

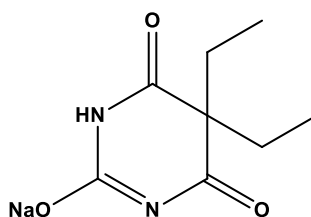
Example of an exam card

Federal State Budgetary Educational Institution of Higher Education
"Volgograd State Medical University"
Ministry of Health of the Russian Federation

Department: **Pharmaceutical, toxicological chemistry, pharmacognosy and botany.**
Discipline: **Special Pharmaceutical Chemistry**
Speciality at the speciality **33.05.01 Pharmacy**
Academic year: **2024 - 2025**

EXAMINATION CARD № 1

1. Subject and objectives of pharmaceutical chemistry. Basic terminology (biologically active substance, pharmacological agent, drug substance, drug product, drug form). Interrelation with chemical and biomedical disciplines.
2. Antitumor antibiotics. Anthracyclines: rubomycin and its analogs.
3. Situational task. A trainee pharmacist-analyst of quality control of a pharmaceutical company received a substance of the following structure:



When assessing the quality of the preparation, the indicators "Solubility", "Transparency and color", "Free alkali content" did not meet the requirements of the regulatory documentation. The solution of the preparation opalesced immediately and the quantitative content of "free alkali" is significantly higher than specified in the regulatory documentation. The trainee needs to:

- Give a justification of the reasons for the change in its quality by this indicator according to its storage conditions and properties.
- Cite other tests characterizing its quality.
- Give the Russian and Latin names of this medicinal substance.
- Characterize its physical and chemical properties.
- According to its chemical properties, propose identification reactions and methods of quantification.

Seal place

Head of department

A.A.Ozerov