



SHREE H. N. SHUKLA GROUP OF COLLEGES

(AFFILIATED TO SAURASHTRA UNIVERSITY & GTU)

2-Vaishali nagar,
Near amrapali railway crossing,
Raiya road, Rajkot- 360 001.
Ph.No.-(0281) 2440478, 2472590

3-Vaishali nagar, Near
amrapali railway crossing,
Raiya road, Rajkot- 360 001.
Ph.No.-(0281) 2224362

Behind marketing yard,
Near Lalpari lake, Between
Amargadh-Bhichri,
Rajkot- 360 002.
Ph.No. 90990 63150

M.Sc. Chemistry Semester II (CBSE)

C-201 Inorganic chemistry

Question bank

Prepared by,
Jyoti Gohel



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Q.1 Give the answer of following questions (1 marks each)

1. What is a strong basic anion-exchange resin?
2. Discuss the role of Tannin in analysis.
3. Discuss the work of Hemoglobin in our blood.
4. Discuss the physiology of blood.
5. What is the importance of Iron in our body?
6. Give the two suitable examples of Heteroleptic σ -bonded organo metallic compounds .
7. Discuss the toxicity of lead.
8. Explain the use of trace elements in our body.
9. Discuss the toxicity of Arsenic.
10. Discuss the structure of Hemoglobin.
11. Discuss isotropic 'g' value in ESR.
12. Draw the structure of Ni-DMG complex.
13. Define heme and globin.
14. Draw the structure of porphyrine.
15. Define physiology of blood.
16. Draw the structure of Cupferon.
17. Draw the ion-exchange flow scheme.
18. Draw the structure of Pyrogallol.
19. Define the term electrolyte.
20. Give the examples of strong and weak cation- exchange resins.



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Q 2. Give the answer of any two following questions (7 marks each)

1. Give the classification of π -bond OMC of transition metals.
2. Write application of ion-exchange chromatography.
3. Discuss Hyperfine splitting in ESR.
4. Discuss the role of Iodine in activity of thyroid hormone.
5. Discuss the experimental technique of Ion-exchange chromatography for the separation of Co and Ni.
6. Discuss the ESR spectrum of H₂.
7. Discuss the experimental technique of Ion-exchange chromatography for the separation of Cu and Zn.
8. Discuss the structure of hemoglobin and explain its function and define metalloporphyrines.
9. Write the short notes on Dithiozone and Benzidine.
10. How many peaks do you expect in ESR spectrum of CH₃, discuss it in detail.
11. Discuss the transport and storage of protein.
12. Give the classification and role of metal ions according to their action in biological system.
13. Describe toxic elements, toxicity and deficiency with suitable example.
14. Discuss the role of bulk metal in biological process.
15. Write note on instrumentation and the work of different parts of ESR instruments.