

**BACHELOR OF SCIENCE in CHEMISTRY (HONS)
SEMESTER – III**

Physical Chemistry Practical
Paper Code: CH-303P

CH-303P: PHYSICAL CHEMISTRY

PRACTICAL: 25 Marks
45 Hours

1. Surface tension measurements (use of organic solvents excluded) Determine the surface tension by

- (i) drop number
- (ii) drop weight method.

2. Viscosity measurement:

- (a) Viscosity measurement of given liquids using Ostwald's viscometer (at room temperature)
- (b) Study the effect of variation of viscosity of an aqueous solution with the concentration of solute.

3. pH measurements

- (a) Measurements of pH of different solutions using pH-meter.
- (b) Preparation of buffer solutions
 - (i) Sodium acetate-acetic acid
 - (ii) Ammonium chloride-ammonium hydroxide

Measurement of the pH of buffer solutions and comparison of the values with theoretical values.

- (c) pH metric titrations of
 - (i) strong acid and strong base
 - (ii) weak acid and strong base Any other experiment carried out in the class.
