## 2021 B.A./B.Sc. First Semester CORE – 2 CHEMISTRY

Course Code: CHC 1.21 (Physical Chemistry - I)

## PART-B

Total Mark: 30

Answer the following questions.

1.	What is collision diameter? Derive the kinetic gas equation.	2+4=6
2.	<ul><li>(a) Why do real gas deviate from ideal behaviour?</li><li>(b) Determine the surface tension of a liquid by capillary rise method</li></ul>	3
3.	Discuss the seven crystal system of solid.	6
4.	What is common ion effect? Derive the relation between hydrolysis constant and degree of hydrolysis.	2+4=6
5.	What is Buffer solution? Give the derivation of Henderson equation.	2+4=6