

(For those admitted in June 2023 and later)

SEM	CATEGORY	COMPONENT	COURSE CODE	COURSE TITLE
III	PART- III	CORE - 3	U23CH303	GENERAL CHEMISTRY- III

Maximum: 75 Marks

[illegible]

Course Outcome	Bloom's K-level	Q. No.	SECTION – B (5 X 5 = 25 Marks) Answer ALL Questions choosing either (a) or (b)
CO1	K3	11a.	Derive an expression for mean free path. (OR)
CO1	K3	11b.	Calculate the RMS & Average Velocity of Argon at 473K.
CO2	K3	12a.	Explain isotropy & anisotropy. (OR)
CO2	K3	12b.	Discuss the crystal structure of ZnS.
CO3	K4	13a.	Explain the Fajan–Soddy group displacement law. (OR)
CO3	K4	13b.	Difference between nuclear fission and nuclear fusion?
CO4	K4	14a.	Classify the halogen derivatives. (OR)
CO4	K4	14b.	Illustrate the preparation and uses of benzyl chloride.
CO5	K5	15a.	Discuss the mechanism of Claisen rearrangement. (OR)
CO5	K5	15b.	Explain why aldehydes without α -hydrogen undergo Cannizzaro reaction.

Course Outcome	Bloom's K-level	Q. No.	SECTION – C (5 X 8 = 40 Marks) Answer ALL Questions choosing either (a) or (b)
CO1	K3	16a.	List the postulates of kinetic theory of gases. (OR)
CO1	K3	16b.	Derive an expression for the Boyle temperature of a vander Waals gas.
CO2	K4	17a.	Classify the crystal system. (OR)
CO2	K4	17b.	Analyse the defects in solids.
CO3	K4	18a.	Explain the following term with suitable examples. i) Isotopes ii) Isobars iii) Isotones iv) Isomers (OR)
CO3	K4	18b.	Determine the age of rock using carbon dating method.
CO4	K5	19a.	Compare S_N^1 & S_N^2 reactions. (OR)
CO4	K5	19b.	How will you distinguish between primary, secondary & tertiary alcohols?
CO5	K5	20a.	Illustrate the preparation, properties and uses of Picric acid. (OR)
CO5	K5	20b.	Discuss the acidic character of phenols.