

# **2010 Scheme**

**QP CODE: 203006**

**Reg. No: .....**

## **Second Year B.Pharm Degree Supplementary Examinations July 2022**

### **Pharmaceutics – II**

**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*
- *Write equations wherever necessary.*

**Essays**

**(3x10=30)**

1. Explain optical, kinetic and electrical properties of colloids.
2. What do you mean by non-Newtonian systems. Explain plastic and dilatant systems in detail.
3. Define and classify suspensions. Explain stability problems of suspensions and methods to overcome the same.

**Short notes**

**(14x5=70)**

4. Define diffusion. Explain Fick's first law of diffusion with its applications.
5. How do you determine half-life of zero order and first order reactions.
6. Surface free energy.
7. Explain types of porosities in powders. Give its applications.
8. How do you measure surface tension by capillary rise method.
9. Define complexation. Explain methods for enhancement of solubility.
10. Define colloids. Classify them on the basis of affinity of dispersed phase towards dispersion medium.
11. Explain coulter-counter method for particle volume determination.
12. Explain micellar solubilization of drugs. Explain.
13. Define rate of a reaction. Give various factors affecting rate of a reaction.
14. Explain Newtonian law for flow of fluids. Give example.
15. Explain the concept of electrical double layer.
16. Enumerate the various stability problems of pharmaceuticals and the methods to overcome them.
17. Give the working principle of falling sphere viscometer.

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