

D 30493

(Pages : 2)

Name.....

Reg. No.....

**FIFTH SEMESTER (CBCSS—UG) DEGREE EXAMINATION
NOVEMBER 2022**

Chemistry

CHE 5B 06—INORGANIC CHEMISTRY—III

(2019 Admission onwards)

Time : Two Hours

Maximum : 60 Marks

Section A (Short Answers)*Answer questions up to 20 marks.**Each question carries 2 marks.*

1. How solubility product principle is effected in the separation of II group and IV group cations ?
2. Mention two advantages of microanalysis.
3. Discuss the structure of XeF_6 molecule.
4. What are interhalogen compounds ?
5. Cyanogen is considered as pseudohalogen. Why ?
6. Explain autoionisation of liquid SO_2 and HF with equations.
7. What are silicates ?
8. What are protic and aprotic solvents ?
9. What are phosphazenes ?
10. Explain the relation between acid rain and pollution.
11. Triple R is important in managing waste. Justify.
12. What is greenhouse effect ?

(Ceiling of marks : 20)

Section B (Paragraph)*Answer questions up to 30 marks.**Each question carries 5 marks.*

13. What are the optimum conditions for the formation of precipitation process ?
14. Write note on structure of xenon fluorides and their reaction with water.

Turn over

- 38
15. Explain the structure and hybridization of ClF_3 and ICl_3 .
 16. Give an account of preparation properties and structure of S_4N_4 .
 17. Discuss on hydrometallurgy.
 18. What are the different sources of noise and radioactive pollution?
 19. Write a note on energy production from waste.

(Ceiling of marks : 3)

Section C (Essay)

Answer any **one** questions.

Each question carries 10 marks.

20. Give the name and composition of two ores of Ti. How is titanium extracted from its ore?
21. Explain the causes and control measures of air pollution.

(1 × 10 = 10 marks)