

# Mahishadal Raj College

M.Sc. Semester -II Examination 2021

(under CBCS pattern)

Subject: Chemistry

Paper: Physical Chemistry Practical

Paper code: CEM-296

Full marks: 50

Time: 2h

Answer any **one question**

1. Write the theory on the conductometric determination of concentrations of  $KCl$ ,  $HCl$  and  $NH_4Cl$  in a mixture and also write the objective of the experiment.
2. Write the theory on the determination of CMC of a surfactant in aqueous solution by conductometric method and also write the objective of the experiment.
3. Write the theory on the determination of the standard potential of  $Fe(CN)_6^{3-}/Fe(CN)_6^{4-}$  electrode by potentiometer and also write the objective of the experiment.
4. Write the theory on the determine the dissociation constants ( $K_1, K_2, K_3$ ) of  $H_3PO_4$  by  $pH$  meter and also write the objective of the experiment.