

Rajiv Gandhi University of Health Sciences, Karnataka

Fourth Semester B. Pharm Degree Examination – 02-Jul-2022

Time: Three Hours

Max. Marks: 75 Marks

Physical Pharmaceutics - II

Q.P. CODE: 5015

Your answers should be specific to the questions asked

Draw neat labeled diagrams wherever necessary

All the Questions are compulsory.

LONG ESSAYS

2 x 10 = 20 Marks

1. What are colloids? Give example. Explain any four methods of preparation of different types of colloids.

OR

Define Newtonian flow of liquids. Explain shear thinning system of liquids with graphical representation.

2. Discuss various theories of emulsification.

SHORT ESSAYS

7 x 5 = 35 Marks

3. Explain the concept of DLVO theory with energy curves. How this theory is applied in stabilizing the colloidal dispersion.

OR

Explain any two methods of purification of colloids.

4. Explain any two physical instability parameters in an emulsion.

OR

Explain the formulation of formulation of flocculated suspension.

5. How do you represent particle size distribution?

6. With the help of neat diagram explain principle and working of coulter counter method to determine the particle size.

7. Define angle of repose. Explain the method to determine the same.

8. Write short notes on accelerated stability studies and application in pharmacy.

9. Explain factors affecting rate of a chemical reaction.

SHORT ANSWERS

10 x 2 = 20 Marks

10. State and explain Hardy schulze rule.
11. What is gold number?
12. Define Rheology. Give any two applications.
13. What is Negative thixotropy?
14. Define sedimentation volume and degree of flocculation.
15. Define HLB value and Griffins HLB scale.
16. Define poly disperse system.
17. What is bulk density and true density?
18. Define molecularity of a reaction with example.
19. Define first order reaction with suitable example.
