



A Charutar Vidya Mandal's Institution
V.P. & R.P.T.P. SCIENCE COLLEGE
 (AUTONOMOUS) (Grant-in-Aid)
 Affiliated to Sardar Patel University
 VALLABH VIDYANAGAR-388120



Bachelor of Science (Semester 1) Internal Examination - 2024
US01MACHE01 : General Chemistry-I

Date: 3rd October 2024, Thursday

Time: 11:00 AM to 12:30 PM

Total marks :30

Note: Figures to the right indicate marks of the question.

- Q-1** Write the most appropriate answer from the following multiple-choice questions. [06]
- General formula of alkene is _____.
 (a) C_nH_{2n+2} (b) C_nH_{2n}
 (c) C_nH_{2n-2} (d) C_nH_{2n-6}
 - Which of the following alkanes will have the highest boiling point?
 (a) n-Pentane (b) Iso pentane
 (c) n-Butane (d) Neo pentane
 - _____ element has lowest ionization energy in the periodic table.
 (a) Li (b) He
 (c) Cs (d) H
 - BF_3 act as a acid according to the concept of _____.
 (a) Lowry-Bronsted (b) Arrhenius
 (c) Lewis (d) All of the above
 - How many series of transition element are there in periodic table?
 (A) 3 (B) 2
 (C) 5 (D) 4
 - The precision of the result is also known as.....
 (a) Accuracy (b) Error
 (c) Reproducibility of result (d) All of these
- Q-2** Discuss the defects of Mendeleev's periodic table. [06]
 OR
- Q-2** Discuss the factors affecting the magnitude of ionization energy. [06]
- Q-3** Explain acid and base according to Arrhenius, Lowry-Bronsted and Lewis concept. [06]
 OR
- Q-3** Explain with examples solubility and solubility product and Calculate the solubility of Ag_2CrO_4 in water. The solubility product of Ag_2CrO_4 is 1.9×10^{-12} M. [06]
- Q-4** Give mechanism for free radical halogenation of alkane. [06]
 OR
- Q-4** Give an account of E1 reaction mechanism with evidences. [06]
- Q-5** Give classification of chemical analysis and write any four application of chemical analysis. [06]
 OR
- Q-5** What is error? Give the classification of error. Discuss the any three methods for minimization of systematic error. [06]

