

2021
B.A./B.Sc.
Third Semester
CORE – 7
CHEMISTRY
Course Code: CHC 3.31
(Physical Chemistry - III)

PART-B
Total Mark: 30

Answer the following questions.

1. (a) Explain the phase diagram of H₂O system. 3
(b) Differentiate congruent melting point and incongruent melting point with suitable examples. 3

 2. (a) Explain the triangular phase diagram of H₂O–CHCl₃–CH₃COOH system. 4
(b) Give suitable phase diagram with CST. 2

 3. (a) Derive the rate expression for the second order reaction. 4
(b) Explain the determination of rate of reaction with graphical method. 2

 4. (a) Describe Eyring equation. 4
(b) Write a note on temperature coefficient and its importance in kinetics. 2

 5. (a) Define enzyme catalysis and acid-base catalysis. 3
(b) Explain the application of Michaelis-Menten mechanism on enzyme catalysis. 3
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