## Questions for the concluding class on the topic: «Medicinal plants and raw materials containing simple phenols and anthracene derivatives».

- 1. Phenolic compounds. Concept of glycosides, their structure, classification. Distribution in the plant world.
  - 2. Physical and chemical properties of phenolic compounds.
- 3. Simple phenols. Chemical classification of simple phenols compounds. Physical and chemical properties of this group of biological active substances.
- 4. Methods of isolation of simple phenols from raw materials. Qualitative and quantitative analysis of raw materials containing simple phenols.
  - 5. Medicinal plants and raw materials containing simple phenols:
  - Vaccinium vitis-idaea;
  - Arctostaphylos uva-ursi.
  - 6. Anthracene derivatives, their classification. Distribution in the plant world.
  - 7. Physical and chemical properties of anthracene derivatives.
  - 8. Methods of isolation of anthracene derivatives from raw materials. Qualitative tests.
  - 10. Quantification of anthracene derivatives in raw materials.
  - 11. Medicinal plants and raw materials containing anthracene derivatives:
  - species of Digitalis (Digitalis purpurea, Digitalis grandiflora, Digitalis lanata);
  - Frangula alnus;
  - Rhamnus cathartica;
  - species of Cassia;
  - Rheum palmatum.
- 20. **Formulas:** phenol, resorcinol, pyrocatechin, hydroquinone, salicylic acid, floroglucin, arbutin, methylarbutin, anthracene, anthranol, anthrone, anthraquinone, chrysacin (emodine), alizarin.