**Independent work for lesson number 1.**

After studying the lecture and the recommended sources for studying the discipline, answer the questions posed. Work in a notebook for independent work.

Questions and tasks for self-control

1. What is the history of logistics?

2. Name the stages of development of logistics.

3. Expand the concept of logistics from various sources.

4. What are the essence and features of the logistics approach to management?

5. Describe the classification of logistics.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Questions and tasks for self-control on independent work of lesson No. 2**

1. What is meant by the concept of logistics?

2. List the basic concepts of logistics.

3. List the concepts of logistics of the second plan.

4. What kind of logistics do you know?

5. What are the basic principles of logistics.

6. List the logistical principles of process optimization.

2. Describe Logistic principles of process optimization: 5 R, 7R, 8H

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Assignment for independent work for lesson No. 3**

1. Having studied the recommended sources for the discipline, describe the indicators that are used to characterize the state of logistics:

a) Average stock in the warehouse;

b) Goods turnover

c) Speed ​​of turnover

d) Time of circulation of goods

e) Ready for delivery

 f) Share of inventory in turnover

g) Associated Capital Costs

h) Characteristics of the discipline of supply

i) Logistics costs per unit of turnover

j) performance indicators of the warehouse

k) Indicators characterizing the efficiency of the use of warehouse space;

 l) Indicators characterizing the financial results of the warehouse;

2. Study the types of logistics costs and briefly describe them.

3. Study the main regulatory and legislative framework for the rules for storing medicines, medical products, etc. Make a summary of each normat

2. Study the types of logistics costs and briefly describe them.

3. Study the main regulatory and legislative framework for the rules for storing medicines, medical products, etc. Make a summary of each normat

ive document, arranging the results of the study in the form of a table.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Assignment for independent work for lesson No. 4

SEARCH SCIENTIFIC LITERATURE AND MAKE A PRESENTATION ON THE TOPIC: FORMATION OF LOGISTICS SERVICE.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Task. Independent work on the topic 2.2.**

After studying the recommended literature for training in the discipline, solve the problem:

Choice of storage capacities.

Pharmaceutical company "Vitafarm", engaged in real-

lization of medicines and parapharmaceutical products

decision, decides to increase its turnover by expanding the assortment

ment of perfumery and cosmetic products, tk. last time

the market for these goods tended to grow in Russia on average

by 10-16% per year. Wholesale turnover is planned to increase

by 3 million rubles, the average shelf life of stocks in the warehouse is

lasts 30 days.

Determine the required storage capacity.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Task for independent work on the topic 2.3.**

**Having studied the recommended sources for study, solve the following problem.**

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_-

**Task 4. Wholesale turnover is planned to be increased**

by 3 million rubles, the average shelf life of stocks in the warehouse is

lasts 30 days.

Determine the capacity of the Vitapharm warehouse

needed to increase turnover by 5 million rubles.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**solve problem**

**Example 14**: Annual demand D = 1000 units, cost of supply

order C0 = 40 rubles/order, purchase price C = 50 rubles/unit, annual

the cost of storage is 25% of its price. Available

3% discount from suppliers if the order size is at least 200

units (the level that violates the price). Is it worth it to use

discount?

**Example 13**. In the autumn-winter period, weekly demand in a pharmacy

And for Ingavirin it is 200 packs (D = 200), the cost is

giving an order - 150 rubles / order, the cost of storing one unit 2

rub./week, delivery time - 1 day. Find the right size

orders, costs, reorder rate.

**Problem 14.** Annual demand D = 1200 units, supply cost

order C0 = 50 rubles / order, purchase price C = 60 rubles / unit

nitsa, the annual cost of storing one unit is 35%

her prices. You can get a 5% discount from suppliers if the size

order will be at least 90 units. Is it worth taking advantage of the discount?

Whoa, how many units should I order?

**Example 15**. Annual demand D \u003d 500 units, the cost of filing

chi orders C0 = 40 rubles / order, the cost of storing one unit

prices Ch = 5 rubles/year, annual cost of no orders Cb =

100 rub./unit.

**Problem 15.** Annual demand D = 600 units, supply cost

orders С0 = 50 rubles/order, storage costs of one unit

Ch = 6 rubles/year, annual cost of no orders Cb = 110

rub./unit. Compare 2 models: the main one and the one with a deficit (declarative

ki are not performed).

**Example 16:** Annual demand D = 3000 units, cost of supply

orders C0 = 25 rubles/order, storage costs of one unit Ch

= 120 rubles/year, annual cost of no orders Cb = 225 rubles/

unit. Deficit model (orders are not executed).

**Problem 16.** Annual demand D = 2000 units, cost of supply

orders С0 = 20 rubles/order, storage costs of one unit

Ch = 100 rubles/year, annual cost of no orders Cb = 220

rub./unit. Deficit model (orders are not executed). Nai-

these costs, justify the answer.

Problem 17. Determine the optimal order size for the warehouse

for "Validol", if the annual requirement is 5500 packs, the price

units of goods 15 rubles, the cost of storing goods in a warehouse

equal to 12% of its price, the cost of placing an order is 5 rubles.

**Example 18.** The annual need for the drug was 3 thousand.

packages, the number of working days per year is 226 days, the optimal

order size 100 packs, delivery time 2 days. Determine

parameters of the inventory management system.

Task 18. The annual need for the drug was 4.5 thousand.

packages, the number of working days per year is 250 days, the optimal

order size 120 packs, delivery time 2 days. Define-

those parameters of the inventory management system. Illustrate

graphically.