2020

B.Sc

4th Semester Examination

Sub: Chemistry (General)

Paper: DSC-1D (T+P)

F.M. 20(T) + 10(P) **Time: 2 Hours**

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1. Answer any one question

   a. What are the inner and outer orbital complexes? Give examples.

   b. Calculate the Crystal field stabilization energy of (CSFE) of $[COF_6]^{3-}$ and

   $[Co\ (NH3)_6]^{3+}$

   c. State the postulates of kinetic theory of gases. Define Boyle temperature.

   d. Define the first order reaction. Derive the expression of rate constant of first order reaction.

   e. Define the term viscosity. Discuss the effect of temperature on viscosity co-efficient.

2. Give procedure only.(Answer any one question)

   a. Determine the surface tension of a liquid using stalagmometer

   b. Determine the viscosity coefficient of a liquid using Ostwald's viscometer

   c. Estimation of nickel by gravimetrically.

N.B.: Send the answer to the e-mail address-

dsc1dgeneral@gmail.com