

Second Semester Internal Examination, February 2026
Minor Course in Chemistry
CHE2MN102- Liquid State, Gaseous State, and Electrochemistry

Time: 1 Hr

Max Marks: 35

Name:	Marks Scored	Section A		Total Marks
Class:		Section B		
		Section C		

Section A

(Each question carries 3 marks, Max marks for section – 7)

1. What are collision number and collision diameter?
2. What is cell constant?
3. What are strong and weak electrolytes?

Section B

(Each question carries 6 marks, Max marks for section – 18)

4. Discuss Galvanic cells.
5. Discuss the variation of molar conductance with dilution.
6. a) Discuss how real gases deviate from Boyle's law?
b) What is coefficient of viscosity? Explain with equation.
7. a) Write and explain the terms of Virial equation of state?
b) Using van der Waal's equation, calculate the pressure exerted by 2 moles of NH_3 confined in a 5L flask at 300K? $a=4.17 \text{ atm L}^2 \text{ mol}^{-2}$; $b=0.037 \text{ mol}^{-1}$.

Section C

(Answer any one question, each question carries 10 marks)

8. Explain the factors which effect the solubility of gases in liquids. State and explain Henry's law with application.
9. What are Colligative properties? Explain Relative lowering of vapour pressure and Elevation in boiling point in detail.