

MODEL PAPERS

B.Sc SEMESTER IV, SUBJECT-CHEMISTRY

PAPER-GENERIC ELECTIVE-4

SHORT QUESTIONS

- 1- What is average and root mean square velocity?
- 2- Define order and molecularity of reactions with examples.
- 3- Discuss diagonal relationship of Li with Mg.
- 4-Discuss important properties of PCl_5 .
- 5-Discuss different hydrides and their classification
- 6-Differentiate Boyle temperature and critical temperature.

LONG QUESTIONS

- 7- Write postulates of Kinetic Theory of Gases and derive kinetic gas equation.
- 8-What is surface tension and how it can be determined using stalagmometer?
- 9-What is rate law? Derive rate constant for 1st order reaction.
- 10-Discuss structure, preparation and properties of Diborane. (B_2H_6).
- 11-Discuss structure, bonding and important properties of Hydrazine. (N_2H_4)
- 12- (a) Discuss anomalous behavior of lithium.
(b) Give a note of main allotropic forms of sulphur.
- 13-Discuss the periodicity in s and p block elements with respect to electronic configuration, atomic and ionic size, ionization enthalpy,
- 14-What is activation energy? How it is calculated from Arrhenius equation.