

2023  
Chemistry (H)  
CBCS  
B.Sc. Third Semester End Examination - 2023  
PAPER - CC5P

Full Marks : 20

Time : 4 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.*

1. Perform any one experiment from the following experiments through lottery. 1×15=15

Experiment 1 : Study of viscosity of unknown liquid (glycerol, sugar) with respect to water.

Experiment 2 : Determination of partition coefficient for the distribution of I<sub>2</sub> between water and CCl<sub>4</sub>.

Experiment 3 : Determination of  $K_{eq}$  for  $KI + I_2 = KI_3$ , using partition coefficient between water and CCl<sub>4</sub>.

(Turn Over)

( 2 )

**Experiment 4 : Conductometric titration of an acid (strong, weak/ monobasic, dibasic).**

**Experiment 5 : Study of saponification reaction conductometrically.**

**Experiment 6 : Verification of Ostwald's dilution law and determination of  $K_a$  of weak acid.**

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| 2. Laboratory Note Book | 3 |
| 3. Viva-Voce            | 2 |