Ministry of Health, Labour and Social Protection of Republic of Moldova STATE UNIVERSITY OF MEDICINE AND PHARMACY "NICOLAE TESTEMITANU"

**Faculty of Pharmacy** 

Department of
SOCIAL PHARMACY "VASILE PROCOPIȘIN"

Variant \_\_\_\_

# MANAGEMENT AND PHARMACEUTICAL LEGISLATION

**Edition II, translated from Romanian** 

Learning guide and workbook for laboratory practical work for the 4<sup>th</sup> year students, Faculty of Pharmacy

(Name, Surname of the student)

Class \_\_\_\_\_, study year 20\_ - 20\_

Chisinau – 2018

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# MANAGEMENT AND PHARMACEUTICAL LEGISLATION

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# Lesson 1. GENERAL FEATURES OF THE MANAGEMENT. ELEMENTS OF THE MANAGEMENT IN THE PHARMACEUTICAL ACTIVITY.

*The aim of lesson.* Students have to: obtain knowledge about the evolution and theory of management, practical skills of planning, organizing, coordinating, motivating and controlling various pharmaceutical activities; become acquainted with contemporary approaches, modern doctrines and management schools and with the functions of modern management, their role and functions in leadership and pharmaceutical management; determine the specifics of pharmaceutical management: structure, goals and functions.

*The type of learning:* Seminar and laboratory practical work *Lesson duration*: 8 hours

### **Questions for self-learning:**

- 1. Basic concepts of management.
- 2. The main elements of management. Stages of development of management.
- 3. Schools of management theory and their features:
  - a) classical school;
  - b) human behaviors school;
  - c) social school;
  - d) empirical school;
- 4. Situational management.
- 5. Comparative management.
- 6. Contemporary management.
- 7. The contribution of different schools to contemporary managerial theory and practice.
- 8. General features of management functions:
  - a) Planning function. The importance of planning. Types of planning in an organization.
  - b) Organizing function.
  - c) Coordinating function.
  - d) Motivating function. Financial and non-financial motivation of the staff.
  - e) Controlling function.

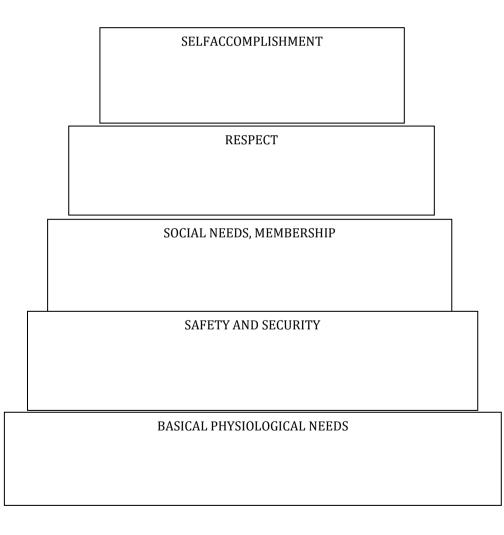
# **Exercises for self-solving**

**Exercise 1.** Write in the table the type of schools of management theory and their approaches. Take into account the information about the scientifically directions and the main concepts of these schools and their contribution in the development of modern management.

Scientifically directions and main concepts	Basic concepts used in the modern management
1. Type of school:	
Scientific principles of work organization. Rationali- zation of work operations. Division of work in the management. Approach of the management process.	

2. Type of school:	
Interpersonal relationships - a factor for increasing the efficiency of work and the potential of each em- ployee.	
3. Type of school:	
Application of quantitative measurement methods.	
The development of theory of systems. Highlighting	
the "macro-" and "micro environmental" factors.	
4. Type of school:	
It uses the science of leadership for efficient leaders,	
experience, the way to action.	

**Exercise 2.** Basing on the principles of human behaviors school and using the Maslow's pyramid make a ranking of the needs of pharmacists.



**Exercise 3.** Describe which of the managerial principles of savants Henri Fayol, Frederick Taylor, Douglas McGregor are currently being applied in the management of pharmaceutical companies. Argue the answer.

Chain community pharmacy; Individual community pharmacy; Pharmaceutical warehouse; Pharmacy with section of preparing medicines basing on prescriptions Pharmaceutical factory

**Exercise 4.** Describe the strategic planning of the activities of a community pharmacylocated:

a. within the Family Physicians Center c. within an apartment building b. within a shopping center d. nearby to another pharmacy

**Exercise 5.** Develop a motivation system for pharmaceutical staff in the following cases. Argue the answer.

- a) Pharmacist, young graduate
- b) Pharmacist with 10 years working experience
- c) Pharmacist with 20 years working experience
- d) Pharmacist, mother of 2 children

**Exercise 6.** The pharmacist manager of a pharmacy after attending the courses of continuous training at the "V. Procopisin" department of social pharmacy decided to improve in the pharmacy the quality management of medicines release: with prescription (Rx), over the counter (OTC) and reimbursed medicines. Using the knowledge of planning and controlling function in organization, propose an algorithm to implement this goal. Additional study: Standard Operational Procedures and the Deming-Shuhart (PDCA) Quality Improvement Cycle.

Conclusions and suggestions of the student:

The teacher's signature \_\_\_\_\_

# Lesson 2. MANAGEMENT OF LEADING PROCESS. DECISIONS IN THE LEADING PROCESS.

*The aim of lesson.* To get acquainted with general leading systems, methods and types. To acquire practical skills in selecting and applying the leadership methods in leading with the pharmaceutical system. To get acquainted with decision-making algorithms and some ways of using them in the practice of pharmaceutical management.

*The type of learning:* Seminar and laboratory practical work *Lesson duration*: 8 hours

### **Questions for self-learning:**

- 1. General features of leading process.
- 2. Classification of leadership methods.
- 3. Styles of leadership.
- 4. General notions about decisions and decisional process.
- 5. Classification of decisions.
- 6. Factors that influence the decisional process.
- 7. Stages of decisional process.
- 8. Methods and models of decision making.

#### **Exercises for self-solving**

**Exercise 1.** Describe the comparative features of the American and Japanese management models. There are 3 groups of students who prepare and present the directions of management in Japan, USA, Europe with ideas that could be used in the managerial activity of pharmaceutical companies from Republic of Moldova.

Nº	American manage- ment model	European manage- ment model	Japanese manage- ment model
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			

Nº	American manage- ment model	European manage- ment model	Japanese manage- ment model
13.			
14.			
15.			
16.			

Elements of comparative management that could be used in the managerial activity of pharmaceutical companies from Republic of Moldova

1.	
2	
3	
4.	

**Exercise 2**. Write the meaning of the word *leadership*. Enumerate the styles of leadership and their particularities.

**Exercise 3.** Propose the characteristics of following types of leadership: linear, functional and matrix.

**Exercise 4.** The pharmacist manager of a pharmacy after attending the courses of continuous training found out that:

- 1. In the section of industrial medicines after the inventory arose a conflict because of a lack of material goods.
- 2. Head of department of industrial forms ordered nomenclature of drugs that are not required due to high prices, the staff of the department are not interested in the realization of these drugs.
- 3. Employees of the department of stocksreceive instructions not only from the head of the department but also from the head of the production department. The head of the Stock Department is not responsible for the timely delivery of medicines with limited validity period.
- 4. Lately, the number of unjustified medicines refusals has increased, which has reduced the quality of pharmaceutical care.

Propose ideas for solving these situations using the concepts of decision-making process.

Questions:

- 1. Has the pharmacist reasonably used the management methodology in solving these situations?
- 2. Has the use of situational approach been argued in case no.1?
- 3. Which of the four styles approaches and leadership methods would have been rationally used in situations no. 2, 3, 4?

Argue the answer.

Conclusions and suggestions of the student:

The teacher's signature \_\_\_\_\_

# Lesson 3. ORGANIZATION MANAGEMENT. HUMAN RESOURCES MANAGEMENT.

**The aim of lesson:** To get acquainted with types of organizations, requirements for formal organization and its features. To acquire practical skills of endowment and ergonomic organization of jobs in the pharmaceutical companies. To learn the methods of studying the work and applying them to determine the effectiveness of pharmacists' work at different jobs in the pharmacy. To learn the content and basic elements of human resources management.

*The type of learning:* Seminar and laboratory practical work *Lesson duration*: 4 hours

# **Questions for self-learning:**

- 1. The organization as a system and object of the leading process.
- 2. Formal and non-formal organization and their features.
- 3. The working environment of an organization.
- 4. Effective organizations.
- 5. The American, Japanese and European management system.
- 6. Ergonomics in the workplace. Work organization and ergonomics.
- 7. Time management. Methods to optimize time management.
- 8. Methods to study the work (time research, photographing the workday etc.).
- 9. Human resources management.
- 10. Functions of human resources management.
- 11. The manager and managerial hierarchy. Performances and skills needed by a leader.
- 12. Roles and managerial responsibilities.
- 13. Aspects of managerial ethics.

#### **Exercises for self-solving**

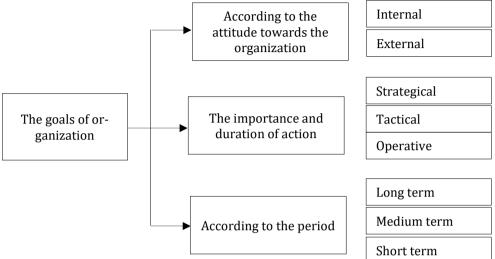
**Exercise 1.** Draw the graphical model of the "Hierarchy of goals and objectives of the pharmaceutical organization," using the "Objectives Tree" and the organization goals classification scheme.

- a) The organization goals classification scheme
- b) The rules of drawing the objective tree:
  - 1. The drawing of the tree starts with the top, forming the main common objective of zero level.
  - 2. Then, the main objective is divided in different levels sub-objectives (1, 2, 3 etc.).
  - 3. The basic principle of dividing: each sub-objective helps to fulfill the superior objective.
  - 4. Forming the objectives from zero to the other next levels, sub-objectives are detailed more concrete in: directions (1<sup>st</sup> level), ways (2<sup>nd</sup> level), problems and tasks (3<sup>rd</sup>, 4<sup>th</sup>, 5<sup>th</sup> level etc.).
  - 5. The dividing continues till the sub-objectives assure the realization of the main common objective.
  - 6. As a result of dividing is obtained the objectives tree that demonstrate all

necessary steps to be taken to achieve the common object and the correlation between them.

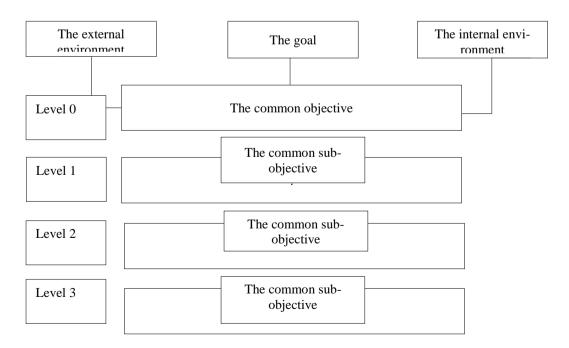
7. The level of achievement of each goal, solving a particular problem, can be measured based on the chosen criteria and indices.

The objective tree have to be branched, inverted crown down.



The problem-solving algorithm:

- 1. Study the rules of elaborating the objective tree;
- 2. Draw the graphical model of the objective tree of a pharmaceutical organization, assigning objectives by importance and duration.
- 3. Make 3 concrete objectives for each level.



**Exercise 2.** Choose from literature and fulfill the objective and the tasks of ergonomics:

ERGONOMICS – content:

**Objective:** 

Tasks:

Tasks for ergonomically work organization:

**Exercise 3.** Write the methods to study the work:

Time research:

Photographing the workday:

**Exercise 4.** Make an analysis of time management of a pharmacist from a community pharmacy to determine:

- a) Which are the "thieves" of time?
- **b)** What are the defacto activities of the pharmacist? Use the Eisenhower matrix.
- c) How could a pharmacist optimize the use of time?

**Exercise 5.** Indicate the content and principles of human resources management:

**Exercise 6.** Indicate the functions of human resources management and how to apply them:

Conclusions and suggestions of the student:

The teacher's signature \_\_\_\_\_

# Lesson 4. PUBLIC HEALTH. HEALTHCARE SYSTEM. PHARMACEUTICAL SYSTEM. COORDINATION OF THE PHARMACEUTICAL SYSTEM.

**The aim of lesson:** To know the structure, purpose and tasks of the public health and pharmaceutical assistance systems in the Republic of Moldova and the coordination system and the main directions of development of the pharmaceutical system.

# *The type of learning:* Seminar. *Lesson duration:* 4 hours.

# **Question for self-learning:**

- 1. The general notions about public health.
- 2. The healthcare system in Republic of Moldova.
  - a) The Ministry of Health, Labor and Social Protection from Republic of Moldova.
  - b) Primary and emergency care.
  - c) Specialized and hospital care.
  - d) Medical assistance for mother and child.
  - e) System of public health (preventive healthcare).
  - f) Basic principles of compulsory medical insurance.
- 3. National health policy.
- 4. International organizations in health protecting.
- 5. General notions about system and coordination.
- 6. General features of the pharmaceutical system.
- 7. Coordination of the pharmaceutical system.
- 8. National and international organizations in the pharmaceutical field.

# **Exercises for self-solving:**

**Exercise 1.** Select the means of "public health" and "health management" basing on various principles and approaches.

Exercise 2. Write the meaning and content of "individual health".

**Exercise 3.** List the groups of factors and factors that influence the people health.

**Exercise 4.** List the basic contents, functions and attributions of the main subsystems of the health system in the Republic of Moldova.

**Exercise 5.** Indicate the basic principles of organizing healthcare based on mandatory medical insurance.

**Exercise 6.** Indicate for each of the components of the pharmaceutical system the purpose and its ways of realization and the current structure of the subsystem.

**Exercise 7.** Enumerate the functions and attributions of the Ministry of Health, Labor and Social Protection in Republic of Moldova in the pharmaceutical field.

Conclusions and suggestions of the student:

The teacher's signature \_\_\_\_\_

# Lesson 5. GENERAL NOTIONS OF LAW AND LEGISLATION. PHARMACEUTICAL LEGISLATION.

*The aim of lesson:* To learn the basic notions of the system of law, the content of pharmaceutical legislation. To learn the content of the notion of pharmaceutical activity, the conditions for the authorization of pharmaceutical activity.

*The type of learning:* Seminar and laboratory practical work *Lesson duration*: 4 hours

## **Questions for self-learning:**

- 1. General notions about law and legal norm.
- 2. Classification of legal norms.
- 3. The system of law and the main features.
- 4. Normative/legislative act. Classification and systematization of normative acts.
- 5. Pharmaceutical legislation: historical and regulation aspects, modifications and completions.
- 6. State medicines policy (SMP).
- 7. The law on pharmaceutical activity and its regulatory areas.
- 8. The law on medicines and its regulatory areas.
- 9. The law on narcotic and psychotropic substances and precursors and its regulatory areas
- 10. Correlation of pharmaceutical legislation with other branches of legislation.
- 11. European Union legislation on medicinal products and pharmaceutical activity

# **Exercises for self-solving.**

# Exercise 1. Write the tasks and main elements of State Medicines Policy

**Exercise 2.** Fulfill the space with the regulation fields of pharmaceutical activity, selected from the Law on pharmaceutical activity.

I.	 
II.	 
III.	
IV.	
V.	 
VI.	

# **Exercise 3.** Select from the Law on medicines the goal and areas of application.

The goal:

Г

Areas of application:

**Exercise 4.** Write from the Law on narcotic and psychotropic substances and precursors the goal and the meaning of drug, narcotic, psychotropic, precursor.

**Exercise 5.** Examine carefully the Law on Pharmaceutical Activity or the Law on Medicines and the Contravention Code. Find in them at least a legal standard for infringement are not established penalties. Suggest written formula for the application of changes (additions).

Exercise **6**. Formulate in a written form a new legal norm to establish:

- a) the pharmacist's exclusive right to possess private pharmacy;
- b) ban "pharmacy chains" (networks of pharmacies);
- c) the obligation of the young graduate of the pharmacy faculty, who made studies on the basis of the budget financing to activate the first three years after graduation in a rural pharmacy;
- d) the pharmacist's right to exercise pharmaceutical activity only on the basis of membership of the Moldovan Pharmacists' Association;
- e) banning the advertising of medicines through mass media;
- f) the establishment of the allowed product groups to be achieved through public pharmacies.

Determine the classification group of the formulated legal norm according to the regulation of conduct.

Exercise **7.** Find in the legislation of the Republic of Moldova the normative legislative acts in the field of law::

a) labor; b) civil; c) administrative; d) commercially;

e) tax; f) customs; g) criminal law.

which correlates with the pharmaceutical activity and draw up a list of such acts explaining correlation (in writing form).

Conclusions and suggestions of the student:

The teacher's signature \_\_\_\_\_

# Lesson 6. PHARMACEUTICAL ACTIVITY AND ITS AUTHORIZATION.

*The aim of lesson:* To learn basically notions about pharmaceutical legislation, the content of pharmaceutical activity and conditions of authorization the exercise of pharmaceutical activity.

