

University of Kalyani
S.R.Fatepuria College, Beldanga
5th semester practical examination 2022
Subject:- Chemistry (DSE)
[BLENDED MODE]

F.M-20.

Time-2 hours

Analytical and environment chemistry

1. Answer any two(2×5=10)
- a) How do you determine the solubility of KHTa? Mention principle and working formula.
 - b) Give the principle for determination of rate constant of a 1st order reaction.
 - c) Give the structure of EDTA. How do you determine 'hardness of water' using EDTA solution?

Analytical and industrial chemistry

2. Answer any two(2×5=10)
- a) KMnO_4 is a primary standard or not? Estimate the available oxygen in Pyrolusite.
 - b) In which pH range does methyl orange and phenolphthalein indicator work? Give the principle and required chemicals for the estimation of NaHCO_3 and Na_2CO_3 mixture using standard $(\frac{N}{20})$ HCl solution.
 - c) How do you estimate HCl and CH_3COOH mixture using standard $(\frac{N}{20})$ NaOH solution? Give procedure and required chemicals.
-