Roll No. | | | | | | | | | | | | |

Total No. of Pages : 02

Total No. of Questions : 13

B.Pharma (2017 Batch) (Sem.-4)

PHYSICAL PHARMACEUTICS-II

Subject Code : BP-403T

M.Code : 75845

Time : 3 Hrs. Max. Marks : 75

INSTRUCTIONS TO CANDIDATES :

1. **SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.**
2. **SECTION-B contains THREE questions carrying TEN marks each and student has to attempt any TWO questions.**
3. **SECTION-C contains NINE questions carrying FIVE marks each and student has to attempt any SEVEN questions.**

SECTION-A

Q1. Answer briefly :

1. Define pseudo-zero order reaction. Give one example.
2. Define the term '*Porosity*'.
3. Explain the term '*Degree of Flocculation*'.
4. List the various kinetic properties of Colloids.
5. What do you understand by the term '*Angle of Repose*'. Give its **one** application.
6. Differentiate between Plastic and Pseudoplastic flow.
7. What are the colloidal systems? Give its one application.
8. What are the various methods for determining Particle size?
9. Give two differences between Flocculated and Deflocculated Suspensions.
10. Enlist the various factors affecting the decomposition of drugs.

SECTION-B

Q2. What do you understand by '*Thixotropy and Negative Thixotropy*'? Explain the various methods for the determination of Thixotropy.

Q3. Explain the concept of DLVO theory along with the energy curves. How is this theory applied in stabilizing the colloidal dispersions?

Q4. Discuss in detail the various signs of Instability of Emulsions.

SECTION-C

Q5. Define different types of densities and explain the differences between them.

Q6. What are Association Colloids? Mention the mechanism of micelle formation with one suitable example.

Q7. Briefly explain the air permeability method for determination of surface area of powders.

Q8. Give the working and principle of Cup and Bob Viscometer with the help of labelled diagram.

Q9. Derive an equation to show that in a first order reaction half life is independent of the concentration.

Q10. Enumerate the Optical properties of Colloids. Explain **any one** in brief.

Q11. Write a note on the influence of Temperature on Drug Decomposition.

Q12. Draw flow curves for Newtonian and Non Newtonian Systems. Plastic flow is exhibited by which type of particles?

Q13. Classify and describe the types of emulsions with suitable examples.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.