*The type of learning:* Seminar and laboratory practical work. *Lesson duration:* 4 hours.

## **Questions for self-learning:**

- 1. The pharmaceutical system. Reform of the pharmaceutical system. Development directions.
- 2. Coordination of pharmaceutical system.
- 3. The law on pharmaceutical activity. Characteristics of pharmaceutical activity.
- 4. Enterprises and pharmaceutical institutions and property types on them.
- 5. Authorization of pharmaceutical activity.
- 6. Basic licensing principles.
- 7. Conditions to obtain the license.
- 8. Updating and issuance of license duplicate.
- 9. General notions regarding the evaluation and accreditation of pharmaceutical companies.
- 10. Temporary license suspension and withdrawal. Exercising pharmaceutical activity.

# **Exercises for self-solving:**

**Exercise 1.** Make an Application to the Medicines and Medical Devices Agency to obtain the Pharmaceutical License.

Indicate the necessary documents to be attached to the Application.

**Exercise 2.** Write a Statement to the Medicines and Medical Devices Agency that is attached to the License Application for Pharmaceutical Activity.

**Exercise 3.** Indicate the cases and conditions under which the License for exercising pharmaceutical activity may be suspended.

**Exercise 4.** Indicate the cases and conditions under which the License for exercising pharmaceutical activity may be withdrawn.

Exercise 1 solving

Annex no.1 to the Order of Medicines and Medical Devices Agency No. A 07 PS – 01. Rg – 04- 227 from 02.11.2017

#### To the Chief Executive Officer of Medicines and Medical Devices Agency Mr. Vladislav ZARA

No. from

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# APPLICATION for license issuance

	Com	pany tax code
	name, surname, identificatio	on number of the requesting person;
Phone	Fax	e-mail
Type of activity		
in	whole or in part, for which a	license is requested
pharmacy		
□ pharmacy subsidiary		
□ pharmaceutical wareho	ouse	
$\hfill\square$ within the industrial phase $\hfill\square$	narmaceutical enterpri	se
$\hfill\square$ with the right to work v	with the substances $\Box$	narcotics $\Box$ psychotropics $\Box$ precursors
$\Box\Box$ without the right to w	vork with the narcotics	s, psychotropics and precursors
The address of the license	ed activity	
To the application are an	nnexed the next docu	ments:
□ the copy of the proper <i>extract from the Real Estat</i>	5 0	where the licensed activity will take place ( <i>Copy of the ing lease agreement</i> );
□ copies of graduation di	plomas of the higher in	nstitution or of college in the pharmaceutical field;
$\Box$ a copy of the certificate cate;	confirming the contin	nuous education; continuing medical education certifi-
□ copies of the employme	nt orders of the heads	of the pharmaceutical company and their subsidiaries.
		nce of the licensing conditions for carrying out the type ity of the documents attached to the application
Name annance of the mone	and of	

Name, surname of the manager of organization or person authorized to submit documents (with indication of function)

signature

#### Exercise 2 solving

Annex no. 1 to the Order of MMDA no. A 07 PS - 01. Rg- 04- 240 from 27.11.201
STATEMENT ON OWN RESPONSIBILITY

By this ,					
5	(applicant's name, tax code, address)				
throu	gh the representative person				
	gh the representative person	. of odentit	y card)		
(man	date)	declares	s the tru	uthfulness of the	
subm	itted information, according to the questionnaire, in c	order to o	confirm	compliance with	
	equirements of the in force legislation for the exercisi			-	
the re	equirements of the inforce registation for the exercisin	ing of price	maccu	cical activity.	
Data	Ci-				
Date	Sig	nature _			
				Comments with	
		Conformable		reference to	
No.				documents prov-	
		VEC	NO	ing	
		YES	NU		
		YES	NU	the answer	
1.	Compliance with the location regulations according to	YES	NU	the answer	
1.	point (4) art. 19 of the Law no. 1456 of 25.05.1993 on	YES	NU	the answer	
1.	point (4) art. 19 of the Law no. 1456 of 25.05.1993 on pharmaceutical activity	YES	NU	the answer	
1. 2.	point (4) art. 19 of the Law no. 1456 of 25.05.1993 on	YES	NO	the answer	
	point (4) art. 19 of the Law no. 1456 of 25.05.1993 on pharmaceutical activity	YES		the answer	
	point (4) art. 19 of the Law no. 1456 of 25.05.1993 on pharmaceutical activity Compliance with demographic norms according to point	YES	NO	the answer	
	point (4) art. 19 of the Law no. 1456 of 25.05.1993 on pharmaceutical activity Compliance with demographic norms according to point (5) art. 19 of the Law no. 1456 of 25.05.1993 on pharma-	YES	NO	the answer	
2.	point (4) art. 19 of the Law no. 1456 of 25.05.1993 on pharmaceutical activity Compliance with demographic norms according to point (5) art. 19 of the Law no. 1456 of 25.05.1993 on pharma- ceutical activity	YES		the answer	
2.	point (4) art. 19 of the Law no. 1456 of 25.05.1993 on pharmaceutical activity Compliance with demographic norms according to point (5) art. 19 of the Law no. 1456 of 25.05.1993 on pharma- ceutical activity Assuring the pharmaceutical company with specialists	YES		the answer	
2.	point (4) art. 19 of the Law no. 1456 of 25.05.1993 on pharmaceutical activity Compliance with demographic norms according to point (5) art. 19 of the Law no. 1456 of 25.05.1993 on pharma- ceutical activity Assuring the pharmaceutical company with specialists according to the mandatory qualification requirements	YES		the answer	
2.	point (4) art. 19 of the Law no. 1456 of 25.05.1993 on pharmaceutical activity Compliance with demographic norms according to point (5) art. 19 of the Law no. 1456 of 25.05.1993 on pharma- ceutical activity Assuring the pharmaceutical company with specialists according to the mandatory qualification requirements provided by art.22 of the Law no. 1456 of 25.05.1993 on the pharmaceutical activity and Order no. 553 of			the answer	
2.	point (4) art. 19 of the Law no. 1456 of 25.05.1993 on pharmaceutical activity Compliance with demographic norms according to point (5) art. 19 of the Law no. 1456 of 25.05.1993 on pharma- ceutical activity Assuring the pharmaceutical company with specialists according to the mandatory qualification requirements provided by art.22 of the Law no. 1456 of 25.05.1993 on			the answer	

vided by the Government Decision no. 504 of 12.07.2012

about the approval of the Health Regulation regarding the endowment and exploitation of pharmacies and pharma-

Providing the pharmacy with appropriate equipment and pharmaceutical equipment provided by the Government

Decision no. 504 of 12.07.2012 about the approval of the Health Regulation regarding the endowment and exploitation of pharmacies and pharmaceutical warehouse. The pharmacy has facilities and equipment specific to the production function, according to the requirements of the Government Decision no. 504 of 12.07.2012 about the approval of the Health Regulation regarding the endow-

ment and exploitation of pharmacies and pharmaceutical warehouse and the requirements of point 2.3 of the Health Ministry Order no. 10 of 06.01.2006 on the supervision of

4.

5.

6.

ceutical warehouse.

pharmaceutical preparations.

**Exercise 5.** The manager of a pharmaceutical company wrote an Application for Licensing and attached the following documents:

- 1. Copy of State Enterprise Registration Certificate.
- 2. Copy of the extract from the real estate register.
- 3. The copy of the sanitary authorization for the operation of the pharmaceutical enterprise, issued by the territorial sanitary-epidemiological service
- 4. Copy of the authorization of the Permanent Drug Control Committee of the Republic of Moldova for the use of buildings and rooms for activities related to the circulation of narcotic and psychotropic substances and precursors
- 5. The copy of the graduation diploma of the specialized pharmaceutical college
- 6. The copy of the registration for employment as a pharmacist manager
- The Medicines and Medical Devices Agency has studied the Application and attached documents and within the time limit set by the law, rejected the Application for the License.
- 1. Indicate how long the decision to reject the Application should be adopted.
- 2. Indicate the reasons behind the decision to reject the Application

Conclusions and suggestions of the student:

The teacher's signature \_\_\_\_

# **INTERMEDIARY ASSESSMENT ON LESSONS 1-6.**

The intermediary assessment is organized in writing and in the form of a test to verify the level of studying of the material during the previous laboratory works. All students who have completed all laboratory work and presented the minutes for each work are admitted.

To summarize the material, use the questions from the laboratory work for self-learning, the basic literature, examples of exercises solved during the laboratory work.

# Lesson 7. THE MEDICINES AND OTHER PHARMACEUTICAL PRODUCTS AS A STUDY OBJECT OF PHARMACEUTICAL ASSISTANCE. THE MARKETING AUTHORIZATION OF MEDICINAL PRODUCTS.

**The aim of lesson:** To learn the characteristics of medicines as a study object of pharmaceutical assistance, classifications, development stages, conditions of production, the need, criteria and principles of medicinal products authorization for using them in the medical practice.

*The type of learning:* Laboratory practical work. *Lesson duration:* 4 hours.

### **Questions for self-learning:**

- 1. General views on the importance of drugs and their specific features.
- 2. The law on medicines. The main notions and requirements towards medicines.
- 3. Main stages of medicines development.
- 4. Quality assurance standards for medicines: *Good Laboratory Practice (GLP), Good Clinical Practice (GCP), Good Manufacturing Practice (GMP), Good Distribution Practice (GDP), Good Pharmacy Practice (GPP).*
- 5. Names and classifications of medicinal products. Essential medicines.
- 6. Marketing authorization of medicinal products and its goal.
- 7. Stages, principles and criteria for authorization of medicines.
- 8. Registration documentation.
- 9. The Medicines Commission.
- 10. The marketing authorization.
- 11. State Nomenclature of Medicines.

# **Exercises for self-solving:**

**Exercise 1.** Look the structure and complete the Report on the Assessment of the Medicinal Product File presented for primary authorization.

**Exercise 2.** Complete the Marketing Authorization of Medicinal Product. Indicate the documents on which the MA is issued.

**Exercise 3.** Analyse the State Nomenclature of Medicines (SNM):

- indicate the information relating to the medicines included in SNM;

- select from SNM 2 International Nonproprietary Names of Rx and OTC medicines. Justify the decision of the Medicines Commission on the statutory status.

**Exercise 4.** Basing on International Nonproprietary Names of medicines determine the assortment of pharmaceutical products (trade names of medicines) authorized in the Republic of Moldova.

Evaluation report of quality (Modules 2.3, 3)
For the authorization of medicine <b>(trade name, dosage form, dose, packaging)</b>
3.2.S. Active substance
<ol> <li>Origin of active substance (manufacturer, presence of GMP certificate or CPP, notarial authenticated)</li> </ol>
<ol> <li>Quality of active substance (presence of specification, quality documents)</li> </ol>
3. Stability (according with the norms of specification, conclusions)
Period of validity of active substance
Storage conditions
3.2.P. The pharmaceutical product

1. Composition (active substance and excipients), the batch size

1.1 The medicines contains or is obtained from genetically modified organisms **(module 1.6.1)** 

2. The manufacturer/manufacturers responsible for production (GMP certificate for each manufacturer, manufacturing authorization, notarial authenticated)

3. The quality control (specification, certificates of batches analyses)

3.1 The agreement between the holder and the manufacturer (when the holder and the manufacturer are not the same person)

3.2 Letter of compliance attesting the ownership of the holder and the manufacturer to the same group of companies (when both the holder and manufacturer are members of the same group of companies)

4. Packing (the type of primary and secondary packaging)

<ol> <li>Stability (according with the norms of specification for all manufactur- ers, conclusions)</li> </ol>		
5.1 Tested batches (industrials, pilot)		
5.2 In real time <b>(period)</b>		
5.3 In accelerated time <b>(period)</b>		
5.4 After the first opening <b>(when is the case)</b>		
5.1 miler the mist opening (when is the case)		
Period of validity of active substance		
Storage conditions		
Objections		
Conclusions		

The Expert: /\_\_\_\_/ /\_\_\_\_/

#### MINISTERUL SĂNĂTĂTII AL REPUBLICII MOLDOVA **AGENTIA MEDICAMENTULUI** SI DISPOZITIVELOR MEDICALE



MINISTRY OF HEALTH **REPUBLIC OF MOLDOVA** MEDICINES AND MEDICAL **DEVICES AGENCY** 

#### **CERTIFICAT DE ÎNREGISTRARE** A MEDICAMENTULUI MARKETING AUTHORIZATION OF MEDICINAL PRODUCT

În baza ordinului MS RM (nr. din " \_\_

" 20\_\_\_) In accordance with order of MoH RM (nr. from " " 20 )

se decide autorizarea produsului:

has been decided the registration of product: Denumire comercială: Name: Formă farmaceutică, doză, mărimea ambalajului: Dosage form, strength and package size: Compoziția: Composition: Deținător al Certificatului de Înregistrare: Marketina Authorization Holder: Producător: Manufacturer: **Clasificarea ATC:** ATC classification: Termen de valabilitate: Shelf life: Număr de înregistrare, data emiterii: Registration number, and date of issue: Anexa1 Rezumatul caracteristicilor produsului și prospect Summary of the product and patient information leaflet sau Instructiunea pentru administrare Instructions for administration Anexa 2 Informatii privind etichetarea Information on the labeling Parametrii de calitate ai produsului sunt cei prevăzuți în documentația care a stat la baza eliberării prezentului Certificat de Înregistrare. The quality of the product is that which is stipulated by the documentations which were the basis for giving this particular Marketing Authorization. Orice modificare a datelor specificate în Certificatul de Înregistrare sau în documentatia de autorizare trebuie raportată și aprobată de Agenția Medicamentului. Any modification of the data stipulated by the Marketing Authorization or documentation must be reported to the Medicines Agency and have its approval. Prezentul Certificat de Înregistrare are o valabilitate de 5 ani de la data emiterii si nu conditionează impor-

tul.

The Marketing Authorization is valid for 5 years after emission and doesn't guarantee the import of the medicinal product.

#### **General Manager**

Exercise 4

Variant	International Nonproprietary Names of medicines	
1	Diclofenac, Ibuprofen, Indometacin	
2	Ciprofloxacin, Norfloxacin, Ofloxacin	
3	Omeprazol,Famotidin, Lansoprazol	
4	Ampicilin,Azitromicin,Cefalexin	
5	Carbamazepin, Acid valproic, Clonazepam	
6	Diazepam, Alprazolam, Zopilclonum	
7	Piracetam, Vinpocetin, Gingko Biloba	
8	Terbinafil, Fluconazol, Ornidazol	
9	Enalapril, Lisonopril, Ramipril	
10	Simvastatin, Atorvastatin, Rosuvastatin	
11	Metoprolol, Atenolol, Bisoprolol	
12	Loratadin, Cetirizin, Desloratadin	

Conclusions and suggestions of the student:

The teacher's signature \_\_\_\_\_

# Lesson 8. OUALITY ASSURANCE OF MEDICINAL PRODUCTS. INDUSTRIAL PRODUCTION OF MEDICINES.

*The aim of lesson:* To study the basic principles regarding the state quality control of different groups of medicines, the working procedures on documenting the organization of state control, the basic principles regarding the assurance of the pharmacovigilance service. To learn conditions for the industrial production of medicines, the elaboration and application of the Analytical Normative Documentation

The type of learning: Laboratory practical work. Lesson duration: 4 hours.

# **Questions for self-learning:**

- 1. Pharmaceutical legislation on the protection of rights of medicines consumers.
- 2. General characteristic of medicines quality assurance system.
- 3. Task and functions of the Laboratory for Quality Control of Medicines.
- 4. State Quality Control of Medicines.
- 5. Types of State Control and their feature.
- 6. Documentation for the quality of medicines.
- 7. Surveillance and pharmacovigilance of medicinal products. Method of organizing the monitoring of adverse effects of medicines.
- 8. General requirements for medicines production.
- 9. Rules of Good Manufacturing Practice.
- 10. The organizational structure of the industrial pharmaceutical enterprise.
- 11. Nomenclature of technological documentation for the manufacture of medicinal products.

#### **Exercises for self-solving:**

**Exercise 1.** Complete the Request for taking the average sample and performing state control and the Sampling Act for the state control of medicinal products manufactured by an indigenous manufacturing company.

Annex no 4

No. from

to the Regulation on State Quality Control of Medicines **Medicines Agency** 

Laboratory for Medicines Quality Control

#### REQUEST

for taking the average sample and performing state control of manufactured medicines / raw material, at the enterprise.

\_ requests sampling and performing state control of manufactured medicines / raw materials, at the enterprise.

Attached:

- copy of the quality certificate from the manufacturer. 1.
- 2. copy of the customs declaration -1 copy \*.
- copy of the completed customs invoice (in the case of import) 1 copy or invoice for 3. shipping and transport in the case of procurements on the territory of the Republic of Moldova \*.

