

# **2010 Scheme**

**QP CODE: 203006**

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

## **Second Year B.Pharm Degree Supplementary Examinations February 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. Add a detailed note on controlled flocculation.
2. How do you determine shelf life of pharmaceuticals by accelerated stability studies.
3. Write in detail the working of cup and bob viscometer with a neat labelled diagram.

#### **Short notes**

**(14x5=70)**

4. Define surface tension. Explain working principle of Du nuoy ring tensiometer.
5. Explain HLB. Give various methods to determine it.
6. Explain the theory of sedimentation in suspensions.
7. Define rheology. Give its applications in pharmacy.
8. Define dissolution. Explain dissolution test apparatus with a neat labelled diagram.
9. Explain type I, type II and type III adsorption isotherms.
10. How does temperature affect rate of a reaction. Explain.
11. Define thixotropy. How do you determine it.
12. What are multipoint viscometers. Explain working principle of cone and plate viscometer.
13. Enumerate various factors affecting dissolution.
14. How do you determine particle surface area. Explain.
15. Give the kinetics of protein binding.
16. What do you mean by apparent zero order and pseudo first order reaction. Give example for each.
17. Define and Classify surfactants with examples.

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