

CONTINUOUS INTERNAL ASSESSMENT – I (EVEN SEM.)
SUBJECT : CHEMISTRY I

Class : II B. Sc., Physics

Date : 5. 09. 2022-FN

Max.Marks : 50

Sub. Code: SD3AB

PART A (5 × 2 = 10 Marks)
Answer any FIVE questions

1. Write notes on Isobars and Nuclear Isomers with examples.
2. State Binding Energy. Give its formula.
3. Sketch group displacement law. Give example.
4. What are silicones?
5. Define hardness. Give its types.
6. Formulate the preparation of urea.
7. Represent nucleophile with a suitable example.

PART B – (2 × 5 = 10 Marks)
Answer any TWO questions

8. Discuss mass defect. Show that $1\text{amu} = 931 \text{ Mev}$.
9. Illustrate the reverse osmosis process with suitable block diagram.
10. Predict the hybridization in methane and ethane

PART C – (3 × 10 = 30 Marks)
Answer ALL questions

11. a) Outline the types of radioactive series with an example.
b) Discuss in detail the mechanism and characteristics of nuclear fission.
12. Categorize the composition and uses of water gas, LPG, Gobar gas, CNG, producer gas
13. List out the preparation and uses of PVC, Teflon, Bakelite, nylon 6 and polyethylene.