

Roll.No.

22UCHCT3006

SHRIMATHI DEVKUNVAR NANALAL BHATT VAISHNAV COLLEGE FOR WOMEN
(AUTONOMOUS)

(Affiliated to the University of Madras and Re-accredited with 'A+' Grade by NAAC)

Chromepet, Chennai - 600 044.

B.Sc.Chemistry - END SEMESTER EXAMINATIONS - NOVEMBER 2025

SEMESTER - III

22UCHCT3006 - Chemistry of s and p Block Elements

Total Duration : 2 Hrs.30 Mins.

Total Marks : 60

Section B

Answer any **SIX** questions ($6 \times 5 = 30$ Marks)

1. Arrange the alkali metal hydroxides to their basicity and justify the order.
2. Explain the reaction between calcium carbide and water.
3. List any two uses of borax.
4. How silicates are classified?
5. Draw the electron dot formula for the pyrophosphoric acid.
6. How oleum is prepared?
7. What is bleaching powder? How is it prepared?
8. Illustrate pseudo halogen with example.

Section C

Answer any **THREE** questions ($3 \times 10 = 30$ Marks)

9. i) Discuss the s-block metal complexes with crown ether.
ii) Write note on "Portland cement".
10. Explain preparation, properties, structure and uses of diborane.
11. i) Illustrate the preparation of the following compounds with suitable equations
a) Nitrous oxide b) Dinitrogen tetroxide c) Nitrogenpentoxide
ii) Write the uses of NPK fertiliser.
12. Describe the preparation, properties, structure and uses of hydrogen peroxide.
13. i) Discuss the exceptional properties of fluorine.
ii) What are interhalogen compounds? Explain the preparation, properties and structure of BrF_3 and ClF_5 .
