Roll No. ☐☐☐☐☐☐☐☐☐☐☐☐☐   Total No. of Pages : 02

Total No. of Questions : 13

B.Pharma (2017 Batch)   (Sem.–3)

PHYSICAL PHARMACEUTICS-I

Subject Code : BP-302T
M.Code : 75106

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

1. Define briefly :

   a) Binary Solutions

   b) Eutectic mixture

   c) Critical solution temperature

   d) Refractive index

   e) HLB scale

   f) Interfacial tension

   g) Buffer capacity

   h) Complexation

   i) Protein binding

   j) Aerosol

SECTION-B

2. Discuss various factors influencing solubility

3. Enumerate and discuss physicochemical properties of drug molecule.

4. Define Surface tension. Enumerate different techniques that can be used to measure it. Explain any one.

SECTION-C

5. Briefly discuss diffusion in biological system.

6. What is the significance of critical solution temperature?

7. Discuss the adsorption at solid interface with example.

8. How complexation affects the action of a drug?

9. Discuss the thermodynamics of stability constant.

10. Discuss Raoults Law.

11. How dipole moment is determined?

12. Discuss the significance of polymorphism.

13. How pH is determined, discuss?

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.