\* - for the control of raw materials used in the manufacture and / or preparation of medicaments Manager

Annex no 6 to the Regulation on State Quality Control of Medicines

#### Sampling Act for the state control of medicinal products manufactured in the Republic of Moldova from \_\_\_\_\_\_20\_\_\_

Committee members:

Pharmacist manager\_\_\_\_\_

Pharmacist responsible for the quality\_\_\_\_\_

Representative of MA\_\_\_\_\_

Joined representative (depending on the case)\_\_\_\_\_

#### took the samples of medicinal products for state control within the company

No	Code of MP	Trade name of MP	INN	Dos- age form	Dos e, pack age	Stored quan- tity	Man ufac ture r	Regis- tra- tion no in SMN	Ana- lytical doc- ument	Ba tc h	Ex pi ry da te	Sam plin g qua ntity	Re- turn ed qua ntity
	1	2	3	4	5	6	7	8	9	10	11	12	13

Pharmacist manager\_\_\_\_\_ Pharmacist responsible for the quality\_\_\_\_\_ Representative of MA\_\_\_\_\_ Joined representative (depending on the case)\_\_\_\_\_

**Exercise 2.** Complete for one medicine a) Quality certificate, b) Register of medicines, which distribution is authorized on the basis of quality certificates of the manufacturer and organoleptic control, packaging and the marking, and c) Analysis bulletin.

#### Ministry of Health from the Republic of Moldova MEDICINES AGENCY

# Laboratory for Medicines Quality Control

MD 2028 Chișinău, Korolenko 2/1 str., phone.727203

## REGISTER

of medicines, which distribution is authorized on the basis of quality certificates of the manufacturer and organoleptic control, packaging and the marking

no.	Regis- tration no	The name of medicine	Batch	Quanti- ty	Produc- er	Certifi- cate from the pro- ducer	Expiry date	Analytical document
1.								
2.								
3.								
4.								

The aspect, packaging and marking of the samples correspond to the analytical document

Chief of Laboratory for Medicines Quality Control

Annex no 1 to the Regulation on State Quality Control of Medicines

#### Ministry of Health from the Republic of Moldova MEDICINES AGENCY

# Laboratory for Medicines Quality Control

MD 2028 Chișinău, Korolenko 2/1 str., phone.727203

Batch

Quality certificate no. from

Name

Producer:

Presented at

recieved \_\_\_\_\_packages, sampled from \_\_\_\_\_ stored packages, used \_\_\_\_\_, returned \_\_\_\_\_. Analysis according to AD:

no.	Criteria	AD limits	Results
1.			
2.			
3.			

Conclusion:

**Chief of Laboratory for Medicines Quality Control** 

by

	oldova									
		<i>Laboratory for Medicines Quality Control</i> MD 2028 Chișinău, Korolenko 2/1 str., phone.727203								
		Analys	is bulletin no.	from						
Name				Batch						
	ed at		rom stored packa	ges, used , retı	ırned					
no.	Cri	iteria	AD limi	its	Results					
Conclusi	ion:									

#### Chief of Laboratory for Medicines Quality Control

**Exercise 3.** The medicine importer disagrees with LMCC MA decision on inappropriate quality of the medicine (see exercise 2). Specify the documents required to perform the State Arbitration Control.

**Exercise 4.** Complete one copy of the "SAFETY NOTICE ABOUT SIDE EFFECTS/or lack of effectiveness of medicines and other pharmaceutical products" and "COM-MUNICATION ON SIDE EFFECTS OF MEDICINES AND OTHER PHARMACEUTICAL PRODUCTS" in the National Drug Enhancing Monitoring Center.

#### SAFETY NOTICE ABOUT SIDE EFFECTS / or lack of effectiveness of medicines and other pharmaceutical products (underlined / check solution acceptable answer)

The confidentiality of the identity data mentioned in this form will be respected !!!

PATIENT INFORMATION					* The side effect caused::					
Name or initials: *	Date/ mo	onth / y	ear of bii	rth	□ patient's death, to be indicated (time / date / month /					
/Age * Sez	к: 🗆 М 🛛	F *W	eight (k	g)	vear)					
* Height (cr	n)				□ endangering	g the patient's life				
City (District)	The villa	ge	_ Phone	num-	🗆 hospitalizat	ion or prolongatior	n of hospita	lization;		
ber					🗆 important o	r lasting disability	/ disability	,		
Habits: 🗖 smokin	g 🛛 Drink	ting 0	ther:	_	Developme	ntal anomaly / cong	genital mal	formation		
Pregnancy □* All	ergy (to indi	cate ):	□ Yes _		□ healing with	nout sequelae (cons	sequences)	;		
□Not					🗆 state withou	ıt dynamics				
The diagnosis:					🗆 unknown					
Treatment: □Outp medication	atient □Stat	ionary <b>l</b>	⊐ Self-		🗆 other, indica	ate	_			
medication										
№ ambulatory car	d or the obse	rvation	form		$\Box$ The lack of $\epsilon$	efficacy of the drug	g (LE)			
* Description of s	side effect (S	5E):			* Date / time of initiation SE// :					
					Date / time of healing SE// :					
					* Duration:					
* MEDICINAL PR	ODUCT (PM	) suspe	cted of l	naving a	side effect (SE)	/ Lack of efficacy	of the giv	en drug (LE)		
Commercial Name (DC)	9			Intern Name	ational Joint e (ICC)					
The manufacture	r		Cou	ntry		Series No. / date of manu- facture				
Cause of using the remedy (disease or patho logical conditions)	admin-	Single dose		/ day neral)	The beginningt of PM admin- istration date / month / year	End of PM administration date / month / year	Date of detection SE	The dose that pro- duced SE		
					/ /	/ /	/ /			
OTHER MEDICINI	ES administe	red co	ncomita	ntly (at	the same time)	🗆 no 🗆 yes	1			
Commercial Name (DC)	/ ministra-		Dose / day (nictemeral)	The beginningt of PM admin- istration date / month / year	End of PM admin- istration date / month / year	Cause of using the remedy (disease or pathological conditions)				
							/ /			

		/ /	/ /	
		/ /	/ /	
		/ /	/ /	

Measures taken to improve SE:      Suspected drug was discontinued	Cessation of the suspected medicinal product was followed by regression of the adverse ef- fect? □ yes □ no □ PM has not been stopped					
<ul> <li>Drug administration has been discontinued concurrently</li> </ul>	Did the repeat or worsening of the adverse effect on the repeated administration of the medicinal product have been determined?  yes  no					
<ul> <li>Received treatment for SE symptoms (what it was treated for (if you have any information))</li> </ul>	RA improving drug therapy (if it was neces- sary)					
<ul> <li>without treatment</li> <li>Other, to be indicated</li> </ul>						
RELEVANT ADDITIONAL INFORMATION						
Antecedents relevant to the case (other concomitant diseases, allergic conditions, past drug allergy, suspected drug interactions, kidney or liver disorders, pregnancy, lactation, special dietary regimens, harmful habits, ionizing radiation exposures, etc.);						

- For developmental abnormalities / congenital malformations arising from the administration of the suspected medicinal product, to indicate all the drugs administered during pregnancy, also the date of the last menstrual period, other relevant data;
- Additional data on the adverse effect (clinical examinations, paraclinical examinations, radiological examinations, relevant laboratory tests (if possible) concentration of the drug in the blood and tissues in case of death of the patient (cause of death, if the death is related to the administration of the suspected medicinal product RA, autopsy data) Describe the pathological changes, indicating the norms in brackets.
- Relevant data to justify the lack of efficacy of the suspected medicinal product (when is applicable).

* Physician or other p	erson who has registe	red SE	
*NS:		* Specialization:	
* Workplace:		* Address of the institution:	
** Phone:	**Fax:	*e-mail:	
* Date of filing:			
-		t: Department pharmacovigilance and rational u 2; Fax: 88-43-38; e-mail: farmacovigilenta@ame	

Fields marked with \* are mandatory. To the extent that you have availability please fill in the other fields as they are important in themselves! \*\* Fill in at least one contact information

# The patient communicates

# COMMUNICATION ON SIDE EFFECTS OF MEDICINES AND OTHER PHARMACEUTICAL PRODUCTS

The confidentiality of the identity
data mentioned in this form will be respected !!!

PATIENT INFORMATION									
* Name or initials: * Date/ m	onth / year o	of birth /Age * S	Sex: 🗆 M 🗖	F*Weigh	it (kg)* Height (cm)				
City (District) The village Phone number Habits: 🛛 smoking 🗖 Drinking									
Other: Pregnancy □ * Allergy (to indicate ): □ Yes □ Not									
Diseases suffered by the person:									
* <b>Description of side</b> effect (symptoms, how it occured):	SE: //	r of curing SE: Serious, affect physic 			d not affect physical activity sical activity octor				
SUSPECTED MEDICINE(S)	:								
* Medicine Trade Name									
Manufacturer / Country / №	series / date	of manufacture (if	you have info	mation)					
* Dose frequency, duration,	route (eg: 1 t	tablet, 3 dly, by mo	uth)						
Cause of using the remedy (d	isease or pat	hological conditior	ıs)						
Start of administration M (date / month / year)//       End of M administration (date / month / year)//       Duration of administration M (days)									
* The medicine was previou	sly used 🗖 n	io □ yes (specify if	it was SE)		-				
* OTHER MEDICINES adm	inistered co	ncomitantly (at t	he same time)	🗆 no 🗆 y	ves				
If Yes, please specify which	medicines								
<ul> <li>* Measures taken to impr</li> <li>Suspected drug was dis</li> <li>The dose of the suspec</li> <li>Drug administration ha</li> <li>Received treatment for you have any infor</li> <li>without treatment</li> <li>Other, to be indicated</li> </ul>	scontinued ted drug was as been disco SE sympton mation))	ontinued concurren ns (what it was trea	ated for (if	of compl o Does r scribe o It still better o Still ha	has symptoms, but it feels				
* <b>Measures to improve SE</b> <ul> <li>physician □nurse□pharm</li> </ul>			_	o The co	ondition has worsened erson died				
* <b>The person who fulfills t</b>	he form:	Communicated	the adverse re	eaction:					
□ The patient's relative Name: Address : □ Physician					* Phone:				
<ul><li>pharmacist</li><li>Nurse</li></ul>		**e-mail:			* Filling date:				
Other specification			-						
Send patient communication sheet at: Department pharmacovigilance and rational use of medicines Phone: 88-43-38, 73-70-02; Fax: 88-43-38; e-mail: <u>farmacovigilenta@amed.md</u>									

Fields marked with\* are mandatory.. o the extent that you have availability, please fill in the other fields as they are important in their turn! \*\* Fill out at least one of your contact information.

**Exercise 5.** List the necessary documents for the industrial production of medicines specifying for each one order of production and their content.

Conclusions and suggestions of the student:

The teacher's signature \_\_\_\_\_

# Lesson 9. SUPPLY OF MEDICINES. THE PHARMACEUTICAL WAREHOUSE, ITS TASKS AND FUNCTIONS.

*The aim of lesson:* To know how is organized the supplying of medicines process, how to realize an import, tasks, functions and structure of pharmaceutical warehouse.

*The type of learning:* Seminar and laboratory practical work. *Lesson duration:* 4 hours.

# **Questions for self-learning:**

- 1. The general feature of the drug delivery system. Supply cycle.
- 2. Characteristics of medicines import in Republic of Moldova.
- 3. Authorization and order of import of medicines in the Republic of Moldova.
- 4. Contracts of supplying and delivering of medicines.
- 5. Pharmaceutical warehouse, tasks and functions. The organizational structure.
- 6. Space, endowment and requirements for the pharmaceutical warehouse. Rules of Good Distribution Practice - GDP.
- 7. General principles of storage of medicines at the pharmaceutical warehouse.
- 8. Receiving pharmaceutical products from suppliers.
- 9. Order of delivery of pharmaceutical products from the warehouse.

# **Exercises for self-solving:**

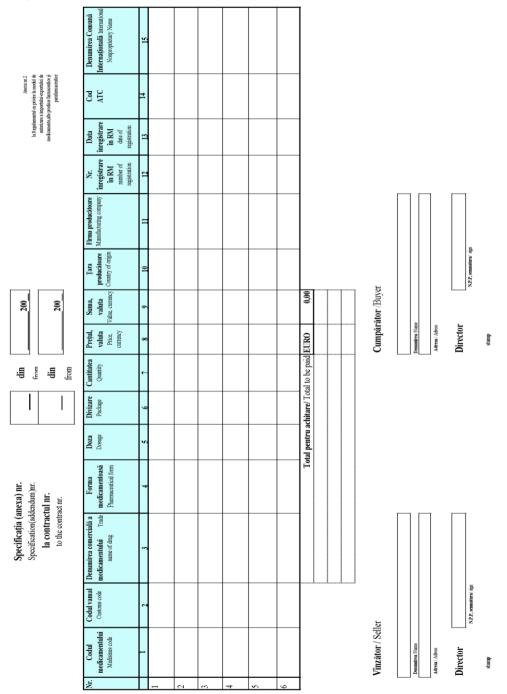
**Exercise 1.** Specify the documents required by the economic agent to receive the import authorization for medical products.

**Exercise 2.** Complete the request for the import transaction (the required data will be arbitrarily taken).

			.1			of the in	nport-exp	Annex no.1 thorization Mode ort of medicines,
1.Importer, address	<u> </u>		other pharmaceutical and parapharmaceutical products 8. REQUEST for IMPORT Authorization					
1.111porter, addres.	5		0. KEQU	101		ORDINA		cion
2. Reg. N	lo. on _//_			No		01	n/	_/
3. Manufacturer, ad	ldress		9. Seller,	addres	s			
			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	addi ob	0			
							10	Collon country
4. Country of destir	nation <b>Moldova M</b>	D	11.Expi	rv date	R	equested		Seller country According to
i. country of destin			11.LAPI	ly dute		ording to		the authori-
						equest		zation
5. Manufacturing co	ountry				/	/_/_		//
6. Custom 7. Code o		12 '	Transacti	on tune				
custom /. code c			ying / Sel					
	-	5		8				
		13.0	Curency o	f payme	ent			
14.Name and	15.Code of		Unit	17.		18.	19.Valu	
characteristics of	goods	of t		Quanti	ity		Thous	and curency
goods		mea	isure					
20. Grounds for the	e application for au	-	22.					
thorization								
Agreement no	on		DO NOT COMPLETE					
Specification (anne			DUNUI	COMPT	ויזר	Ľ		
	, <u> </u>							
21. Director of imp	orter company		23.					
Function DIRECTO	R		DO NOT	' COMPI	( FT	٦		
			DONOI	COMI	1 11	П		
Signed and author								
24. Terms and cond	litions							

**Exercise 3.** Make a Pharmaceutical Supply Agreement between a pharmaceutical warehouse and a manufacturer of medicines from abroad.

**Exercise 4.** Complete the specification of the imported products with the indication of the manufacturer, the country of origin, the number and the date of registration of the product (collect necessary information from the State Nomenclature of Medicines).



**Exercise 5.** Determine import and other taxes for imported pharmaceuticals. **Exercise 6.** Complete the Import Authorization.

Annexa no. 2 to the Order of Medicines Agency No. 1 from 16.01.2006

MINISTRY OF HEALTH FROM REPUBLIC OF MOLDOVA MEDICINES AND MEDICAL DEVICES AGENCY IMPORT AUTHORIZATION							
1.Importer, address		8. RE(	QUEST for		T Author DINARY	ization	l
2. Reg. No. on _/	/_		No.		on	_//_	
3. Manufacturer, address			er, addres				
4. Country of destination <b>M</b>	oldova		eller countr piry date	y	Reque	stad	According to
MD	oluova	11.68	apiry date		accordi the req	ng to	the authori- zation
5. Manufacturing country					_/_/_		//
6. Custom 7. Code of custom			12. Trans Buying /	saction type / Selling			
			13. Curency of payment				
14.Name and characteris- tics of goods	s- 15.Code of goods		16. Unit o measure	of the	17. Quanti- ty	18.	19.Value Thousand curency
					-	1	
20. Grounds for the applica	tion for autl	norizat	ion	22. TH	IE MEDIO	INES A	AGENCY
Agreement no on				<b>N.S.</b> Function General Manager			
Specification (annex) no	_						a//
21. Director of importer co	mpany			23. Import-Export Section of			
Function DIRECTOR				Medicines, Other Pharmaceuti- cals and Parapharmaceuticals			
Signed and authorized Date _/_/_				N.S.			
			tion Head 		Date		
24. Terms and conditions To be reviewed at 00.00.200X Instruction in Roumanian or Roumanian and Russian. Products are included in the State Nomenclature of Medicines.							

