

**Assessment tools for certification  
in the discipline "Medicines from natural raw materials "  
for students of the educational program  
Specialist in the specialty 33.05.01 Pharmacy,  
direction (profile) Pharmacy,  
form of study full-time  
for the 2023-2024 academic year**

Intermediate attestation of students in the discipline "Medicines from natural raw materials" is carried out in the form of credit (7th semester).

The credit is held in the form of testing in the scope of the discipline program. The student receives 1 of 10 variants containing 20 test tasks, formed by random sampling method from 200 questions of the bank of test tasks. Test questions include theoretical material on the general characteristics of natural sources of medicines, classification, methods of analysis, pharmacological properties of groups of biologically active substances.

Students are informed in advance about the form of the credit; for preparation they are given a list of test tasks on the studied sections of the discipline.

**Examples of test tasks:**

**Checked competences:** OK-1.1.3, OK-1.2.1, OK-1.2.2, OK -1.2.3, OK -1.3.1, OK -8.1.1, OK -8.1.2, OK -8.2.1, OK -8.3.1, OPC-1.1.1, OPC -1.2.1, OPC -1.2.2, OPC -1.3.1, PC-1.1.1, PC -1.2.1, PC -1.3.2, PC -1.3.3, PC -1.3.4, PC -3.1.1, PC -3.2.1, ПК-PC, ПК-PC, ПК -PC, PC -4.2.3, PC -4.3.1, PC -4.3.2.

1. Fresh medicinal plant material is used to make:

- A. Infusions.
- B. Tinctures.
- C. Juices.
- D. Dry extracts.

2. Calendula tincture is used to make a tincture of calendula:

- A. 50% ethyl alcohol.
- B. Ethyl alcohol 96% (absolute).
- C. Ethyl alcohol 70%.
- D. Water.

3. The main group of active substances of tincture of *Schizandra chinensis* are:

- A. Flavonoids, iridoids.
- B. Anthracene derivatives.
- C. Lignans, vitamins.
- D. Lignans, essential oil.

4. Select a preparation whose main active ingredients are essential oils:

- A. Rotocan.
- B. Mukaltin.

- C. Caleflon.
- D. Inhalipt.

5. Medicinal plant raw materials are used for industrial production of rutin:

- A. Hypericum perforatum.
- B. Aronia melanocarpa.
- C. Glycyrrhiza glabra.
- D. Sophora japonica.

6. Novogalenic preparations include:

- A. The sum of the active ingredients.
- B. Related substances.
- B. Ballast substances.
- Г. Individual substance only.

The full fund of assessment tools for discipline / practice is available in the EIES of VolgSMU at the link (s):

<https://elearning.volgmed.ru/>

Considered at the meeting of the department of Pharmacognosy and Botany "26" May 2023, protocol No 10.

Head of the Department



A.V. Yanitskaya