate full marks
- iv) Use of scientific calculator is allowed

Q.No	Question	Marks	CO	BI
Q1.(a)	Enumerate and explain the different steps used for purifying water for domestic purposes.	[5]	CO1	L2
OR				
(b)	Explain hardness of water. 50 ml of water sample requires 17 ml of 0.01M EDTA in titration. 50 ml of boiled & filtered water sample requires 12.5 ml of the same EDTA. Calculate the Alkaline, Non-alkaline and Total hardness of the water sample.	[5]	CO1	L3
(c)	Describe the processes of Priming and Foaming process with the prevention.	[3]	CO1	L2
OR				
(d)	Describe the principal of Reverse Osmosis process. Give any 2 advantages of this method.	[3]	CO1	L2
Q 2.(a)	Discuss the management of solid waste from its generation to disposal.	[5]	CO2	L2
OR				
(b)	Explain e-waste. Describe ill effect of poor management of e waste on human and environment separately.	[5]	CO2	L2
(c)	Explain two ill effect of poor management of Biomedical waste. Discuss any one method of Biomedical waste management.	[3]	CO2	L2
OR				
(d)	Explain how the 3R's principle helps in waste reduction — illustrate with a diagram.	[3]	CO2	L2
Q 3.(a)	Explain the various components of Batteries.	[4]	CO3	L2
OR				
(b)	Describe the construction and working of Dry cell(Laclanche Battery) along with diagram reactions involved.	[4]	CO3	L2