Fourth Semester B.Pharm Degree Supplementary Examinations
December 2021
Physical Pharmaceutics II

(2017 Scheme)

Time: 3 Hours   **Max. Marks: 75**

- *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*
- *Draw diagrams wherever necessary*

Essays   **(2x10=20)**

1. Explain with graph and equations the influence of temperature on degradation of pharmaceutical dosage form. How do you assess the shelf life of a product.
2. Differentiate single and multipoint viscometers. Explain the working principle of two rotational viscometers with examples.

Short Notes   **(7x5=35)**

3. Explain physical stability of emulsion.
4. Describe Griffins HLB scale with examples.
5. Explain optical properties of colloids.
6. How are medicinal agents stabilized against oxidation in dosage forms.
7. Describe a method for determination of surface tension.
8. What are elastic and plastic deformations of solids under the influence of stress.
9. Describe dilatant non Newtonian flow with examples and rheograms.

Answer Briefly   **(10x2=20)**

10. What are pseudo first order reactions.

11. Write two approaches to stabilize medicinal agents against hydrolysis.

12. Define yield value.

13. What are Newtonian systems.

14. Define degree of flocculation.

15. Preservation in emulsion.

16. Spreading coefficient.

17. Give the Freundlich adsorption equation.

18. What are Nernst and zeta potentials.

19. Define coacervation.

****