

# **S.P.U (PG) COLLEGE, FALNA**

( Affiliated to Jai Narayan Vyas University, Jodhpur)

## **Assignment For Semester-I 2023-24**

Programme – B.Sc Part-I

Subject – Chemistry

Course Name And Code- Fundamental Of Chemistry-I (CH-101)

**Max. Marks:30**

Note: The question Paper is divided into Two section A and B. Write Answers as per given instructions.

### **Section A**

(Very Short Answer Type Questions)

Note: Answer all questions. Give answer in One word or One Sentence or maximum up to 30 Words. Each question carries 2 marks.(5x2=10)

- Q 1 Define the Lattice enthalpy? Write the formula for Lattice Enthalpy.
- Q 2 What is Hydrogen Bond ? How many types of Hydrogen Bond ? Give Name.
- Q 3 Define Nucleophile and Electrophile.
- Q 4 Write the Wurtz reaction.
- Q 5 Define Critical Temperation.

### **Section B**

(Long Answer Type Questions)

Note: Answer any two questions. Give answer in maximum up to 500 Words. Each question carries 10 marks. (2x10=20)

- Q 1 (A) Explain the structure of following molecules by hybridization.  
(a)  $\text{PCl}_5$                       (b)  $\text{ClF}_3$                       (c)  $\text{NH}_3$   
Or  
(B) (i)  $\text{Be}_2$  is not Exist. Explain by MO Diagram.  
(ii)  $\text{O}_2$  is Paramagnetic. Explain by MO Diagram.
- Q 2 (A) Explain the Hydrohalogenation of alkene with mechanism.  
Or  
(B) Explain the Conformational isomers of n-butane with energy profile diagram.