

Roll No.

Total No. of Pages : 02

Total No. of Questions : 22

B.Pharma (2017 & Onward) (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

Define briefly :

1. What are polar and semi-polar solvents? Give two examples each.
2. What is meant by internal pressure?
3. What is self-association?
4. Differentiate between adhesive and cohesive forces in a mixture containing immiscible liquids.
5. What is maximum buffer capacity?
6. Define 'Freezing Point Depression'.
7. What is meant by contact angle and how is it related to wetting of solids?
8. Differentiate between physical adsorption and chemisorption.
9. What is dielectric constant and its significance?
10. What are eutectic mixtures?

SECTION-B

11. Explain the phase diagram for water at moderate pressures and discuss the occurrence of “triple point”.
12. Discuss ideal solutions and explain complete and partial miscibility.
13. Discuss adsorbent - adsorbate interaction at solid-gas interface and explain the adsorption isotherms.

SECTION-C

14. Write a note on influence of buffer capacity and pH on tissues.
15. Discuss the solubility method for determining complex formation.
16. Write a note on ampholytes with examples.
17. Explain hydrophobic interaction and its significance.
18. Write a note on distribution coefficient.
19. What is dissociation constant? Write a note on it and explain its significance.
20. What are liquid crystals and what are their applications?
21. Summarize the application of diffusion in drug absorption.
22. Give a brief account of the factors affecting complexation and protein binding and its physiologic implications.

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.