Rajiv Gandhi University of Health Sciences, Karnataka

Fourth Semester B. Pharm Degree Examination – 08-Dec-2020

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

LONG ESSAYS (Answer any Two)   **2 x 10 = 20 Marks**

1. Describe in detail optical and kinetic properties of colloids.

2. Explain in detail different systems of Non-Newtonian flow of liquids with respective equations.

3. Derive the equation for the determination of rate constant, half life and shelf life for first order reaction kinetics.

SHORT ESSAYS (Answer any Seven)   **7 x 5 = 35 Marks**

4. Write a short note on stability of emulsions.

5. Write the principle and working of coulter counter method to determine particle size with neat diagram.

6. Briefly explain the preventive measures for chemical degradation by oxidation.

7. Discuss briefly the concept of DLVO theory with energy curves.

8. Explain the principle and working of Ostwald's viscometer.

9. Write short note on settling properties of suspensions.

10. Write in brief on derived properties of powders.

11. What are the different methods for determining order of reaction and explain any two.

12. Briefly describe electrical double layer with diagram.

SHORT ANSWERS (Answer All)   **10 x 2 = 20 Marks**

13. Define first order reaction and zero order with example.

14. Define pseudo first order reaction and molecularity of reaction with example.

15. Rheogram and rheopexy.

16. State Edmundson's equation.

17. Ferret diameter and Projected diameter.

18. What are association colloids?

19. Gold number and Tyndall effect.

20. Heckle equation.

21. Stress and Strain.

22. Relative viscosity and specific viscosity.

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