**Theme: obtaining syrups and aromatic waters. Theoretical foundations for the distillation of essential oils. Equipment. Technological schemes of production**

**Lesson objectives**

1. To study the theoretical foundations of the dissolution process.

2. Examine the factors that allow you to control dissolution.

3. To study the equipment used to obtain solutions and their purification.

**Relevance**

These dosage forms are widely used, especially in children's practice.

***Students should know***

1. Dissolution of substances as a diffusion-kinetic and mass transfer process. The main provisions of the theory of solutions. Dissolution stages. Dissolution equation. Factors affecting the dissolution process.

2. Mixing of solutions. Equipment. Agitators.

3. Special methods of mixing: pneumatic, gravitational, circulation, in the pipeline.

4. Separation of heterogeneous systems. Methods (settling, centrifugation, filtration). Equipment.

5. Medical solutions. Definition. Characteristic. Nomenclature.

6. Technological scheme for obtaining solutions for external and internal use. Preparation of solutions (basic lead acetate, basic aluminum acetate) by dissolution, chemical interaction, electrolysis, etc. Cleaning methods.

7. Evaluation of the quality of solutions. Storage.

8. Syrups. Definition. Characteristic. Classification. Nomenclature.

9. Technological scheme for obtaining syrups (sugar simple, fruit, medicinal) at pharmaceutical enterprises. Pertussin. Holosas. Aloe syrup with iron, etc.

10. Assessment of the quality of syrups.

11. Fragrant waters. Definition. Characteristic. Nomenclature.

12. Dalton's law.

13. Technological schemes of obtaining. Methods of obtaining. Equipment.

14. Assessment of the quality of aromatic waters. Storage. Application.