**Exercise 7.** Complete the Request for taking the average sample and performing state control and the Sampling Act for the state control of imported medicinal products

Annex no.5 to the Regulation on State Quality Control of Medicines **Medicines Agency** Laboratory for Medicines Quality Control REOUEST for taking the average sample and performing state control of imported medicines requests sampling and performing state control of imported medicines (the name of enterprise) according to the import authorization: No.\_\_\_\_\_ from \_\_\_\_\_ Attachment: 1. copy of the customs declaration – 1 copy; 2. copy of Invoice – 2 copies: 3. project of the Sampling Act for the state control of imported medicinal products – 3 copies; 4. electronical document of the Sampling Act for the state control of imported medicinal products Manager Annex no.7 to the Regulation on State Quality Control of Medicines Sampling Act for the state control of imported medicinal products from \_\_\_\_\_20\_\_ Committee members: Pharmacist manager \_\_\_\_\_\_ Pharmacist responsible for the quality \_\_\_\_\_\_ Representative of MA Joined representative (depending on the case) took the samples of medicinal products for state control within the company No. of custom declara-No. of import authori Producing company Producing country **Frade name of MP** Sampling quantity Returned quantity Stored quantity Price, currency Fotal, currency Custom code Dosage form Expiry date Code of MP Package zation Batch Dose tion No Total Department of import-export of medicines and other pharmaceuticals and parapharmaceuticals Pharmacist manager \_\_\_\_\_\_ Pharmacist responsible for the quality \_\_\_\_\_\_

Representative of MA \_\_\_\_\_\_ Joined representative (depending on the case) \_\_\_\_\_\_

**Exercise 8.** Following the control of the pharmaceutical products received on a medicinal product (at the teacher's indication) from the imported ones, quantitative divergences were found. Draw the appropriate act.

Form F- 01

Approved by Ministry of Health from the Republic of Moldova order no from and Decision of Statistics Department from the Republic of Moldova no from	
Name of pharmaceutical unit	
"Approved"	
Pharmacist manag "" 20	
Document No	
from "" 20	
to detect qualitative or quantitative divergences in the receipt of goods Place	
Committee members	
In the presence of representative (authorization No from "" ) received goods and establishe	
	d:
1. Supplier and address	
2. Supplier invoice No from "" 20	
3. Agreement of supply No from "" 20	
4. Delivered goods "_" 20 in wagon, containers, auto, from units of goods, brut to weight	
5. Goods arrived at "" 20 transported to the pharmacy"" 20,units of goods.	
6. Trade document no written ""20	
7. Receiving the goods: beginning: hour min. "_" 200 end: hour min 20	(
8. Condition and contents of seals	
9. Storage conditions until receiving	
10. Description of the exterior appearance of goods	
11. State of external marking of goods	
12. Reweighted goods (where) brut to weight	
13. Detailed description of the damage	
14. Conclusions of committee: Signature: President of committee Committee members Representative	
15. Result of receiving / the value of the goods is indicated in purchase prices	

No Name	MII	Duine	Quantity		Divergences (insufficiency, rebut, damage, etc.)		Note	
NO	Name	Name M.U. Price	Name M.O. Fille	According to the invoice	Real	Quantity	Amount	note

**Exercise 9.** Specify the storage conditions for the medicinal products received under the contract.

Conclusions and suggestions of the student:

The teacher's signature \_\_\_\_\_

# Lesson 10. THE OUTPATIENT PHARMACEUTICAL CARE SYSTEM. THE COMMUNITY PHARMACY, ITS TASK AND FUNCTIONS.

*The aim of lesson:* Studying, analyzing of the existing situation and acquiring the basic principles of the pharmaceutical assistance organization, the principles and norms of extending the pharmacy chain and their subsidiaries.

# *The type of learning:* laboratory practical work *Lesson duration:* 8 hours.

# **Questions for self-learning:**

- 1. Characteristics of the population's pharmaceutical assistance system.
- 2. Basic principles of organizing the activity of community pharmacies.
- 3. Location and expansion of the pharmacy chain in the Republic of Moldova. Principles and enlargement rules.
- 4. Types of pharmacies.
- 5. The community pharmacy. The foundation of the pharmacy, its task and functions.
- 6. Requirements for the space of the pharmacy rooms and their location plan. The endowment of pharmacy.
- 7. Sanitary regime in pharmacy:
  - a) sanitary requirements for rooms and equipment;
  - b) sanitary requirements for the cleaning of the rooms and the pharmaceutical equipment;
  - c) requirements for the personal hygiene of pharmacy workers;
  - d) sanitary rules for preparing, transporting and storaging purified water and water for injection;
  - e) sanitary requirements for the preparation of medicines under aseptic conditions and non-sterile medicinal forms.
- 8. Organizational structure of community pharmacies. Subsidiaries of pharmacies.
- 9. Principles of organizing the storage of medicines and other pharmaceuticals in the community pharmacy.
- 10. Classification of products released from the pharmacy.

# **Exercises for self-solving:**

# Exercise 1. Select:

- a) Care factors that serve as a basis for the rational placement of community pharmacies.
- b) Additional factors to be taken into account in the planning, expansion and location of community pharmacies.
- c) Other (nonessential) factors in the expansion and location of pharmacies.

Variant 1.	Variant 2.
1. Number of patients with diabetes	1. Density of the population
2. Economic significance of the locality	2. Number of residents related to a pharmacy
3. Presence of medical institutions	3. Number of preschool children
4. Number of residents related to a pharmacy	4. Existence of the shopping center
5. Tourist significance of the locality	5. Number of patients with oncological
6. Density of the population	diseases
	6. Presence of medical institutions

Variant 3.	Variant 4.
1. Social-economic significance of the local-	1. Average age of district residents
ity 2 Number of pharmagista per 100 they	2. The number of people related to a phar-
2. Number of pharmacists per 100 thou- sands residents	macy 2. Social economic significance of the local
3. Presence of medical institutions	3. Social-economic significance of the local-
	ity A Number of the sum exists you 100 they
4. Number of retired people from the local-	4. Number of pharmacists per 100 thou-
ity	sands residents
5. Tourist significance of the locality	5. Distance and accessibility to the district
6. Density of the population	center
Verient F	6. Number of pre-school institutions
Variant 5.	Variant 6.
1. Tourist significance of the locality	1. Number of pharmacists per 100 thou-
2. The number of people related to a	sands residents
pharmacy	2. Presence of medical institutions
3. Density of the population	3. Tourist significance of the locality
4. Average age of district residents	4. Density of the population
5. Economic significance of the locality	5. Number of the shopping centers
6. Number of medical institutions	6. Number of retired people
Variant. 7.	Variant 8.
1.Number of newborns	1. Number of children up to 7 years old
2. Density of the population	2. Density of the population
3. Number of pharmacists per 100 thou- sands residents	3. Number of pharmacists per 100 thou-
	sands residents
4. Presence of medical institutions	4. Tourist significance of the locality 5. Presence of medical institutions
5. The number of people related to a	
pharmacy	6. The number of people related to a phar-
6. Distance to the nearest pharmacy Variant 9.	macy Variant 10.
	1. Presence of medical institutions
1. Average age of district residents	
<ol> <li>Economic significance of the locality</li> <li>The number of people related to a</li> </ol>	<ol> <li>Density of the population</li> <li>Number of patients with oncological</li> </ol>
	diseases
pharmacy 4. Tourist significance of the locality	4. Number of pharmacists per 100 thou-
0	sands residents
5. Density of the population 6. Number of pharmacists per 100 thou-	5. Economic and geographic significance
sands residents	6. Distance and accessibility to the district
5011051051001105	
Variant 11.	Variant 12.
1. Density of the population	1. Number of patients with hypertension
2. Number of medical institutions	2. The number of people related to a phar-
3. The number of people related to a	macy
pharmacy	3. Density of the population
4. Number of tuberculosis patients	4. Number of pharmacists per 100 thou-
5. The distance between the planned	sands residents
pharmacy and the pharmacy with the	5. Tourist significance of the locality
production section	6. Number of educational institutions
6. The presence of shopping centers	

a)	 	 
b)	 	 
c)	 	 

**Exercise 2.** Determine the average pharmacy serving radius at the following distances from nearby pharmacies: \_\_\_ km; \_\_\_ km; \_\_\_ km; \_\_\_ km.

Variant	Distance						
variant	I	II	III	IV			
1	0,5	0,8	0,3	0,6			
2	0,65	0,7	0,4	0,8			
3	0,7	0,25	0,5	0,7			
4	0,3	0,5	0,6	1,0			
5	0,8	0,3	0,8	0,5			
6	0,4	0,6	0,3	0,3			
7	0,25	0,8	0,5	0,5			
8	0,5	0,7	0,3	0,65			
9	0,5	1,0	0,75	0,7			
10	0,8	0,5	1,2	0,3			
11	0,7	0,3	1,0	0,8			
12	0,3	0,9	0,8	0,4			

**Exercise 3.** The population of a city is \_\_\_\_\_\_ thousands of residents. Determine the number of pharmacies that need to work in this city.

Variant	Number of residents	Variant	Number of residents
1	26,3 thousands	7	25,1 thousands
2	39,6 thousands	8	28,6 thousands
3	21,3 thousands	9	22,6 thousands
4	29,8 thousands	10	24,3 thousands
5	37,5 thousands	11	20,3 thousands
6	36,4 thousands	12	26,2 thousands

**Exercise 4.** The \_\_\_\_\_\_ population is \_\_\_\_\_\_ thousands residents, including \_\_\_\_\_\_ thousands of rural population. In \_\_\_\_\_\_ there are

\_\_\_\_\_ pharmacies, including \_\_\_\_\_ in rural areas. Perform the analysis of population assurance with pharmacies and make the respective conclusions.

- 1. Population of Edineț district is 83,4 thousands residents, including 57,9 thousands in rural areas. In Edineț district there are 28 pharmacies, including 12 in rural areas.
- 2. Population of Cahul district is 123,8 thousands residents, including 84,8 thousands in rural areas. In Cahul district there are 20 pharmacies, including 14 in rural areas.
- 3. Population of Drochia district is 91,5 thousands residents, including 71,2 thousands in rural areas. In Drochia district there are 23 pharmacies, including 17 in rural areas.
- 4. Population of Cantemir district is 63,4 thousands residents, including 57,1 thousands in rural areas. In Cantemir district there are 8 pharmacies, including 5 in rural areas.
- 5. Population of Floresti district is 91,5 thousands residents, including 60,3 thousands in rural areas. In Floresti district there are 22 pharmacies, including 15 in rural areas.
- 6. Population of Briceni district is 91,5 thousands residents, including 71,2 thousands in rural areas. In Briceni district there are 23 pharmacies, including 17 in rural areas.
- 7. Population of Soroca district is 101,5 thousands residents, including 64,5 thousands in rural areas. In Soroca district there are 20 pharmacies, including 14 in rural areas.
- 8. Population of Falesti district is 93,6 thousands residents, including 73,4 thousands in rural areas. In Falesti district there are 18 pharmacies, including 10 in rural areas.
- 9. Population of Anenii-Noi district is 83,6 thousands residents, including 74,5 thousands in rural areas. In Anenii-Noi district there are 16 pharmacies, including 11 in rural areas.
- 10. Population of Calarasi district is 79,6 thousands residents, including 63,6 thousands in rural areas. In Calarasi district there are 13 pharmacies, including 8 in rural areas.
- 11. Population of Cimislia district is 73,1 thousands residents, including 48,8 thousands in rural areas. In Cimislia district there are 13 pharmacies, including 8 in rural areas.
- 12. Population of Causeni district is 91,5 thousands residents, including 71,2 thousands in rural areas. In Causeni district there are 23 pharmacies, including 17 in rural areas.

**Exercise 5.** Nearby the pharmacy there is a center of family doctors, that works hours from 8:00 to 18:00. Set the work schedule and propose the organizational structure of this pharmacy. Justify the conclusions.

**Exercise 6.** Based on the results of Exercise 5, list the functions of the community pharmacy and indicate its activities for each of these functions. Argument planning strategies to satisfy consumer demand.

Functions	Activities

**Exercise 7.** Based on the results of the exercise 5, determine the rooms and minimum mandatory areas of the community pharmacy. Make a scheme of the technological location of the rooms and indicate the equipment.

**Exercise 8.** Argue the rationality of the location of this pharmacy rooms.

# Conclusions and suggestions of the student:

The teacher's signature \_\_\_\_\_

# Lesson 11. THE MANAGER OF PHARMACY. LEADING PROCESS. HUMAN RESOURCES OF PHARMACEUTICAL SYSTEM.

*The aim of lesson.* To learn the characteristics of the manager and the specificity of the functional obligations of the management staff of the pharmaceutical companies. To acquire practical skills of endowing the work place of the lead-ing staff and of communication manager-subordinate, manager-patient.

*The type of learning:* Laboratory practical work. *Lesson duration:* 8 hours.

# **Questions for self-learning:**

- 1. Human resources management in pharmaceutical enterprises.
- 2. Functions of human resources management.
- 3. Pharmacy staff, nomenclature of specialties and pharmaceutical workplaces. Leading jobs in pharmaceutical companies.
- 4. Main aspects of leading in pharmaceutical companies. Requirements to the pharmacy manager personality. Manager and management hierarchy. Performances and abilities needed by a pharmacy manager.
- 5. Managerial roles and responsibilities.
- 6. Organizing the pharmacist manager work. Relationship pharmacist manager subordinate.
- 7. Aspects of managerial ethics. Pharmaceutical ethics and deontology.
- 8. General aspects of the certification of pharmacists.
- 9. Obligations and rights of pharmacists, the documents they are conducting, the order of filling workplaces.
- 10. Contract of employment. Content and order of completion.
- 11. Material responsibility in the pharmacy and its legalization.

# **Exercises for self-solving:**

**Exercise 1.** According to the volume of work and organizational structure of the community pharmacy (see exercise 5, lesson 9), propose the nomenclature of the pharmacy staff, taking into account the nomenclature of pharmaceutical specialties and workplaces.

No.	Name, surname	Name of subdivision and function	Units	Function salary

**Exercise 2.** Select and suggest some possibilities to increase the effectiveness of the pharmacist manager. Argue the answer.

# **Exercise 3.** Suggest 5 mandatory characteristics (requirements) to the leader personality and 5 characteristics that are not admitted to the leader. Argue the answer.

······································					
Mandatory characteristics (require-	Characteristics that are not admitted to				
ments) to the leader personality	the leader				

**Exercise 4.** As a pharmacy manager of a community pharmacy set priorities for the week of work, regarding: 1. medical assistance; 2. working with the staff of the pharmacy; 3. working with doctors, etc.

Activity	Duration	Deadline

**Exercise 5.** Get acquainted with the content and fill in a copy of the employment contract between the pharmacist manager and a specialist in the pharmacy. Missing data is arbitrary.

### EMPLOYMENT CONTRACT no. \_\_\_\_ (model) 20\_ (locality) (the name of company or name and surname of employer) hereinafter referred to as "Employer", in person of (name, surname, workplace) on the one hand, and Mr. (Mrs) \_\_\_\_\_ (name, surname) hereinafter referred to as "Employee", on the other hand, pursuant to the provisions of Articles 45-94 of the Labor Code, approved by the Law no.154-XV of 28 March 2003, have concluded this Employment contract by agreeing on the following: 1. The employee is employed as a \_\_\_\_\_ (function, profession, specialty, qualification) 3. Work is: a) basic; b) by cumulation. 4. The duration of the Contract is: a) indefinite; b) determined \_\_\_\_\_ (the exact period) 5. Probation period (if agreed by the parties)\_\_\_\_\_ (the exact period) 6. This employment contract has its effects in: a) day of signing; b) \_\_\_\_\_\_(date agreed by the parties) 7. Function specific risks (work in harmful and / or dangerous conditions, etc.) 8. Employee has the following rights: a) rights provided under paragraph (1) of art.9 of the Labor Code; b) other rights (specify the additional rights agreed by the parties) 9. Employee is required: a) to fulfill the obligations stipulated in paragraph (2) of art.9 of the Labor Code; b) to fulfill other obligations (specify the additional obligations agreed by the parties) 10. The employer has the following rights: a) rights provided in paragraph (1) of Article 10 of the Labor Code; b) other rights (specify additional rights negotiated by the parties) 11. The employer is obliged: a) to fulfill the obligations stipulated in paragraph (2) of art.10 of the Labor Code; b) to fulfill other obligations laid down in the Labor Code, other normative acts, collective agreements, collective labor agreement and this employment contract, including (additional obligations are specified) 12. Conditions for the remuneration of the employee's work \_\_\_\_\_ (salary function or tariff, supplements, bonuses, additions, prizes, material aids and allowances, including for work performed under

harmful and / or dangerous, labor conditions etc.)

