University of Kalyani S.R. Fatepuria College,Beldanga

U.G 5th semester examination 2021

[Programme course]

CHEMISTRY PRACTICAL BLENDED MODE

F.M-20 Time-3hrs

1. Answer any five (5X2=10)

- a) What do mean by total hardness of water?
- b) What is the working formula of determining PH of an unknown solution?
- c) In a strong acid and weak acid mixture when titrated with strong base which indicator has been used and why?
- d) Is KMnO₄ a primary standard or secondary standard solution? Calculate the equivalent weight of KMnO₄.
- e) Give the principle of estimation of strength of H₂O₂ sample?
- f) What is the rate constant of an 1st order reaction?

2. Answer any two (2X5=10)

- a) Give the working principle of determines the solubility product of potassium hydrogen tartrate. What is the main element in pyrolusite? [4+1]
- b) Is P_H maintain is necessary in estimation of hardness of water? What is the importance of Eriochrome Black T in this reaction? Give structure of EDTA. [1+2+2]
- c) Give the procedure and working formula of available oxygen in pyrolusite.