



SIDDHIKSHA
EDUCATION CARE
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SIDDHIKSHA EDUCATION CARE 2024-25

CHEMISTRY – 12

1. Write the differences between physisorption and chemisorption.
2. Write short note on the following : i) Gabriel phthalamide reaction ii) Carbylamine reaction iii) Diazotisation iv) Coupling reaction v) Sand Meyer reaction
3. Derive Nernst equation.
4. For the complex ion of $[\text{Co}(\text{NH}_3)_6]^{2+}$ i) State the hybridization and magnetic nature of the complex. ii) What is the oxidation number of cobalt in the complex. iii) Give IUPAC name of the complex.
5. Explain the structure of fructose.
6. Write short note on i) Carbylamine reaction ii) Gabriel phthalimide synthesis
7. 1) Explain Brownian Movement 2) Explain Adsorption theory.
8. 1) What are hydrate isomers. 2) Write short notes on werner's theory.
9. For the complex $[\text{Fe}(\text{en})_2\text{Cl}_2]\text{Cl}_2$. Identify a) Oxidation number of Fe b) Hybridisation c) Shape d) magnetic behaviour e) IUPAC name