

U.G. 3rd Semester Examination - 2020

CHEMISTRY

[HONOURS]

Course Code : CHEM-H-CC-P-05

[PRACTICAL]

Full Marks : 20

Time : 2 Hours

The figures in the right-hand margin indicate marks.

Answer any **four** questions from the following: 5×4=20

1. a) State "Nernst Distribution Law" and define Partition co-efficient from this law. 2+1=3
b) Give two limitations of Nernst Distribution law. 2
2. a) Define viscosity and mention its SI unit. 2+1=3
b) How viscosity of gases and liquids depends on temperature? 2
3. a) What is the basic principle of conductometric titration? 1

b) Show the nature of conductometric titration curves of the following titrations:

- i) CH_3COOH Vs. NaOH solution
- ii) CH_3COOH Vs. NH_4OH solution

Give reasons in each case. 4

4. State Ostwald's dilution law. "Degree of dissociation of CH_3COOH increases with dilution"—Explain. 2+3
5. a) You are supplied with a 12% (v/v) stock solution of glycerol. How will you prepare 50ml each of 9%, 6% and 3% solutions by quantitative dilution in water? 1+1+1=3
b) What do you mean by saponification reaction? Give one suitable example. 1+1=2

[Turn over]