13. Work Regime \_\_\_\_\_

(normal or reduced working time, weekly type of work, daily working time) working time, part-time work, shift work, night work, etc.) 14. Rest regime \_\_\_\_\_ (daily rest, weekly rest, etc.) 15. Holidav leave: a) Annual leave: (duration) b) additional annual leave (duration) 16. The social insurance of the employee is carried out in the manner and the size provided by the legislation in force. 17. The medical insurance of the employee is carried out in the manner and the size provided by the legislation in force. 18. Specific clauses (if the parties have agreed) \_\_\_\_\_ (mobility, confidentiality, other clauses that do not violate applicable law) 19. Benefits that the Employee will receive in return for compliance with the specific clauses set forth in paragraph \_\_\_\_\_ 20. This employment contract may be amended only by an additional agreement signed by the parties, which is attached to the contract and is an integral part thereof. 21. It will be considered as a modification of this employment contract any change that relates to: (a) a) the duration of the contract: b) the place of work: c) the specific nature of the work (difficult, harmful and / or dangerous conditions, the introduction of specific clauses according to Art.51 of the Labor Code, etc.); d) the amount of the work remuneration; e) work and rest regime; f) specialty, profession, qualification, function; g) the nature of the facilities and the way they are granted. 22. By way of exception, the unilateral amendment by the employer of this employment contract is possible only in the cases and under the conditions provided by the Labor Code. In these cases, the employee will be prevented from changing the employment contract 2 months before. 23. The employee's place of work may be temporarily changed by the employer by moving in the interests of the service or posting to another job in accordance with Articles 70 and 71 of the Labor Code. 24. In the event of the occurrence of a situation provided by art.104 paragraph (2) a) and b) of the Labor Code, the employer may temporarily change the place and the specificity of the work of the employee without his consent for a maximum period of one month and without operating the respective modifications in this individual labor contract. 25. The transfer of the employee to another work and his / her permutation may take place in strict accordance with the provisions of Articles 68 and 74 of the Labor Code and points 20 to 21 of this employment contract.

26. Suspension of this employment contract may occur:a) in circumstances beyond the will of the parties (art. 76 of the Labor Code);

b) by agreement of the parties (art.77 of the Labor Code);

c) at the initiative of one of the parties (art. 78 of the Labor Code).

27. This employment contract may terminate:

a) in circumstances not dependent on the will of the parties (art. 82, 305 and 310 of the Labor Code):

b) at the initiative of one of the parties (art.85 and 86 of the Labor Code).

- 28. The individual labor disputes that will arise during the duration of this employment contract will be settled in the manner established by the Labor Code and other normative acts.
- 29. This employment contract is drawn up in two copies of the same legal power, one of which is kept by the Employer, and the second by the Employee.

#### Data identifying the parties to the Contract:

The employer Address	<i>The employee</i> Address
Tax code	Identity card
	Released by
Signature	Personal code
	Personal Social Insurance Code
	Signature

**Exercise 6.** Legalize the individual material responsibility of a manager in the pharmacy. Missing data is arbitrary.

> Annex no. 2 to the RM Government Decision Nr. 449 of 29.04.2004

# Full material liability contract

(the name of the transmitted values) and according to art.339 of the Labor Code (Law no.154-XV of March 28, 2003), \_\_\_\_\_

(name of unity)

hereinafter referred to as Employer, in person of

(name, surname, function)

acting on behalf of the unit, on the one hand, and the employee \_\_\_\_\_\_

(name, surname, function)

\_\_\_\_\_\_ hereinafter referred to as the Employee, on the other hand, have concluded this contract regarding to the following:

1. Employee assumes full personal liability for not ensuring the integrity of the values transmitted by the Employer and undertakes:

a) to have a correct attitude to the transmitted values and to take measures to prevent the damage:

- b) to inform the employer in time about all circumstances that threaten the integrity of the values passed to him:
- c) to keep in evidence, to prepare and present, in the established manner, the financialmaterial reports and other reports regarding the movement and balances of the values

that have been passed to him;

d) to participate in the inventory, revision, other controls on the integrity of the values passed to him.

2. In order that the Employee to ensure the integrity of the values that have been passed to him. the Employer undertakes:

- a) to create the normal conditions for the Employee and to ensure the integrity of the values
- passed to him;b) to inform the Employee of the legislation in force regarding the material liability of employees for the damage caused to the Employer, as well as the internal regulations regarding the way of keeping, receiving, processing, selling (delivering), transporting, using in the process of work and carrying out other operations with the values passed to the Employee;
- c) to carry out, in the established manner, inventory, revision, other controls on the integrity and status of the values passed to the Employee.

3. The determination of the amount and compensation for the damage caused to the Employer by the Employee is carried out in the manner provided by the legislation in force.

4. The employee does not bear material liability if the damage was not caused by his fault as well as in the circumstances provided by art.334 of the Labor Code.

5. This contract commences on the date of its signature.

6. The action of this contract extends over the entire period during which the Employee works with the values transmitted to him by the Employer.

7. This employment contract is drawn up in two copies of the same legal power, one of which is kept by the Employer, and the second by the Employee.

8. Modification of the terms of this contract, its completion or termination shall be effected by means of an additional agreement signed by the parties, which shall be annexed to the Contract and form an integral part thereof.

Employer	Employe	e
Address	Address	
Signature PSH	Signature	

**Exercise 7.** Legalize the collective material responsibility of a pharmacy department's staff. Missing data is arbitrary.

Annex no. 4 to the RM Government Decision Nr. 449 of 29.04.2004

# Full collective material liability contract

*No.\_\_\_\_* In order to ensure integrity \_\_\_\_\_

"\_\_\_"\_\_\_\_20\_\_\_\_

(the name of the transmitted values) and according to art.339 of the Labor Code (Law no.154-XV of March 28, 2003), \_\_\_\_\_

(name of unity)
hereinafter referred to as Employer, in person of \_\_\_\_\_\_

(name, surname, function)

acting on behalf of the unit, on the one hand, and the members of collective \_

, (name, surname, function)
referred to as the Collective, in person of

(name, surname, function)

on the other hand, have concluded this contract regarding to the following:

## I. Subject of the contract

The Collective undertakes full collective material liability for failure to ensure the integrity of the values transmitted by the Employer, and the Employer undertakes to create normal conditions for work and to ensure the integrity of the values that have been passed to him.

# **II. General dispositions**

- 1. The Employer's decision on the establishment of full collective material liability is made by order (provision, decision) and communicated to the Collective. The order (provision, decision) of the Employer regarding the establishment of collective redemption is attached to this Agreement.
- 2. The team is completed by the principle of free consent. The inclusion of the newly employed employees in the Workforce is taken by considering the opinion of the Collective.
- Team Leadership is exercised by the Leader of Collective.
   The Leader of the Collective is appointed by the order (the order, decision) of the Employer, after prior consultation with the Collective.
   In the event that the Leader of Collective is temporarily absent, the Employer shall perform the duties of one of the members of the Collective.
- 4. In the event of a change the Collective Leader or the exit of the Collective by more than 50% of his members, this contract is to be re-opened.
- 5. This Contract shall not be terminated in the event of leaving out of the Group of some of the employees or of receiving new employees in the Collective. In these cases, the member of the Collective who left the post indicates the date of his departure and the employee who has been received signs the Contract and indicates the date of entry into the Collective.

# III. Rights and Obligations of the Collective and the Employer

- 6. The team has the right:
  - a) to participate in the reception of the transmitted values and to carry out the mutual control over the storage, processing, sale (delivery), transportation or use in the labor process of the values that have been transmitted to it;
  - b) to participate in the inventory, revision, other controls on the integrity and status of the values passed to him;
  - c) to take note of the reports on the movement and balances of the transmitted values;
  - d) to ask the Employer, if necessary, to perform the inventory of the transmitted values;

- e) to submit to the Employer proposals for recusal of the Team Leader as well as members of the Collective who, in his opinion, can not ensure the integrity of the transmitted values.
- 7. The Collective is obliged to:
  - a) have a correct attitude to the transmitted values and to take measures to prevent the damage;
  - b) keep in evidence, to prepare and present, in the established manner, the financial-material reports and other reports regarding the movement and balances of the values that have been passed to him;
  - c) inform the employer in time about all circumstances that threaten the integrity of the values passed to him;
  - 8. The Employer is obliged to:
  - a) to create the normal conditions for the Collective and to ensure the integrity of the values passed to him;
  - b) to take timely measures to detect and eliminate the causes that prevent the Collective from ensuring the integrity of the values passed to him, identify the persons guilty of causing the damage and hold them accountable according to the legislation in force;
  - c) to inform the Collective of the legislation in force regarding the material liability of employees for the damage caused to the Collective, as well as the internal regulations regarding the way of keeping, receiving, processing, selling (delivering), transporting, using in the process of work and carrying out other operations with the values passed to the Collective;
  - d) to create the necessary conditions for the record keeping and timely reporting on the circulation and balances of the transmitted values;
  - e) to examine the question of the merits of the Collective's request to make an inventory of the values passed to him;
  - f) to examine, in the presence of the employee, the appeal lodged with him and, if he is motivated, to exclude the respective employee from the members of the staff and to decide, in accordance with the legislation in force, on his / her subsequent activity;
  - g) to examine the Collective communications on the circumstances that threaten the integrity of the values passed to him and to take action to remove them.

# IV. How to keep records and present reports

- 9. Receiving the transmitted values, keeping records and presenting reports on the movement of these values is done in the established way by the team leader.
- 10. The planned inventory of the values transmitted to the Collective shall be carried out within the time limits provided by the legislation in force.

The unplanned inventory shall be carried out in the event of a change in the manager of the Collective, in the case of leaving the Collective of more than 50% of its members, and at the request of at least 1/3 of the members of the Collective (brigăzii).

11. Reports on the circulation and balances of the values transmitted to the Collective are signed by the Head of the Collective and, in the order of succession, by a member of the Collective. The content of the report is brought to the attention of all members of the Collective .

# V. Repair of injury

- 12. Reason for material liability of the members of the Collective serves the damage caused to the Employer directly by the Collective.
- 13. The collective and / or a member of the Collective shall be relieved of material responsibility if it is established that the damage has not been caused by the members (member) of the Collective and in the circumstances provided in Article 334 of the Labor Code.
- 14. Determining the amount of damage caused to the Employer by the Collective and its repair is done in the manner established by the applicable law.
- 15. This contract takes effect from the date of signature and its action extends over the entire period in which the Collective works with the values transmitted by the Employer.
- 16. This Contract is drawn up in two copies, having the same legal power, one of which is held by the Employer, and the other by the Head of the Collective.
- 17. Modification of the terms of this contract, its completion or termination shall be effected by a written agreement signed by the parties, which is an integral part of this contract.

Employer	Collective
Address	Address
Signature	Signature
PSH	
Addresses of the members of Collective	Signatures of the members of Collective

**Exercise 8.** Complete the proposed algorithm of the pharmacist manager actions and of the pharmacist who wishes to engage in the section of industrial medicines, who has a 6-year work experience and has the second category of professional qualification.

Pharmacist manager	Pharmacist		
1. analyzes(what?)	1. sends(what?)		
2.organize(what?)	2. pass(what?)		
3. decides to engage	3. get a positive response		
4. analyzes the submitted documents:	4. presents the following documents		
-	-		
-	-		
-	-		

## The action algorithm

5. gets(what?)	5. completes(what?)
6. concludes and signs in two copies	6. completes and signs:
	-
(what document?)	-
7. issues (what document?)	7. signs(what?)
8. Forwards the copy of the order to	8. Receives a copy of the individual labor
the accountancy for opening your per- sonal account.	contract.
9. perfects your personal file	9.Provides the necessary documents and completes the Personal Record Sheet.
10. Spends general and primary intro-	10. After passing the general and primary
ductory training on health and safety	training on health and safety at work, it
at work.	proceeds to the fulfillment of the func-
	tional duties.
	Indicate the document

**Exercise 9. Case study:** Students are divided into 2 groups. Perform conflict analysis: between pharmacies; pharmacist-patient. Find the best possibilities to solve the conflict situation with or without the pharmacist manager involvement in solving the problem. Analyze the conflict situation through the Ishikawa diagram. Indicate the normative and legislative acts that will form the basis for solving these conflicts.

# Case study no.1

In the evening, an excited, middle-aged lady, presents to the pharmacist a note in which is written "Alprazolam" - 3 packages. The pharmacist tries to explain to the lady how to dispense the "Alprazolam" tablets from the pharmacy, and the lady wishes to hear no argument, she says that without this medicine she will not leave the pharmacy. The pharmacist declined to dispense this medicine. The woman asked the Complaints Register, indicating the pharmacist's incompetence to dispense drugs and consult patients, and left the pharmacy dissatisfied. The next day, the pharmacist manager examining the Complaint Register penalized the pharmacist, canceling his prize for the current month. There was a conflict between a pharmacist and a pharmacist.

# Case study no.2

In the pharmacy, an old lady, who received the "Vinpocetine" recipe, said, "Dear, you gave me a fake medicine, I'm sure because I have received this preparation, and he was in a package in blue letters, and it is in green letters! Give me, please, another one, that will be not spurious!" The man, sitting near the old woman, also engaged in dialogue: "Why do you ask? She is required to release you a qualitative medicine! We will bring to light all the scams that they make with us in the pharmacy!". The scandal includes all visitors to the pharmacy, accusing the pharmacist of incompetence, robbery, insanity and scam. The pharmacist did not resist, got out of office and went to the staff room, waiting to calm the spirits of the visitors. The pharmacist manager went out and solved the conflict. The next day, between the pharmacist and the pharmacist manager, there was an open conflict, because information appeared in the media, such as in the "X" pharmacy, falsified medicines being released.

# Conclusions and suggestions of the student:

The teacher's signature \_\_\_\_

# THE 2<sup>nd</sup> INTERMEDIARY ASSESSMENT 7-11. COLLOQUY.

# THE CONTENT OF THE INDIVIDUAL WORK FOR SEMESTER I

**Student's individual work** is a complex and varied activity of independent, free, personal learning, both for the achievement of the objectives of the educational process and for the extradidactic activity within the time he has at its disposal. It is the kind of independent academic activity of the student included in the curricular discipline, assumed by the teacher's instructions, carried out with or without the methodical support offered by him, but realized without his direct involvement.

The aim of student's individual work:

- establishing the objectives of the activity, designing the activity, distributing the time budget, identifying the database and materials, etc.
- studying course notes, completing and expanding them
- extensive documentation from different sources
- consultation and / or study based on textbooks / course materials, dictionaries, scientific articles
- preparing communications, essays, reports, syntheses, abstracts, articles, etc.

- identifying and solving case studies, specific professional situations, the labor market

- initiating, designing, organizing and conducting on-the-spot investigations - preparing for mid-term and final evaluations.

# **GLOSSARY FOR THE STUDENT'S INDIVIDUAL WORK**

# Report

The report is an individual work of the student, which must reflect his / her knowledge of self-study of the proposed topic. The report must include the following compartments:

1. The introduction, where the actuality of the theme is argued, the objective of the work and the tasks, objects and methods of research.

# 2. Content, main part:

- 2.1. Analysis of existing materials in printed and electronic editions (sources) on the proposed theme
- 2.2. The actual research, in which the student must propose his hypothesis in the analysis of the question, with arguments

3. Conclusion, including the most important results in the report.

The paper will be displayed on a minimum of 10 pages (A4, Times New Roman, character size 12, space between intervals 1.5) and is completed during the semester. The report is sent to the email address indicated by the teacher.

### Essay

The essay is a form of task that represents one or several questions the student answers in free form. The essay is evaluated according to rules or criteria designed to identify skills for using creativity and acquired knowledge. The student's independent work consists of a creative, professional response on the theme of the essay. The themes are individually recommended by the teacher.

Essay Preparation:

- 1. From the sources of selected information, the materials in which the subject is being discussed are taken;
- 2. The materials are analyzed, comparing different points of view on this issue.
- 3. In form of theses, the theory, the evidence and the opinions of the specialists, which the student needs to know to understand this problem (question), are exposed.
- 4. The author's (student's) position on the subject is formulated and exposed in the main part of the written paper.

Paper size - 3-5 pages, (A4, Times New Roman, character size 12, space between intervals 1.5). The essay is sent to the email address indicated by the teacher.

**Case study analysis** 

In order to adopt the action plan proposed in the case study, the student must understand that he will have to use rationally the time to prepare qualitatively a report on the analysis of the proposed situation. First, the student needs to understand and analyze the proposed situation. To do this, he needs to work with the text, making notes and extracts. At the same time, it is useful to create their own "logical" schemes. Then it will be well thought out how to present the results of the analysis. The general structure of the report on the proposed case may be as follows:

- context of events and facts;
- formulation of the problem;
- direct analysis;
- their decisions and implementation;
- figures, charts and tables;
- conclusions with the student's position on the subject.

Paper size - 2-3 pages, (A4, Times New Roman, character size 12, space between intervals 1.5). The results of the case study analysis are sent to the email address indicated by the teacher.

compartments					
No	The expected product	Implementation Strategies	Evaluation criterias	Deadline	
1.	Working with the book and legislative and normative acts.	Systematic work in library and media. Use of current electronic sources on the subject.	<ol> <li>Quality of formed judgments, logical thinking, flexibility.</li> <li>The quality of the systematization of the informational material obtained through its own activity.</li> </ol>	During the first and second semesters.	
2.	Preparation of reports and presentations (the themes are proposed)	Analysis of rele- vant sources on the topic of the paper. Analysis, systema- tization and syn- thesis of infor-	<ol> <li>The quality of systema- tization of informational material obtained through own activity.</li> <li>Concordance of infor- mation with the pro- posed theme.</li> </ol>	During the first and second semesters.	

