



বিদ্যাসাগর বিশ্ববিদ্যালয়  
VIDYASAGAR UNIVERSITY

Question Paper

**B.Sc. Honours Examinations 2022**

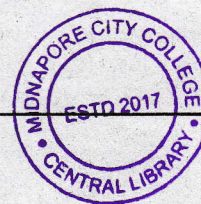
(Under CBCS Pattern)

**Semester - IV**

**Subject: CHEMISTRY**

**Paper : C 9-P**

**Inorganic Chemistry - III**



**Full Marks : 20**

**Time : 3 Hours**

*Candidates are required to give their answer in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

**Group - A**

Answer any *one* question :

5×1=5

- (a) What are the criteria of a good metal indicator ? Give two examples of metal indicator.  
(b) Why is  $P^H$  of the solution kept constant within a certain limit during titration with EDTA? (2+1)+2
- Describe the methodology for the determination of permanent hardness of water. 5
- Write down the principle for the complexometric estimation of  $Zn^{2+}$  in a salt. 5

**Group - B**

Answer any *one* question :

10×1=10

1. Discuss the principle and methodology involved in the estimation of  $\text{Ca}^{2+}$  in a  $\text{Ca}^{2+}$  and  $\text{Mg}^{2+}$  mixture. 10
2. Write down the process of the preparation of potassium tri(oxalate) ferrate(III). 10

**Group - C**

1. Laboratory Notebook 2
2. Viva-voce 3

