

**P.G. Semester-II Examination, 2023****CHEMISTRY****Course ID : 21465      Course Code : CHEM205C(PR)****Course Title : Physical Chemistry (Practical)**

Time : 6 Hours

Full Marks : 40

*The figures in the right-hand margin indicate marks.**Candidates are required to give their answers in their own words as far as practicable.*

1. Perform any **one** of the following experiments: 30
    - a) Find out the rate constant of the reaction between the given compound labelled as 'A' and water.
    - b) Determine the acid dissociation constant of the supplied acid labelled as 'B' and also verify the Ostwald dilution law with the experimental data.
    - c) Evaluate experimentally the reaction rate constant for the reaction between the supplied compounds 'C' and 'D'.
    - d) Determine the composition of the given mixture labelled as 'E' by conductometry.
  2. Laboratory Notebook 5
  3. Viva Voce 5
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