# The individual work program of the student includes the following

· · · · ·			r –		1
		mation on the	3.	The degree of argu-	
		proposed theme.		mentation of the con-	
		Compilation of the		clusions.	
		report in accord-	4.	Ingenuity of presenta-	
		ance with the re-		tion, creativity.	
		quirements in			
		force and its			
		presentation.			
3.	Writing an es-	Materials in which	1.	The quality of system-	During the
	say (the themes	the subject is being		atization of the infor-	first and
	are proposed)	discussed are ana-		mational materials ob-	second
	· · · · · · · · · · · · · · · · · · ·	lyzed. Materials,		tained through own	semesters.
		comparing differ-		activity.	50110500151
		ent points of view	2.	Ability to analyze and	
		at this issue are	2.	understand the sub-	
		analyzed.		ject.	
		In the form of the-	3.	Ability to formulate	
		ses, the theory, the	з.	and expose its own	
		evidence and the			
				position on the sub-	
		opinions of the	4	ject. Ability to use greativi	
		specialists are	4.		
		exposed. The au-		ty and knowledge.	
		thor's (student's)			
		position is formu-			
		lated and exposed			
		to this topic.	4		D i il
	Case study on a	Choice and de-		Ability to identify topical	During the
	topical issue	scription of the		issues.	first and
		case study.		Analysis, synthesis,	second
		Analysis of the		generalization of data	semesters.
		causes of the is-		obtained through own	
		sues raised in the		investigation.	
		case study.		Formation of an algo-	
		Deduction of the		rithm of knowledge	
		expected result of		based on the obtained	
		the case.	-	conclusions.	
	Analyzes in the	Analysis and syn-		Capacity to think and	During the
	field of pharma-	thesis of recog-		approach systemic and	first and
	ceutical policy	nized political		situational issues.	second
		experiences. Selec-		Presentation of the	semesters.
		tion of population		results in the form of a	
		needs, own re-		cause-effect-result dia-	
		search, use / result		gram.	
		of research; con-		Ability to understand	
		firmation or nega-		the methods available to	
			1	analyze the effects of	
		tion of the as-		5	
		tion of the as- sumption.		political interventions.	
				5	
			4.	political interventions.	

# THEMES FOR INDIVIDUAL STUDENT WORK IN SEMESTER I.

No	Themes	Type of works
1.	The pharmaceutical system - part of the health system.	Case studies
	Public health. The health system. The pharmaceutical sys-	
	tem. Coordination of the pharmaceutical system. General	
	notions of law and legislation. Pharmaceutical legislation -	
	branch of health legislation. Pharmaceutical activity and	
	authorization to exercise it.	
2.	Management and application of its elements (compo-	Case studies
	nents) in the pharmaceutical field. The general manage-	
	ment features. Elements of management in pharmaceutical	
	activity. Management of the leading process. Decisions in the	
	process of leading. Organization management. Human re-	
	sources management of the pharmaceutical system.	
3.	Medicines, pharmaceutical market and activities of it	Case studies Es-
	assurance.	say
	The medicine and other pharmaceuticals as a subject of	
	study of pharmaceutical assistance. Authorization of medi-	
	cines. Ensuring the quality of medicines. Industrial produc-	
	tion of medicines. Supply of medicines. Pharmaceutical	
	warehouse, its tasks and functions.	
4.	The outpatient pharmaceutical care system. The com-	Case studies Re-
	munity pharmacy.	port

# Lesson 1. THE PHARMACEUTICAL SYSTEM – PART OF THE HEALTH SYS-TEM.

Public health. The health system. The pharmaceutical system. Coordination of the pharmaceutical system. General notions of law and legislation. Pharmaceutical legislation - branch of health legislation. Pharmaceutical activity and authorization to exercise it.

**Tasks of the individual study:** *integration, search and evaluation, reevaluation, improvement, innovative creation.* 

Expected product: individually identified case study, personal investigations.

Exercises for self-solving

# **Exercise 1**

Case study

There are 1168 community pharmacies in the Republic of Moldova, 24 of them offer preparations, 69 - are hospital pharmacies, 36 sections of district health centers with 700 subsidiaries in rural localities.

At the same time, in 44 localities do not exist pharmacies.

# Questions:

1. Analyzing the existing situation, indicate who performs the pharmaceutical assistance in the health center subsidiaries.

2. Identify problems in providing pharmaceutical assistance in rural areas.

3. Propose current regulatory solutions in pharmaceutical activity to ensure the population of all rural areas with professional and qualitative pharmaceutical assistance.

# **Exercise 2**

# Case study

Licensing a new pharmacy around an older represent a risk for the activity of the old one. Thus, the conflict between pharmaceutical companies in Moldovan urban areas is growing.

Small pharmacies (often owners of which are pharmacists) are covered by the big ones without any chance of survival.

# Questions:

1. Which requirements for licensing pharmaceutical activity are applied in the countries of the European Union (Germany, France, Italy, Denmark, etc.)

2. Propose legislative mechanisms to protect small pharmacies in the Republic of Moldova.

# **Exercise 3**

# Case study

The manager of "M-Farm" LTD company submitted a month ago to the licensing authority all needed documents for licensing the activity. During this month, he received any answer about the decision of licensing authority. The manager being convinced that he submitted all documents, appealed to the tribunal, to resolve the issue with the license.

# **Questions:**

- 1. Indicate where and what documents are submitted to receive a license for pharmaceutical activity.
- 2. Which legislative and regulatory acts regulate licensing of pharmaceutical activity?
- 3. Give your opinion on the actions taken by the manager of "M-Farm" LTD to solve the problem of licensing the activity of company.
- 4. What do you think about the professionalism of the manager.

# Lesson 2. MANAGEMENT AND APPLICATION OF ITS ELEMENTS (COMPO-NENTS) IN THE PHARMACEUTICAL FIELD.

The general management features. Elements of management in pharmaceutical activity. Management of the leading process. Decisions in the process of leading. Organization management. Human resources management of the pharmaceutical system.

**Tasks of the individual study:** *integration, search and evaluation.* **Expected product:** *individually identified case study, personal investigations.* 

# Exercise 1

# Case study

Complete the "Theory X - Theory Y" questionnaire and calculate the score according to the guidelines. Develop the answers to the questions proposed below.

"Theory X - Theory Y" questionnaire

Affirmations	Total agree-	Partial agree-	Not	Partial disa-	Total disa-
	ment	ment	sure	gree- ment	gree- ment
1. Most people do not like to work.	5	4	3	2	1
2. When people are given the chance to	-		2	2	1
think for themselves, most of them are bril- liant.	5	4	3	2	1
3. Individuals are motivated to achieve the goals they have assumed.	5	4	3	2	1
4. Managers must control their employees, in order to do their work.	5	4	3	2	1
5. Above all employees need security.	5	4	3	2	1
6. If people are treated seriously, they will accept responsibility.	5	4	3	2	1
7. People prefer someone else to tell them what to do.	5	4	3	2	1
8. People could be forced to do the right thing.	5	4	3	2	1
9. Work is as natural as playing.	5	4	3	2	1
10. Employees can be creative at work.	5	4	3	2	1
11. At work people show their ambitions.	5	4	3	2	1
12. Some people will not work until they are threatened.	5	4	3	2	1
13. Some people will follow their goals if they are rewarded.	5	4	3	2	1
14. Most employees try to avoid as much work as possible.	5	4	3	2	1
15. Most employers do not use the full po- tential of their employees.	5	4	3	2	1
16. If they were given the chance, some employees would propose innovative solu- tions to solve the problems.	5	4	3	2	1
17. People usually avoid responsibility.	5	4	3	2	1
18. To achieve the goals, managers must supervise the activity of subordinates.	5	4	3	2	1
19. Under favorable conditions, people will take responsibility.	5	4	3	2	1
20. It is not natural for people not to like the work.	5	4	3	2	1

# The score for Theory X - Theory Y

Questions	for Theory Y
Number	Score
2	
3	
6	
9	
10	
13	
15	
16	
19	
20	
Total	

# Questions:

- 1. What determines differences in individual scores?
- 2. It is possible for a person to correspond less to Theory X and more to Theory Y and vice versa?
- 3. Indicate the types of effective motivation depending on the obtained result and argue the answer.

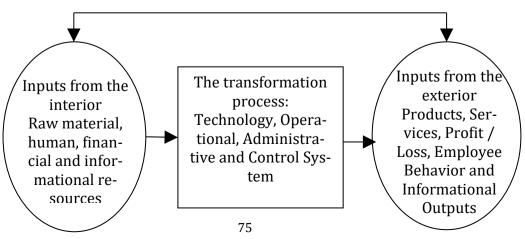
# **Exercise 2**

# Case study

The student should study the figure "The Systemic Concept of Organizations" and consult the literature on the systemic approach to management, then apply these concepts to creating a Systemic Organizational Model for 3 specified organizations (pharmaceutical factory, pharmaceutical warehouse, community pharmacy).

The Systemic Concept of Organizations

# Reverse link from the environment



Transfer the points corresponding to each answer in this scoring sheet. Calculate the score for both theories in the following way:

# Systemic organizational model

Organizations	Inputs	The transformation process	Outputs
Pharmaceutical factory			
Pharmaceutical ware- house			
Community pharmacy			

# **Questions:**

- 1. There are common inputs for these organizations?
- 2. There are processes of transformation of inputs used by these organizations?
- 3. There are common outputs for these organizations?

# Exercise 3

Case study

The student must complete the Essential Skills table and the Analysis of Skills table.

# **Essential Skills**

Check the skills that a specialist needs to have at the work.

	Legiti-	Capacity	Capacity	Capacity
Job	mate	to reward	to be an	of con-
	power	work	expert	straint
Pharmacist manager of pharma-				
ceutical warehouse				
Chief of department of industrial				
pharmaceuticals				
Chief of manufacturing depart-				
ment in the pharmaceutical factory				
Chief of a pharmacy subsidiary				
Pharmacist manager in a commu-				
nity pharmacy				
Pharmacist manager in a hospital				
pharmacy				
Pharmacist in a community phar-				
macy				
Pharmacist assistant				

# Analysis of essential skills

For each job, explain why you have chosen this skill, or give an example.

# Pharmacist manager of pharmaceutical warehouse

Legitimate power	
Capacity to reward work	
Capacity to be an expert	
Capacity of constraint	

# Chief of department of industrial pharmaceuticals

Legitimate power
Capacity to reward work
Capacity to be an expert
Capacity of constraint

# Chief of manufacturing department in the pharmaceutical factory

Legitimate power Capacity to reward work Capacity to be an expert Capacity of constraint

Chief of a pharmacy subsidiary

Legitimate power Capacity to reward work Capacity to be an expert Capacity of constraint

# Pharmacist manager in a community pharmacy

Legitimate power Capacity to reward work Capacity to be an expert Capacity of constraint

# Pharmacist manager in a hospital pharmacy

Legitimate power

Capacity to reward work

Capacity to be an expert

Capacity of constraint

# Pharmacist in a community pharmacy

Legitimate power	
Capacity to reward work	
Capacity to be an expert	
Capacity of constraint	
Ph	armacist assistant
Legitimate power	
Capacity to reward work	
Capacity to be an expert	
Capacity of constraint	

# Lesson 3. MEDICINES, PHARMACEUTICAL MARKET AND ACTIVITIES OF IT ASSURANCE.

The medicine and other pharmaceuticals as a subject of study of pharmaceutical assistance. Authorization of medicines. Ensuring the quality of medicines. Industrial production of medicines. Supply of medicines. Pharmaceutical warehouse, its tasks and functions.

**Tasks of the individual study:** *identifying and solving case studies, specifically professional situations, personal investigations.* 

Expected product: case study, report

# **Exercises for self-solving**

# **Exercise 1**

Case study

The manager of D-Farm Pharmaceutical Warehouse has concluded a sale and purchase agreement with the pharmaceutical company "Lekfarm" for the supply of following medicines:

- 1. Tab. Amlodipin 5mg N.30 1000 pcks
- 2. Tab. Arpetol 100mg N.10 500 pcks
- 3. Tab. Ambroxol 30mg N.20 1000 pcks
- 4. Tab. Viasil 50mg. N.2 500 pcks

In the agreement, the following criteria were considered: the price of the medicines, the terms of supply, the payment terms. 20 days after, Lekfarm provided the medicines required for the D-Farm pharmaceutical store. The medicines was received within 3 days, after which a shortfall of 50 pcks of Tab. Amlodipin 5mg N.30 was detected. The provider was notified of the shortcomings 10 days later. Questions:

1. What are the criterias of goods receiving?

2. When the supplier have to be announced about the shortfall notified while goods receiving?

3. What the responsible person should undertake when the shortcoming is identified?

# Exercise 2

Essay

*Topic*: Conditions for the pharmaceutical warehouse certification according to GDP standards.

# Exercise 3

Essay

*Topic*: Barriers to the implementation of GMP and GDP rules in the Republic of Moldova.

# Lesson 4. THE OUTPATIENT PHARMACEUTICAL CARE SYSTEM. THE COMMUNITY PHARMACY.

**Tasks of the individual study:** *integration, search and evaluation, re-evaluation, report elaboration, improvement, innovative creation.* **Expected product:** *case study, report.* 

# **Exercises for self-solving**

# **Exercise 1**

# Case study

Perform a comparative study on the legislation of the community pharmacy activity in the Republic of Moldova and one of the proposed countries: Germany, France, Italy, Poland, Hungary, Israel, Canada, USA, Japan in terms of the following criterias: pharmacies establishing, management, pharmaceutical staff, localization, assistance with medicines, parapharmaceuticals etc. Identify the problems and propose reforms in the pharmaceutical field in the Republic of Moldova at legislative and regulatory level.

# Exercise 2

Report

*Topic:* Social responsibility in the activity of community pharmacy

# Lesson 12. THE LEGAL PRESCRIBING RULES FOR MEDICINES.

*The aim of lesson:* To acquire the rules and procedures for prescribing different drug groups for outpatient patients, completing prescription forms in accordance with the provisions in force and principles of rational prescription of medicines.

*The type of learning:* Seminar and laboratory practical work. *Lesson duration:* 8 hours.

# **Questions for self-learning:**

- 1. General prescribing rules for patients under ambulatory conditions.
- 2. Peculiarities of prescription drugs containing toxic, narcotics and psychotropic substances.
- 3. The specifics of prescribing for different categories of the population and the sick.
- 4. Drug prescribing rules, offset from mandatory health insurance funds.
- 5. The concept of rational drug prescribing.

# **Exercises for self-solving:**

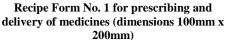
**Exercise 1.** Select from the list of drugs (narcotics) and psychotropic substances (included in Table 2, Lists 1 and 2, approved by Government Decision of the Republic of Moldova Nr. 1088 of 05.10.2004), used for medical purposes registered in the Republic of Moldova.

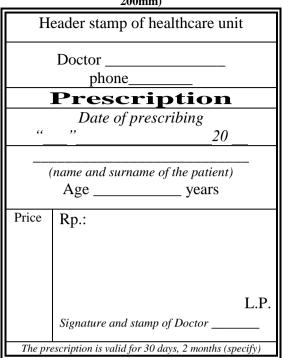
**Exercise 2.** Select from the list of narcotic and psychotropic substances (included in Table No. 3, Lists 1, 2 and 3, approved by the Government Decision of the Republic of Moldova No. 1088 of 05.10.2004) used for medical purposes registered in the Republic of Moldova.

**Exercise 3.** Prescribe prescriptions for drugs from the proposed list, respecting the rules and peculiarities prescribing requirements.

