

# **Pharmaceutical Technology 1 – Exam Topics for 2025/2026**

## **3rd Year, 1st Semester**

1. Definition of a drug and dosage form, classification of pharmaceutical preparations
2. Subject and tasks of pharmaceutical technology; pharmaceutical technological processes, operations, and procedures
3. Classification of pharmaceutical substances (by origin, usage, BCS classification)
4. Theory of dissolution and influencing factors (solvents, possibilities for increasing solubility)
5. Theory of mixing, mixing of liquids
6. Solution-type preparations I (aqueous solutions, stock solutions, elixirs, mixtures, base solutions, colloidal solutions)
7. Solution-type preparations II (drops intended for internal and external use)
8. Dispersion, concept of dispersed systems
9. Emulsion as a dosage form
10. Pharmaceutical technological application of emulsifiers
11. Suspension as a dosage form
12. Excipients of liquid dosage forms (syrups, mucilages, preservatives)
13. Microbiological purity classes of pharmaceutical preparations, significance of sterile preparations
14. Theoretical foundations of sterility, depyrogenation and pyrogen testing
15. Classification and application possibilities of sterilization procedures
16. Aseptic drug preparation, ophthalmic preparations
17. Injections and infusions: definitions, similarities, differences, quality requirements
18. General aspects and testing of the preparation of injections and infusions
19. Classification of infusions (compound infusions, special infusions, parenteral nutrition)
20. The operation of extraction, description of extraction equipment, theory and practice of pressing
21. Extracts: classification and base preparations