

**Assessment tools for certification
in the discipline " Pharmaceutical logistics "
for students enrolled
in the 2020 educational program
33.05.01 Pharmacy,
specialty,
full-time education
for the 2024-2025 academic year**

1. Evaluation tools for conducting current certification in the discipline

The current certification includes the following types of tasks: testing, solving situational problems, control work, writing and defending abstracts, interviewing on control issues.

1.1. Example of test tasks:

1. What types of purchases are characterized by simplicity of paperwork, increased trade discounts:

- a) purchase of goods in one batch
- b) regular purchases in small batches
- c) purchases according to quotation lists
- d) piece purchase
- e) small-scale purchase

2. The disadvantage of the method of procurement with immediate delivery:

- a) increased costs due to the need for detailed documentation for each order
- b) the probability of ordering an excess quantity
- c) slowing down the turnover of capital
- d) accelerating the turnover of capital
- e) the probability of ordering insufficient quantity

3. Advantages of receiving goods as needed

- a) no calculation of the required quantity of goods
- b) acceleration of capital turnover
- c) ease of paperwork
- d) slowing of capital turnover
- e) complexity of paperwork

4. Specify the correct sequence of the transition of material resources from one type to another

- a) stocks of finished products – production stocks – stocks of work in progress
- b) production stocks – stocks of finished products – stocks of work in progress
- c) stocks of work in progress – production stocks – stocks of finished products
- d) production stocks – stocks of work in progress – stocks of finished products
- e) stocks of work in progress - stocks of finished products

5. Determine the correct expression

- a) inventories are part of working capital
- b) the working capital of the enterprise is part of the material reserves
- c) the material reserves are part of the finished product

- d) inventories are part of the fixed assets of the enterprise
 - e) inventories are part of non-current assets
6. What ensures the "just-in-time" inventory management approach
- a) the growth of production stocks
 - b) reduction of time for delivery of the next batch of material resources
 - c) practical abandonment of material production stocks
 - d) reduction of transportation costs
 - e) increase in transportation costs
7. What is the stock rate
- a) the maximum amount of material that must be used for the production of products
 - b) the minimum amount of material required to order products
 - c) the net weight of finished products
 - d) the amount of semi-finished products and materials used in production over the past month
 - e) the estimated minimum amount of material resources required for the production of products
8. What is the basis of the inventory management system with a fixed order size
- a) the size of the batch depends on the period of sale
 - b) equal intervals between deliveries
 - c) the same level of stocks
 - d) equal shipments
 - e) equal
9. What is the relationship between the costs of order fulfillment and the size of the delivered batch of material resources
- a) direct
 - b) inverse
 - c) there is no clear dependence
 - d) non-linear
 - e) logarithmic
10. Inventory storage costs increase with an increase in the delivery batch
- a)
 - b) decrease
 - c) do not change
 - d) do not depend on each other
 - e) depend only on environmental factors

1.2. Examples of situational tasks

Situational task No. 1

On the basis of theoretical knowledge, give a description of the commodity distribution chain according to the proposed scheme: justify your choice. Make out the solution in a workbook.

Situational task No. 2

As a result of studying the inventory management system in pharmacies, it was found that the formation of the assortment and the preparation of the request – order are engaged in: head. pharmacy – in 66% of cases, head. the department of stocks – 17%, pharmacists – technologists engaged in the release of medicines – 17%. Give a description of the conducted research. What is the optimal distribution of job responsibilities? Who should be engaged, in

your opinion, in the preparation of the order application? Specify the optimal delivery schedule.

1.3. Examples of control work options

Question No. 1. Material flows in pharmaceutical logistics: definition, goals, tasks.

Question No. 2. Logistics approach to the management of pharmaceutical organizations. Logistics departments at enterprises.

1.4. Writing an abstract

Approximate topics of the abstracts. Students can offer their own topic within the discipline.

