QP (CODE: 203008	Reg. No:

Second B. Pharm (Ayurveda) Degree Supplementary Examinations September 2022

Physical Pharmacy

Time: 3 Hours **Total Marks: 100**

- 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 (2x10=20)

Essays:

1. Define dissolution. Explain the factors influencing the drug dissolution. Describe type II dissolution apparatus

2. What are colloids. Classify them with examples. Explain the kinetic properties of colloids

(10x5=50)Answer briefly:

- 3. Purification of colloids.
- 4. Thixotropy.
- 5. Derive the equation for First order rate constant and half life.
- 6. Association colloids.
- 7. Explain various Non Newtonian types of flow in fluids.
- 8. Any two methods for the preparation of Lyophobic colloids.
- 9. pH partition hypothesis and limitations.
- 10. Pharmaceutical application of Surfactants.
- 11. Kinetics of drug transportation.
- 12. Any two methods to determine the Energy of activation

Short notes: (10x3=30)

- 13. Plug flow.
- 14. Porosity.
- 15. Zero order kinetics.
- 16. Distribution law and its application.
- 17. Discuss various graph to express particle size distribution of powders.
- 18. Gold number.
- 19. Contact angle, Mention its application
- 20. Detergency.
- 21. Newtonian system.
- 22. Sedimentation parameters.
