Roll	No.	:	

Total No. of Questions: 11] [Total No. of Printed Pages: 3

CHEMSEM-101

M.Sc. (Ist Semester) Examination Dec., 2022 CHEMISTRY

Paper - CC-1

(Inorganic Chemistry-I)

Time: 3 Hours [Maximum Marks: 40

Section-A (Marks : $1 \times 10 = 10$)

Note: Answer all ten questions (Answer limit 50 words). Each question carries 1 mark.

Section–B (Marks : $3 \times 5 = 15$)

Note: Answer all five questions. Each question has internal choice (Answer limit200 words). Each question carries 3 marks.

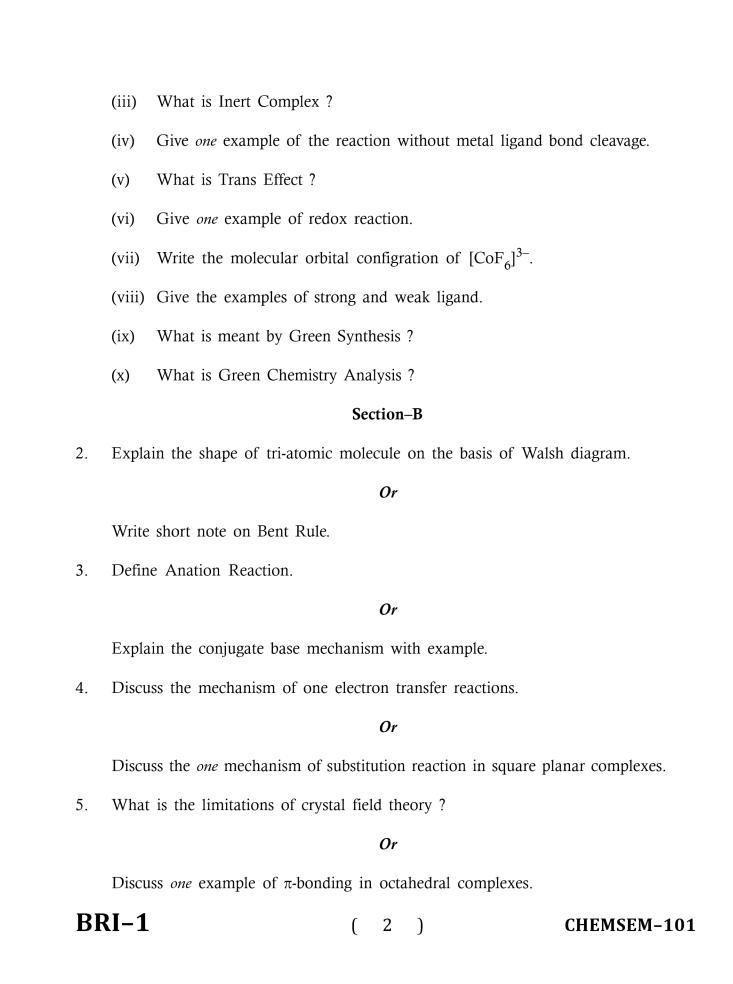
Section–C (Marks: $5 \times 3 = 15$)

Note: Answer any *three* questions out of five (Answer limit **500** words). Each question carries **5** marks.

Section-A

- 1. (i) What is dp-pp bonds?
 - (ii) Give one example of reaction of covalently bonded molecules.

BRI-1 (1) CHEMSEM-101 P.T.O.



6. Write a note on chemical and biochemical weapons.

Or

Write short note on safety rules and safe use of different material.

Section-C

- 7. Explain VSEPR theory with suitable examples.
- 8. What is Acid Hydrolysis? Discuss the factors affecting acid hydrolysis.
- 9. Discuss the detail about Marcus Hush Theory.
- 10. Define Molecular Orbital Theory. Explain the MOT energy level diagram of $[\text{Co(NH}_3)_6]^{3+}$ complex.
- 11. Discuss the twelve principles of Green Chemistry.