

AMENDMENTS AND CHANGES TO THE PROGRAM OF PRACTICAL SESSIONS

«Botanical»

for the specialty 7-07 0912-01 «Pharmacy»

for 2025/2026 academic year

Amendments and changes		Basis/Reason
1. The list of questions for the differentiated assessment has been revised and supplemented		Department meeting (protocol # 11 of 15.05. 2025)
2. Updated the list of practical skills		Department meeting (protocol # 11 of 15.05. 2025)

The curriculum is revised and approved at the department meeting of the department pharmacy organizations with advanced training course and retraining (protocol № 11 of 15.05.2025)

Head of the department of Pharmacy organization
with advanced training course and retraining



O.V. Mushkina

APPROVED

Dean of the Medical Faculty for International Students



O.S. Ishutin

QUESTIONS FOR DIFFERENTIAL PASS-FAIL

educational botanical practice 2025-2026y

1. Plants life forms (with examples), which was found in botanical practice places.
2. Examples of annual and perennial herbaceous plants, which was found in botanical practice places, and their systematic position.
3. Examples of plants with different types of shoot branching and their systematic position with examples from practice
4. Examples of plants with metamorphosis of vegetative organs and their systematic position.
5. Examples of plants, having a tap root system and a system of additional roots, and their systematic position.
6. Examples of plants with a different shape of the stem, with different stem position in space, with shortened and elongated stems and their systematic position.
7. Examples of plants with the alternating, opposite and whorl leaf position and their systematic position.
8. Examples of plants with a variety of forms of leaf blade, apex forms, base forms, leaf edge shapes and types of venetation and their systematic position.
9. Examples of plants with tricompond, palmately compound and pinnatelycompound leaves.
10. Examples of plants with different types of flowers (various types of androceum and gyneceum).
11. Examples of plants with different types of inflorescences. Examples of different types of botryoid and chymoid inflorescences.
12. Examples of plants with different types of fruits (apocarpous, monocarpous, cenocarpic and pseudomonocarpic).
13. Examples of medicinal, vitamin-bearing, poisonous species of plants with examples from practice
14. Water as an environmental factor. Plants adaptation to various conditions of moistening. Plants-hydrophytes, hygrophytes, mesophytes, xerophytes (sclerophytes and succulents). Give the examples.
15. Soil as an environmental factor. Plants adaptation to different soil conditions.
16. Heat as an environmental factor. Plants adaptation to high and low temperatures. Heat resistance and frost resistance.
17. Give the concept of "phytocenosis" (vegetable community), describe its structure.
18. Description of meadow phytocenosis.
19. Description of forest phytocenosis.
20. The concept of vegetation, its zonality. The main vegetative zones of the Earth.
21. Analysis of the vertical structure of plant communities.
22. What are endemic plants, cosmopolitans and relics? Give the examples.

23. Species-indicators and species - assemblers. Give the examples.
24. What are the nature conservation areas, their role in the species composition preserving? What kind of environmental protection do you know in Belarus?
25. Name rare and endangered plant species found in practice areas that are protected and listed in the Red Data Book.
26. Rules for the collection of plants for herbarium taking into account rational nature management.
27. Rules for drying plants for herbarium.
28. Rules for the herbarium design.
29. Diagnostic signs of the main families under study – Asteraceae with examples from practice
30. Diagnostic signs of the main families under study - Apiaceae, with examples from practice
31. Diagnostic signs of the main families under study - Rosaceae with examples from practice
32. Diagnostic signs of the main families under study - Lamiaceae with examples from practice

LIST OF PRACTICAL SKILLS, FIXED DURING PRACTICE AND THE LEVELS OF THEIR DEVELOPMENT

Levels of mastering practical skills:

1 – to know theoretically, to be professionally oriented, to know the indications for conducting;

2 – to know theoretically, to evaluate, to participate in the work of the staff;

3 – know theoretically, do it yourself.

№	Practical skill	Recommended	
		Number	Level of mastering
1.	Herbarization of medicinal plants	10	3
2.	Identification of plant and systematic position of the plant using the determinant	5	3
3.	Geobotanical description of phytocenoses, necessary to account for the stock of medicinal plants as a source of medicinal plant raw materials.	5	3
4.	Carrying out the cultivation of medicinal plants	2	2
5	Compilation of morphological description of plants	5	3