

Rajiv Gandhi University of Health Sciences, Karnataka

Fourth Semester B. Pharm Degree Examination – 08-Nov-2023

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. Define Colloids. Describe optical and kinetic properties of colloids.

OR

Define Newtonian and non-Newtonian liquids. Explain the thixotropic properties of Non-Newtonian liquids.

2. Explain the causes for instability in emulsions. How emulsions can be stabilized?

SHORT ESSAYS

7 x 5 = 35 Marks

3. Describe Donnan membrane equilibrium. Give its applications.

OR

Explain principle and working of Cup and Bob viscometer.

4. Differentiate elastic and plastic deformation of solids.

OR

Define angle of repose and discuss any one method to determine it. Give its significance.

5. Draw and explain particles frequency distribution curve.
6. Write a note on accelerated stability studies
7. How do you protect drugs against oxidative breakdown?
8. Discuss the evaluation of physical stability of suspension by sedimentation volume and degree of flocculation.
9. Write a note on theories of emulsification.

SHORT ANSWERS

10 x 2 = 20 Marks

10. Define gold number of protective colloid.
11. What is Faraday Tyndall effect?
12. Define Yield value.
13. Give the advantages of cone and plate viscometer.
14. Define rheology and mention its application.
15. Why flocculated particles settle rapidly compared to deflocculated particles?
16. Define stokes diameter.
17. Give the applications of micromeritics.
18. What is pseudo first order reaction?
19. Define molecularity of a reaction.
