QP Code: 322006 **Reg. No…….**

Third Semester B. Pharm Degree Regular/Supplementary Examinations October 2022

Physical Pharmaceutics I

(2017 Scheme)

Time: 3 Hours **Max. Marks: 75**

- ***Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space***
- ***Answer all parts of a single question together • Leave sufficient space between answers.***
- ***Draw diagrams wherever necessary***

Essays **(2x10=20)**

1. Explain the different methods for the determination of average particle size and particle size distribution. Explain in detail about the sieving technique.
2. Explain the various factors affecting the solubility of gases in liquids.

Short Notes **(7x5=35)**

3. Summarize the solubility of partially miscible liquids.
4. Glassy state.
5. Explain in short about eutectic mixture.
6. Explain micromeretics. Write its application in pharmaceutical sciences.
7. Elaborate about hydrogen bonded complexes.
8. Demonstrate any two methods for the determination of true density.
9. Buffer capacity.

Answer Briefly **(10x2=20)**

10. Define the term Buffer.
11. What are the various factors influencing the pH of buffer solution.
12. Draw a neat label diagram of one component system.
13. Critical point.
14. Enlist the scientific ways of expressing particle size distribution.
15. Particle number.
16. Classify the metal ion coordination complexes.
17. What are clathrates.
18. Define Raoult's law.
19. The terms used for expressing solubility.

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