BP-302T

Roll No.

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ODD SEMESTER EXAMINATION, 2022-23

COURSE NAME :- B.PHARM

SEMESTER- III

SUBJECT :- PHYSICAL PHARMACY I

TIME: 3 HOURS   MAX MARKS:75

NOTE: Attempt all parts.

PART A

ATTEMPT ALL QUESTIONS   10X2=20

1. Ethanol is added to water to increase the solubility of poorly soluble drug by adding as a:
a) Solvent   b) Co-solvent   c) Surfactant   d) Solubilizer

2. According to IP, "Freely soluble" means _____ parts of solvent required for one part of solute:
a) < 1   b) 10-30   c) 30-100   d) 1-10

3. The solubility of gases in liquids _____ with temperature:
a) Decreases   b) Increases   c) Remain constant   d) None of above

4. Buffer solutions:
a) Are strong acid
b) Resist change in pH
c) Decrease the pH of a solution
d) Increase the pH of solution

5. Relative humidity is measured using the apparatus:
a) Hygrometer   b) Hydrometer   c) Refractometer   d) All of the above

6. Which of the following is also known as super-cooled liquid:
a) Crystalline solids   b) Amorphous solids   c) Ionic   d) None of the above

7. Numbers of moles of solute dissolved in 1kg of solvent is expressed as:
a) Morality   b) Molality   c) Normality   d) None of the above

8. Stalagmometer is used to determine:
a) Viscosity   b) Solubility   c) Surface tension   d) pH

9. A 10%dextrose solution is:

a) Hypotonic   b) Isotonic   c) Hypertonic   d) Is-osmotic

10. Micelles are observed when the concentration of surfactant is:

a) <CMC   b) >CMC   c) =CMC   d) None of the above

PART B

ATTEMPT ANY TWO (2) QUESTIONS   **2X10=20**

11. Classify the various states of matter, emphasize upon the solid state.

12. What do you understand by Surface tension? Mention various methods employed to determine surface tension.

13. Enlist various methods for determining particle size.

PART C

ATTEMPT ANY SEVEN (7) QUESTIONS   **7X5=35**

14. Association of solutes in solutions.

15. Distinguish between Ideal & Real solutions.

16. Comprehend HLB scale.

17. How are complexes formed? What are the different types of complexes?

18. Buffered isotonic solution.

19. Define micrometrics and its parts.

20. Elucidate the colligative properties of a solution.

21. Explain the acid base concept, with the Sorenson pH scale.

22. Dielectric constant & its practical applications.