1. Assessment of the rational placement of pharmacy organizations in a large city.
2. Up-to-date information resources and databases on the inventory of medicinal products in pharmacies, warehouses.
3. The problem of procurement logistics in the implementation. State guarantee programs for inpatient patients.
4. The specifics of the field of professional activity of logistics specialists in pharmacy in theory and practice.
5. The possibility of organizing a temporary storage warehouse for imported pharmaceutical products.
6. Opportunities to optimize the management of logistics systems and supply chain in the pharmaceutical market.
7. Warehouse logistics: opportunities for the development of a trans-regional distribution hub in Volgograd and the Southern Federal District.
8. Experience in organizing the work of pharmacy warehouses, ways to automate the management of business processes.
9. The use of procurement logistics in the management of the supply chain (for individual groups of pharmacy assortment products).
10. Automation and visualization of the process of determining the optimal order point (from the positions of OOT, JSC).
11. Analysis of the pharmacy organization (organization of wholesale trade of drugs) as a typical pharmaceutical logistics system.
12. Cartographic analysis of the competitive environment of JSC (with the formation of a pharmacy placement map on the example of the region, city, district). Application of the law of retail gravity in the realities of the regional pharmaceutical market.
13. Managing distributors' price waves: a view from the pharmacy. Prospects for the future.
14. Anti-crisis management and activation of internal resources of the pharmacy network.
15. Procurement logistics of the pharmacy chain.
16. Distribution logistics on the example of pharmaceutical organizations.
17. Calculation of the optimal level of costs in the organization of the "cold chain" of immunobiological preparations.
18. Organization of monitoring of suppliers' price offers and management of their price waves.
19. Integration of information, financial and material logistics flows at the regional level and at the level of a separate pharmacy chain in Volgograd.
20. Optimization of business processes of a pharmacy/pharmaceutical organization based on a logistics approach

1.5. Examples of control questions for the interview.

1. Definition, concept and meaning of logistics. Logistics development.
2. Logistics system, its characteristics and features
3. Warehouse logistics functions. The concept of a warehouse

4. Own and third-party transport. Comparative characteristics.

2. Evaluation tools for conducting intermediate certification in the discipline

Intermediate certification is carried out in the form of a credit.

Interim certification includes the following types of tasks: interviews on control questions.

2.1. List of control questions for the interview

№	Questions for the student's intermediate certification
1.	Requirements of FZ-61 "On the circulation of medicines" to the organization of wholesale trade in medicines.
2.	Definition of the concept of "Logistics", its role in pharmacy
3.	The main concepts and trends in the development of pharmaceutical logistics. Trends in logistics development.
4.	Basic concepts of logistics: logistics system, logistics system link, logistics chain.
5.	Characteristics of logistics operations and functions.
6.	The main objects of logistics management: material flows, financial flows, information flows, service flows.
7.	Principles of storage of medicines.
8.	Theory of optimal inventory management
9.	The complete set of the order and the procedure for the release of pharmaceutical products to consumers.
10.	Primary accounting documentation and organization of document flow in the pharmacy warehouse.
11.	Principles of formation of logistics channels in the system of bringing medicines to the consumer. The structure of channels.
12.	What are the levels of logistics channels in the pharmaceutical market?
13.	Name the types of distribution network. The role of sales logistics in minimizing warehouse costs.
14.	List the basic rules in the work of a logistics organization. Analysis of logistics systems. Methods, stages of decision-making.
15.	Rules of wholesale trade in medicines.
16.	The procedure for making an application is an order for a warehouse.
17.	Theory of optimal inventory management.
18.	What properties of the pharmaceutical flow are reflected in the specifics of the supply chain?
19.	The relationship of logistics with marketing. Which specialists in the pharmacy solve marketing and logistics tasks?
20.	The economic effect of logistics management in the pharmaceutical market. The social effect of logistics management.
21.	Evaluate the integrative qualities of the logistics system: cargo, quality, quantity, time, place, costs.
22.	Give a management scheme for a wholesale enterprise. Identify the main services, determine the number of specialists, including those with pharmaceutical education. Calculate the number of storage units.
23.	Technology of transfer and execution of the application from pharmacy organizations to the pharmacy warehouse.

The full fund of assessment tools for discipline is available in the EIES of VolgSMU at the link:

<https://elearning.volgmed.ru/course/view.php?id=8219>

Considered at the meeting of the Department of Organization of Pharmaceutical Business, Pharmaceutical Technology and Biotechnology «29» August 2024, Protocol No. 1

Head of the Department,
Doctor of Pharmacy

A handwritten signature in blue ink, appearing to be 'V. S. Sirotenko', written in a cursive style.

V. S. Sirotenko