List Nr. 1.	List Nr. 2.	List Nr. 3.
1. Morfin hidrochl.	1. Omnopon	1. Trihexifenidil
2. Zopiclon	2. Diazepam	2. Fenobarbital
3. Alprozalam	3. Aminazin	3. Sotalolum
4. Ketamin	4. Ergometrin	4. Dipiridamol
5. Atropin sulf.	5. Prozerin	5. Plathyphyllini h/t
6. Tetrazepam	6. Streptomicin	6. Mebendazol
7. Amlodipin	7. Ketoconasol	7. Captopril
8. Lidocain	8. Extraveral	8. Teofilin
9. Amitriptilin	9. Piracetam	9. Doxiciclin
10. Tetraciclin	10. Tinidazol	10. Actovegin
11. Nitroglicerin	11. Ibuprofen	11. Streptomicin
12. Digoxin	12. Fluconazol	12. Omnopon
13. Diclofenac	13. Teofilin	13. Diprospan
14. Pilocarpin	14. Varfarin	14. Zolpidem
15. Diazepam	15. Dexametazon	15. Clindamicin
16. Suprax	16. Metronidazol	16. Oxycort
17. Metoprolol	17. Amitriptilin	17. Lisinopril
18. Amoxicilin	18. Propranololum	18. Rexetin
19. Ketoprofen	19. Glucosamin	19. Bendazol
20. Meloxicam	20. Pentoxifilin	20. Groprinosin
List Nr. 4.	List Nr. 5	List Nr. 6
1. Trimeperidin	1. Fentanil	1. Codein fosfat
2. Metandrostenolon	2. Distonocalm	2. Efiedrin h/c
3. Bromazepam	3. Calmepam	3. Clonidin
4. Azitromicină	4. Clonazepam	4. Pilocarpin h/c
5. Argentum nitras	5. Spiritus aethylic	5. Retabolil
6. Nistatin	6. Metoprolol	6. Cianocobalamin
7. Platifilin h/t	7. Atorvastatin	7. Zaleplon (Andante)
	<ol> <li>Atorvastatin</li> <li>Sulfat de magneziu</li> </ol>	<ul><li>7. Zaleplon (Andante)</li><li>8. Fluvoxamin (fevarin)</li></ul>
7. Platifilin h/t		
<ul> <li>7. Platifilin h/t</li> <li>8. Cimetidin</li> <li>9. Metoclopramid</li> <li>10. Glibenclamid</li> </ul>	8. Sulfat de magneziu	<ul><li>8. Fluvoxamin (fevarin)</li><li>9. Trimeperidin</li><li>10. Atenolol</li></ul>
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<ul> <li>7. Platifilin h/t</li> <li>8. Cimetidin</li> <li>9. Metoclopramid</li> <li>10. Glibenclamid</li> <li>11. Trihexifenidil</li> <li>12. Amlodipin</li> <li>13. Metildopa</li> <li>14. Hidroclortiazid</li> <li>15. Vinpocetin</li> <li>16. Itraconazol</li> </ul>	<ol> <li>8. Sulfat de magneziu</li> <li>9. Pentoxifilin</li> <li>10. Metiluracil</li> <li>11. Etambutol</li> <li>12. Oxazepam</li> <li>13. Risperidin</li> <li>14. Ketoprofen</li> <li>15. Nimesulid</li> <li>16. Dihidroergotamin</li> </ol>	<ul> <li>8. Fluvoxamin (fevarin)</li> <li>9. Trimeperidin</li> <li>10. Atenolol</li> <li>11. Imipraminum</li> <li>12. Carbamazepin</li> <li>13. Lizinopril</li> <li>14. Cinarizin</li> <li>15. Bromazepam</li> <li>16. Fenazepam</li> </ul>
<ul> <li>7. Platifilin h/t</li> <li>8. Cimetidin</li> <li>9. Metoclopramid</li> <li>10. Glibenclamid</li> <li>11. Trihexifenidil</li> <li>12. Amlodipin</li> <li>13. Metildopa</li> <li>14. Hidroclortiazid</li> <li>15. Vinpocetin</li> <li>16. Itraconazol</li> <li>17. Simvastatin</li> </ul>	<ol> <li>8. Sulfat de magneziu</li> <li>9. Pentoxifilin</li> <li>10. Metiluracil</li> <li>11. Etambutol</li> <li>12. Oxazepam</li> <li>13. Risperidin</li> <li>14. Ketoprofen</li> <li>15. Nimesulid</li> <li>16. Dihidroergotamin</li> <li>17. Piracetam</li> </ol>	<ul> <li>8. Fluvoxamin (fevarin)</li> <li>9. Trimeperidin</li> <li>10. Atenolol</li> <li>11. Imipraminum</li> <li>12. Carbamazepin</li> <li>13. Lizinopril</li> <li>14. Cinarizin</li> <li>15. Bromazepam</li> <li>16. Fenazepam</li> <li>17. Indometacin</li> </ul>
<ul> <li>7. Platifilin h/t</li> <li>8. Cimetidin</li> <li>9. Metoclopramid</li> <li>10. Glibenclamid</li> <li>11. Trihexifenidil</li> <li>12. Amlodipin</li> <li>13. Metildopa</li> <li>14. Hidroclortiazid</li> <li>15. Vinpocetin</li> <li>16. Itraconazol</li> <li>17. Simvastatin</li> <li>18. Meloxicam</li> </ul>	<ol> <li>8. Sulfat de magneziu</li> <li>9. Pentoxifilin</li> <li>10. Metiluracil</li> <li>11. Etambutol</li> <li>12. Oxazepam</li> <li>13. Risperidin</li> <li>14. Ketoprofen</li> <li>15. Nimesulid</li> <li>16. Dihidroergotamin</li> <li>17. Piracetam</li> <li>18. Codein fosfat</li> </ol>	<ul> <li>8. Fluvoxamin (fevarin)</li> <li>9. Trimeperidin</li> <li>10. Atenolol</li> <li>11. Imipraminum</li> <li>12. Carbamazepin</li> <li>13. Lizinopril</li> <li>14. Cinarizin</li> <li>15. Bromazepam</li> <li>16. Fenazepam</li> <li>17. Indometacin</li> <li>18. Azitromicin</li> </ul>

List NR. 7	List Nr.8	List Nr.9
1. Sombrevin	1. Diazepam	1. Amfetamin
2. Clordiazepocsid	2. Trimeperidin	2. Elenium
3. Clonidin	3. Teopental natriu	3. Droperidol
4. Relium	4. Hidrocortizon	4. Tramadol
5. Dexametazon	5. Doxiciclin	5. Cyclodol
6. Nifedipin	6. Bromocriptin	6. Panangin
7. Betametazon	7. Ranitidin	7. Rosuvastatin
8. Gentamicin	8. Clonidin	8. Sulfocamfocain
9. Estradiol	9. Hemodez neo	9. Amlodipin
10. Bromazepam	10. Morfilong	10. Lexotan
11. Ketoconazol	11. Dimedrol	11. Trimeperidin
12. Difenhidramin	12. Metformin	12. Oxitocin
13. Verapamil	13. Piridoxin	13. Ofloxacin
14. Pentoxifilin	14. Soludexan	14. Metotrexat
15. Fenazepam	15. Atrotinin sulfat	15. Ciclosporin
16. Zolpidem	16. Ramipril	16. Clozapin
17. Bisoprolol	17. Propranolol	17. Losartan
18. Galvus (Vildagliptin)	18. Platifilin h/t	18. Mebendazol
19. Metoclopramid	19. Aciclovir	19. Ciprofloxacin
20. Domperidon	20. Clotrimazol	20. Flosteron
List Nr.10	List Nr.11	List Nr. 12.
<b>List Nr.10</b> 1. Aethylmorphini h/c	List Nr.11 1. Xanax	List Nr. 12. 1. Etilmorfină clorhidrat
1. Aethylmorphini h/c	1. Xanax	1. Etilmorfină clorhidrat
<ol> <li>Aethylmorphini h/c</li> <li>Ketazolam</li> </ol>	<ol> <li>Xanax</li> <li>Etilamfetamin</li> </ol>	<ol> <li>Etilmorfină clorhidrat</li> <li>Barbital natrium</li> </ol>
<ol> <li>Aethylmorphini h/c</li> <li>Ketazolam</li> <li>Ergometrin</li> </ol>	<ol> <li>Xanax</li> <li>Etilamfetamin</li> <li>Wenflox</li> </ol>	<ol> <li>Etilmorfină clorhidrat</li> <li>Barbital natrium</li> <li>Grandaxin</li> <li>Retabolil</li> </ol>
<ol> <li>Aethylmorphini h/c</li> <li>Ketazolam</li> <li>Ergometrin</li> <li>Nitrazepam</li> </ol>	<ol> <li>Xanax</li> <li>Etilamfetamin</li> <li>Wenflox</li> <li>Dimedrol</li> </ol>	<ol> <li>Etilmorfină clorhidrat</li> <li>Barbital natrium</li> <li>Grandaxin</li> <li>Retabolil</li> </ol>
<ol> <li>Aethylmorphini h/c</li> <li>Ketazolam</li> <li>Ergometrin</li> <li>Nitrazepam</li> <li>Amitriptilin</li> </ol>	<ol> <li>Xanax</li> <li>Etilamfetamin</li> <li>Wenflox</li> <li>Dimedrol</li> <li>Vinkristin</li> </ol>	<ol> <li>Etilmorfină clorhidrat</li> <li>Barbital natrium</li> <li>Grandaxin</li> <li>Retabolil</li> <li>Azothyoprinum</li> </ol>
<ol> <li>Aethylmorphini h/c</li> <li>Ketazolam</li> <li>Ergometrin</li> <li>Nitrazepam</li> <li>Amitriptilin</li> <li>Osarsol</li> </ol>	<ol> <li>Xanax</li> <li>Etilamfetamin</li> <li>Wenflox</li> <li>Dimedrol</li> <li>Vinkristin</li> <li>Trihexifenidil</li> </ol>	<ol> <li>Etilmorfină clorhidrat</li> <li>Barbital natrium</li> <li>Grandaxin</li> <li>Retabolil</li> <li>Azothyoprinum</li> <li>Clorpromazin</li> </ol>
<ol> <li>Aethylmorphini h/c</li> <li>Ketazolam</li> <li>Ergometrin</li> <li>Nitrazepam</li> <li>Amitriptilin</li> <li>Osarsol</li> <li>Adelfan</li> </ol>	<ol> <li>Xanax</li> <li>Etilamfetamin</li> <li>Wenflox</li> <li>Dimedrol</li> <li>Vinkristin</li> <li>Trihexifenidil</li> <li>Lopril</li> </ol>	<ol> <li>Etilmorfină clorhidrat</li> <li>Barbital natrium</li> <li>Grandaxin</li> <li>Retabolil</li> <li>Azothyoprinum</li> <li>Clorpromazin</li> <li>Loratadin</li> <li>Heparin</li> <li>Indapamid</li> </ol>
<ol> <li>Aethylmorphini h/c</li> <li>Ketazolam</li> <li>Ergometrin</li> <li>Nitrazepam</li> <li>Amitriptilin</li> <li>Osarsol</li> <li>Adelfan</li> <li>Enalapril</li> </ol>	<ol> <li>Xanax</li> <li>Etilamfetamin</li> <li>Wenflox</li> <li>Dimedrol</li> <li>Vinkristin</li> <li>Trihexifenidil</li> <li>Lopril</li> <li>Diclofenac de natriu</li> <li>Droperidol</li> </ol>	<ol> <li>Etilmorfină clorhidrat</li> <li>Barbital natrium</li> <li>Grandaxin</li> <li>Retabolil</li> <li>Azothyoprinum</li> <li>Clorpromazin</li> <li>Loratadin</li> <li>Heparin</li> </ol>
<ol> <li>Aethylmorphini h/c</li> <li>Ketazolam</li> <li>Ergometrin</li> <li>Nitrazepam</li> <li>Amitriptilin</li> <li>Osarsol</li> <li>Adelfan</li> <li>Enalapril</li> <li>Co-trimoxazol</li> </ol>	<ol> <li>Xanax</li> <li>Etilamfetamin</li> <li>Wenflox</li> <li>Dimedrol</li> <li>Vinkristin</li> <li>Trihexifenidil</li> <li>Lopril</li> <li>Diclofenac de natriu</li> </ol>	<ol> <li>Etilmorfină clorhidrat</li> <li>Barbital natrium</li> <li>Grandaxin</li> <li>Retabolil</li> <li>Azothyoprinum</li> <li>Clorpromazin</li> <li>Loratadin</li> <li>Heparin</li> <li>Indapamid</li> </ol>
<ol> <li>Aethylmorphini h/c</li> <li>Ketazolam</li> <li>Ergometrin</li> <li>Nitrazepam</li> <li>Amitriptilin</li> <li>Osarsol</li> <li>Adelfan</li> <li>Enalapril</li> <li>Co-trimoxazol</li> <li>Montelukast</li> </ol>	<ol> <li>Xanax</li> <li>Etilamfetamin</li> <li>Wenflox</li> <li>Dimedrol</li> <li>Vinkristin</li> <li>Trihexifenidil</li> <li>Lopril</li> <li>Diclofenac de natriu</li> <li>Droperidol</li> <li>Clonazepam</li> </ol>	<ol> <li>Etilmorfină clorhidrat</li> <li>Barbital natrium</li> <li>Grandaxin</li> <li>Retabolil</li> <li>Azothyoprinum</li> <li>Clorpromazin</li> <li>Loratadin</li> <li>Heparin</li> <li>Indapamid</li> <li>Izoniazid</li> </ol>
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<ol> <li>Aethylmorphini h/c</li> <li>Ketazolam</li> <li>Ergometrin</li> <li>Nitrazepam</li> <li>Amitriptilin</li> <li>Osarsol</li> <li>Adelfan</li> <li>Enalapril</li> <li>Co-trimoxazol</li> <li>Montelukast</li> <li>Ceftriaxon</li> <li>Doxiciclin solutab</li> </ol>	<ol> <li>Xanax</li> <li>Etilamfetamin</li> <li>Wenflox</li> <li>Dimedrol</li> <li>Vinkristin</li> <li>Trihexifenidil</li> <li>Lopril</li> <li>Diclofenac de natriu</li> <li>Droperidol</li> <li>Clonazepam</li> <li>Pantoprazol</li> <li>Trimeperidin</li> </ol>	1. Etilmorfină clorhidrat2. Barbital natrium3. Grandaxin4. Retabolil5. Azothyoprinum6. Clorpromazin7. Loratadin8. Heparin9. Indapamid10. Izoniazid11. Strofantin K12. Haloperidol
<ol> <li>Aethylmorphini h/c</li> <li>Ketazolam</li> <li>Ergometrin</li> <li>Nitrazepam</li> <li>Amitriptilin</li> <li>Osarsol</li> <li>Adelfan</li> <li>Enalapril</li> <li>Co-trimoxazol</li> <li>Montelukast</li> <li>Ceftriaxon</li> <li>Doxiciclin solutab</li> <li>Diprospan</li> </ol>	<ol> <li>Xanax</li> <li>Etilamfetamin</li> <li>Wenflox</li> <li>Dimedrol</li> <li>Vinkristin</li> <li>Trihexifenidil</li> <li>Lopril</li> <li>Diclofenac de natriu</li> <li>Droperidol</li> <li>Clonazepam</li> <li>Pantoprazol</li> <li>Trimeperidin</li> <li>Finlepsin</li> </ol>	<ol> <li>Etilmorfină clorhidrat</li> <li>Barbital natrium</li> <li>Grandaxin</li> <li>Retabolil</li> <li>Azothyoprinum</li> <li>Clorpromazin</li> <li>Loratadin</li> <li>Heparin</li> <li>Indapamid</li> <li>Izoniazid</li> <li>Strofantin K</li> <li>Haloperidol</li> <li>Tamoxifen</li> </ol>
<ol> <li>Aethylmorphini h/c</li> <li>Ketazolam</li> <li>Ergometrin</li> <li>Nitrazepam</li> <li>Amitriptilin</li> <li>Osarsol</li> <li>Adelfan</li> <li>Enalapril</li> <li>Co-trimoxazol</li> <li>Montelukast</li> <li>Ceftriaxon</li> <li>Doxiciclin solutab</li> <li>Diprospan</li> <li>Clopidogrel</li> </ol>	<ol> <li>Xanax</li> <li>Etilamfetamin</li> <li>Wenflox</li> <li>Dimedrol</li> <li>Vinkristin</li> <li>Trihexifenidil</li> <li>Lopril</li> <li>Diclofenac de natriu</li> <li>Droperidol</li> <li>Clonazepam</li> <li>Pantoprazol</li> <li>Trimeperidin</li> <li>Finlepsin</li> <li>Axprenolol</li> </ol>	1. Etilmorfină clorhidrat2. Barbital natrium3. Grandaxin4. Retabolil5. Azothyoprinum6. Clorpromazin7. Loratadin8. Heparin9. Indapamid10. Izoniazid11. Strofantin K12. Haloperidol13. Tamoxifen14. Zolpidem
<ol> <li>Aethylmorphini h/c</li> <li>Ketazolam</li> <li>Ergometrin</li> <li>Nitrazepam</li> <li>Amitriptilin</li> <li>Osarsol</li> <li>Adelfan</li> <li>Enalapril</li> <li>Co-trimoxazol</li> <li>Montelukast</li> <li>Ceftriaxon</li> <li>Doxiciclin solutab</li> <li>Diprospan</li> <li>Clopidogrel</li> <li>Amiocardin</li> </ol>	<ol> <li>Xanax</li> <li>Etilamfetamin</li> <li>Wenflox</li> <li>Dimedrol</li> <li>Vinkristin</li> <li>Trihexifenidil</li> <li>Lopril</li> <li>Diclofenac de natriu</li> <li>Droperidol</li> <li>Clonazepam</li> <li>Pantoprazol</li> <li>Trimeperidin</li> <li>Finlepsin</li> <li>Oxprenolol</li> <li>Doxiciclin</li> </ol>	<ol> <li>Etilmorfină clorhidrat</li> <li>Barbital natrium</li> <li>Grandaxin</li> <li>Retabolil</li> <li>Azothyoprinum</li> <li>Clorpromazin</li> <li>Loratadin</li> <li>Heparin</li> <li>Indapamid</li> <li>Izoniazid</li> <li>Strofantin K</li> <li>Haloperidol</li> <li>Tamoxifen</li> <li>Zolpidem</li> <li>Ofloxacin</li> </ol>
<ol> <li>Aethylmorphini h/c</li> <li>Ketazolam</li> <li>Ergometrin</li> <li>Nitrazepam</li> <li>Amitriptilin</li> <li>Osarsol</li> <li>Adelfan</li> <li>Enalapril</li> <li>Co-trimoxazol</li> <li>Montelukast</li> <li>Ceftriaxon</li> <li>Doxiciclin solutab</li> <li>Diprospan</li> <li>Clopidogrel</li> <li>Amiocardin</li> <li>Valsartan</li> </ol>	<ol> <li>Xanax</li> <li>Etilamfetamin</li> <li>Wenflox</li> <li>Dimedrol</li> <li>Vinkristin</li> <li>Trihexifenidil</li> <li>Lopril</li> <li>Diclofenac de natriu</li> <li>Droperidol</li> <li>Clonazepam</li> <li>Pantoprazol</li> <li>Trimeperidin</li> <li>Finlepsin</li> <li>Oxprenolol</li> <li>Doxiciclin</li> <li>Atropin sulfat</li> </ol>	1. Etilmorfină clorhidrat2. Barbital natrium3. Grandaxin4. Retabolil5. Azothyoprinum6. Clorpromazin7. Loratadin8. Heparin9. Indapamid10. Izoniazid11. Strofantin K12. Haloperidol13. Tamoxifen14. Zolpidem15. Ofloxacin16. Trimeperidin
<ol> <li>Aethylmorphini h/c</li> <li>Ketazolam</li> <li>Ergometrin</li> <li>Nitrazepam</li> <li>Amitriptilin</li> <li>Osarsol</li> <li>Adelfan</li> <li>Enalapril</li> <li>Co-trimoxazol</li> <li>Montelukast</li> <li>Ceftriaxon</li> <li>Doxiciclin solutab</li> <li>Diprospan</li> <li>Clopidogrel</li> <li>Amiocardin</li> <li>Valsartan</li> <li>Naproxen</li> </ol>	<ol> <li>Xanax</li> <li>Etilamfetamin</li> <li>Wenflox</li> <li>Dimedrol</li> <li>Vinkristin</li> <li>Trihexifenidil</li> <li>Lopril</li> <li>Diclofenac de natriu</li> <li>Droperidol</li> <li>Clonazepam</li> <li>Pantoprazol</li> <li>Trimeperidin</li> <li>Finlepsin</li> <li>Axropin sulfat</li> <li>Piracetam</li> </ol>	1. Etilmorfină clorhidrat2. Barbital natrium3. Grandaxin4. Retabolil5. Azothyoprinum6. Clorpromazin7. Loratadin8. Heparin9. Indapamid10. Izoniazid11. Strofantin K12. Haloperidol13. Tamoxifen14. Zolpidem15. Ofloxacin16. Trimeperidin17. Gentamicin

