

2023

Chemistry (H)

B.Sc. First Semester End Examination - 2023

PAPER - MM101P

Full Marks : 20

Time : 2 hours

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

Carry out the experiment that will be allotted to you by lottery

15

a) Table : 2+2+2

b) Results : 8

c) Calculation : 1

3. Laboratory Note Book 2

4. Viva-Voce 3

(Turn Over)

(2)

Procedure of Q No. 1

1. **Preparation of 100 ML (N/10) $K_2Cr_2O_7$ solution :** weight of 0.49g $K_2Cr_2O_7$ is to be taken and dissolved in distilled water and made up to the mark in a 100 ml volumetric flask.
2. **Estimation of Fe^{2+} ion :**

Pipette out 25 ml of the supplied Mohr's salt solution into a 250 ml conical flask, add 125 ml of 2N H_2SO_4 and 5ml Syrupy H_3PO_4 acid and add 4-5 drops BaDS indicator and titrate the solution by standard N/10 $K_2Cr_2O_7$ solution running from a burette drop by drop until the colour of the solution just changes from green to violet. Note the titre value to calculate the amount (gm/letre) of Fe^{2+} ion present in the supplied sample.