

H-BP-403

B. Pharma (Semester-IV) Examination, 2022

PHYSICAL PHARMACEUTICS – II

Time Allowed : Three Hours

Maximum Marks : 75

Minimum Passing Marks : 28

PART – A

Note: Answer all questions. (10 x 2 = 20 Marks)

1. What is HLB? What are its applications?
2. What is the Tyndall effect?
3. Define surface tension. Mention its applications.
4. Define viscosity. Mention its applications.
5. Write Stokes equation for sedimentation of particles.
6. What is Hooke's law? Give an idea about plastic and elastic deformation.
7. Write the applications of microemulsions.
8. What is bulk density? Mention its applications.
9. What is the first-order reaction? Give some examples of

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first-order reactions.

10. What is photodegradation? How it can be prevented?

PART – B

Note: Answer any two questions. (2 x 10 = 20 Marks)

1. Explain methods for the determination of viscosity.
2. Explain about the formulation of flocculated and deflocculated suspensions.
3. Discuss methods for determining the order of the reaction.

PART – C

Note: Answer any seven questions. (7 x 5 = 35 Marks)

1. Explain the association of colloids.
2. Explain the plastic flow of liquids and give an idea about plastic viscosity.

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3. Write about theories of emulsification.
4. Mention the measures to prevent hydrolysis.
5. Write the principle as well as a method for the determination of surface tension.
6. State Fick's first law of diffusion and its role in colloids.
7. Write about hydrolytic degradation and its prevention.
8. Write the limitations of accelerated stability testing.
9. Explain the preservation of emulsion.