Enrollment No: Exam Seat No: C.U.SHAH UNIVERSITY Winter Examination-2022 Subject Name: Physical Pharmaceutics II - Theory Subject Code: BP403T Branch: B.Pharm Semester: 4 Date: 21/09/2022 Time: 02:30 To 05:30 Marks: 75		
a) b) c) d) e) f) g) h) i) j)	Elaborate following terms: Stokes diameter Surface diameter Thixotropy Kinematic viscosity Angle of repose Sedimentation volume ratio Types of emulsion Angle of repose Carr's Index with their pharmacopoeial specification. Porosity and packing arrangement of powder	(20)
A B C	Attempt any two of following : Explain Newtonian and Non-Newtonian type of flow with rheograms. Define suspension. Write a note on factors affecting stability of suspension. Write a note on accelerated stability testing in brief.	(20) 10 10 10
A B C D E	Attempt any Seven of following : Differentiate flocculated and deflocculated suspensions. Write short note on association colloids. Explain the working principle of coulter counter with labeled diagram. Derive the first order rate of reaction equation Give the principle, working and applications of cup and bob viscometer with clean and next diagram.	(35) 5 5 5 5 5 5
F G	Explain the concept of DLVO theory along with energy curve and how this theory is applied in stabilizing the colloidal dispersion Write about chemical factors influencing the chemical degradation of	5 5
H I	pharmaceutical product. Write the principle and working of Ostwald viscometer Enumerate different methods commonly used for measurement of particle size determination. Describe optical microscopy method.	5 5

Q-1

Q-2

Q-3