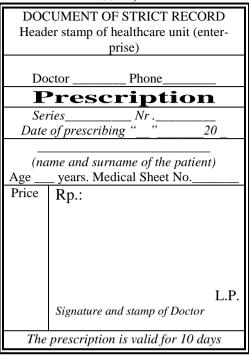




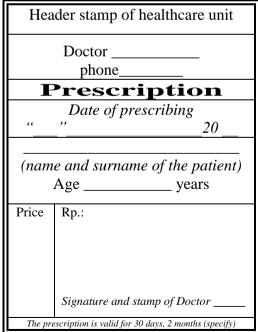
Recipe Form No. 1 for prescribing and delivery of medicines (dimensions 100mm x 200mm)

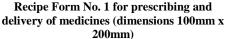
Н	eader stamp of healthcare unit	
Docto	r phone	
	Prescription	
"	Date of prescribing " 20	
	me and surname of the patient) Age years	
Price	Rp.:	
	L.P. Signature and stamp of Doctor	
The pro	escription is valid for 30 days, 2 months (specify)	

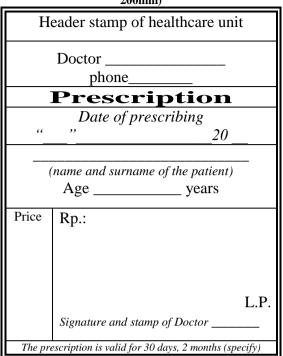
#### Recipe Form No. 2 for prescribing and delivery of medicines (dimensions 100mm x 200mm)



#### Recipe Form No. 1 for prescribing and delivery of medicines (dimensions 100mm x 200mm)



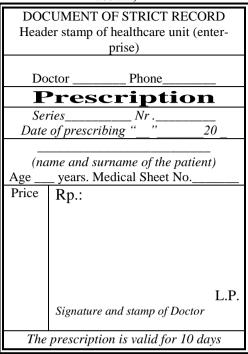




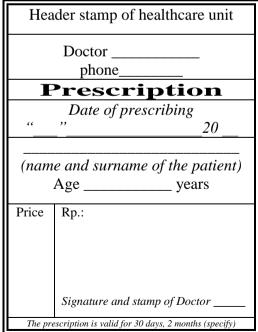
Recipe Form No. 1 for prescribing and delivery of medicines (dimensions 100mm x 200mm)

Н	eader stamp of healthcare unit	
Docto	r phone	
	Prescription	
"	Date of prescribing " 20	
(na	me and surname of the patient) Age years	
Price	Rp.:	
	L.P. Signature and stamp of Doctor	
The pr	escription is valid for 30 days, 2 months (specify)	┢

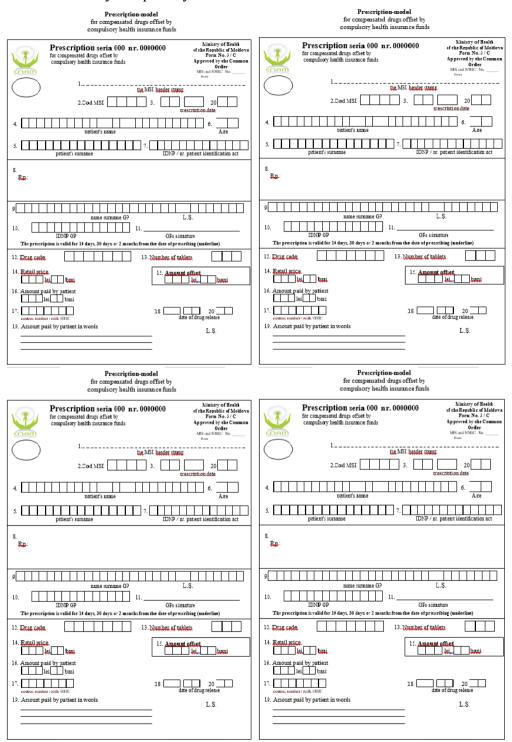
#### Recipe Form No. 2 for prescribing and delivery of medicines (dimensions 100mm x 200mm)



#### Recipe Form No. 1 for prescribing and delivery of medicines (dimensions 100mm x 200mm)



**Exercise 4.** Prescribe prescriptions for drugs from the proposed list, he cost of which is offset by compulsory health insurance funds.



1. Bîrcă Elena, 50 years old	1. Rudenco Livia, 68 years old.
Rp: Tab.Amlodipin 0.05 N 30	Rp.: Tab.Digoxinum 0.0025 N 25
DS. One pill each day	DS. One pill 2 times per day.
2. Pitman Marian, 55 years old.	2. Gaibu Oleg, 67 years old.
<b>Rp:</b> Tab.Acid acetylsalicylicum 0.075 N. 30	Rp.: Tab.Amiodaronum 0.2 N 30
DS. One pill each day.	DS. One pill a day.
3. Arseni Alina, 58 years old.	3. Fusu Elena, 60 ani.
Rp: Tab.Enalaprilum 0.01 N 20	Rp.: Tab.Torasemidum 0.005 N 20
DS. One pill 2 times per day.	DS. One pill 2 times per day.
4. Deget Dumitru, 49 years old.	4. Constantinov Ana-Maria, 49 years old.
Rp.:Tab.Lisinoprilum 0.020 N 28	Rp.:Tab. Enalapril 0.02 N 30
DS. One pill each day.	DS. One pill 2 times per day.
1. Lungu Ion, 63 years old.	1. Dodonov Ecaterina, 46 years old.
Rp.: Tab.Indapamidum 0.0015 N 30	Rp.: TabAmlodipinum 0.05 N 30
DS. One pill a day in the morning	DS. One pill a day.
2. Budu Lavrentie, 49 years old.	2. Guțenco Dragoș, 67 years old.
Rp.: Tab.Isosorbidi mononitras 0.02 N 30	Rp.: Tab.Bisoprololum 0.005 N 30
DS. One pill a day.	DS. One pill a day.
3. Bou Adelina, 66 years old.	3. Furom Raisa, 58 years old.
Rp.: Tab.Enalaprilum 0.01 N 30	Rp.: Tab. Ramiprilum 0.005 N 30
DS. One pill 2 times per day.	DS. One pill a day.
4. Donțu Iurie, 72 years old.	4. Pop Alina, 59 years old.
Rp.: Tab.Losartanum 0.05 N30	Rp.:Tab. Verapamilum 0.08 N 30
DS. One pill a day in the morning	DS One pill 2 times per day.
1. Gîncu Lilia, 67 years old.	1. Racov Andrei, 59 years old.
Rp.: Tab.Ramiprilumum 0.01 N 30	Rp.: Tab. Indapamidum 0.0015 N 20
Rp.: Tab.Ramiprilumum 0.01 N 30 DS. One pill a day.	Rp.: Tab. Indapamidum 0.0015 N 20 DS. One pill a day.
Rp.: Tab.Ramiprilumum 0.01 N 30 DS. One pill a day. <b>2. Postolache Ludmila, 58 years old.</b>	Rp.: Tab. Indapamidum 0.0015 N 20 DS. One pill a day. <b>2. Țucanov Liubovi, 49 years old.</b>
Rp.: Tab.Ramiprilumum 0.01 N 30 DS. One pill a day. <b>2. Postolache Ludmila, 58 years old.</b> Rp.: Tab. Spirolactonum 0.025 N 20	Rp.: Tab. Indapamidum 0.0015 N 20 DS. One pill a day. <b>2. Țucanov Liubovi, 49 years old.</b> Rp.: Tab.Digoxinum 0.00025 N 50
<ul> <li>Rp.: Tab.Ramiprilumum 0.01 N 30 DS. One pill a day.</li> <li><b>2. Postolache Ludmila, 58 years old.</b> Rp.: Tab. Spirolactonum 0.025 N 20 DS. One pill a day.</li> </ul>	<ul> <li>Rp.: Tab. Indapamidum 0.0015 N 20 DS. One pill a day.</li> <li><b>2. Ţucanov Liubovi, 49 years old.</b> Rp.: Tab.Digoxinum 0.00025 N 50 DS. One pill 2 times per day.</li> </ul>
<ul> <li>Rp.: Tab.Ramiprilumum 0.01 N 30 DS. One pill a day.</li> <li><b>2. Postolache Ludmila, 58 years old.</b> Rp.: Tab. Spirolactonum 0.025 N 20 DS. One pill a day.</li> <li><b>3. Russu Larisa, 83 years old</b></li> </ul>	<ul> <li>Rp.: Tab. Indapamidum 0.0015 N 20 DS. One pill a day.</li> <li><b>7. Jucanov Liubovi, 49 years old.</b> Rp.: Tab.Digoxinum 0.00025 N 50 DS. One pill 2 times per day.</li> <li><b>3. Golovin Alexandru, 58 years old.</b></li> </ul>
<ul> <li>Rp.: Tab.Ramiprilumum 0.01 N 30 DS. One pill a day.</li> <li><b>2. Postolache Ludmila, 58 years old.</b> Rp.: Tab. Spirolactonum 0.025 N 20 DS. One pill a day.</li> <li><b>3. Russu Larisa, 83 years old</b> Rp.: Tab.Indapamidum 0.0025 N 20</li> </ul>	<ul> <li>Rp.: Tab. Indapamidum 0.0015 N 20 DS. One pill a day.</li> <li><b>7. Jucanov Liubovi, 49 years old.</b> Rp.: Tab.Digoxinum 0.00025 N 50 DS. One pill 2 times per day.</li> <li><b>3. Golovin Alexandru, 58 years old.</b> Rp.: Tab.Amlodipinum 0.05 N 56</li> </ul>
<ul> <li>Rp.: Tab.Ramiprilumum 0.01 N 30 DS. One pill a day.</li> <li>2. Postolache Ludmila, 58 years old. Rp.: Tab. Spirolactonum 0.025 N 20 DS. One pill a day.</li> <li>3. Russu Larisa, 83 years old Rp.: Tab.Indapamidum 0.0025 N 20 DS. One pill a day in the morning.</li> </ul>	<ul> <li>Rp.: Tab. Indapamidum 0.0015 N 20 DS. One pill a day.</li> <li><b>7. Tucanov Liubovi, 49 years old.</b> Rp.: Tab.Digoxinum 0.00025 N 50 DS. One pill 2 times per day.</li> <li><b>3. Golovin Alexandru, 58 years old.</b> Rp.: Tab.Amlodipinum 0.05 N 56 DS. One pill a day.</li> </ul>
<ul> <li>Rp.: Tab.Ramiprilumum 0.01 N 30 DS. One pill a day.</li> <li><b>2. Postolache Ludmila, 58 years old.</b> Rp.: Tab. Spirolactonum 0.025 N 20 DS. One pill a day.</li> <li><b>3. Russu Larisa, 83 years old</b> Rp.: Tab.Indapamidum 0.0025 N 20 DS. One pill a day in the morning.</li> <li><b>4. Forov Dorin, 47 years old.</b></li> </ul>	<ul> <li>Rp.: Tab. Indapamidum 0.0015 N 20 DS. One pill a day.</li> <li><b>7. Jucanov Liubovi, 49 years old.</b> Rp.: Tab.Digoxinum 0.00025 N 50 DS. One pill 2 times per day.</li> <li><b>3. Golovin Alexandru, 58 years old.</b> Rp.: Tab.Amlodipinum 0.05 N 56 DS. One pill a day.</li> <li><b>4. Ciupearcă Vladimir, 23 years old.</b></li> </ul>
<ul> <li>Rp.: Tab.Ramiprilumum 0.01 N 30 DS. One pill a day.</li> <li><b>2. Postolache Ludmila, 58 years old.</b> Rp.: Tab. Spirolactonum 0.025 N 20 DS. One pill a day.</li> <li><b>3. Russu Larisa, 83 years old</b> Rp.: Tab.Indapamidum 0.0025 N 20 DS. One pill a day in the morning.</li> <li><b>4. Forov Dorin, 47 years old.</b> Rp.:Tab.Verapamilum 0.04 N 30</li> </ul>	<ul> <li>Rp.: Tab. Indapamidum 0.0015 N 20 DS. One pill a day.</li> <li><b>7 Jucanov Liubovi, 49 years old.</b> Rp.: Tab.Digoxinum 0.00025 N 50 DS. One pill 2 times per day.</li> <li><b>3 Golovin Alexandru, 58 years old.</b> Rp.: Tab.Amlodipinum 0.05 N 56 DS. One pill a day.</li> <li><b>4 Ciupearcă Vladimir, 23 years old.</b> Rp.: Tab. Acidi folicum 0.001 N 30</li> </ul>
<ul> <li>Rp.: Tab.Ramiprilumum 0.01 N 30 DS. One pill a day.</li> <li><b>2. Postolache Ludmila, 58 years old.</b> Rp.: Tab. Spirolactonum 0.025 N 20 DS. One pill a day.</li> <li><b>3. Russu Larisa, 83 years old</b> Rp.: Tab.Indapamidum 0.0025 N 20 DS. One pill a day in the morning.</li> <li><b>4. Forov Dorin, 47 years old.</b></li> </ul>	<ul> <li>Rp.: Tab. Indapamidum 0.0015 N 20 DS. One pill a day.</li> <li><b>7. Jucanov Liubovi, 49 years old.</b> Rp.: Tab.Digoxinum 0.00025 N 50 DS. One pill 2 times per day.</li> <li><b>3. Golovin Alexandru, 58 years old.</b> Rp.: Tab.Amlodipinum 0.05 N 56 DS. One pill a day.</li> <li><b>4. Ciupearcă Vladimir, 23 years old.</b></li> </ul>
<ul> <li>Rp.: Tab.Ramiprilumum 0.01 N 30 DS. One pill a day.</li> <li><b>2. Postolache Ludmila, 58 years old.</b> Rp.: Tab. Spirolactonum 0.025 N 20 DS. One pill a day.</li> <li><b>3. Russu Larisa, 83 years old</b> Rp.: Tab.Indapamidum 0.0025 N 20 DS. One pill a day in the morning.</li> <li><b>4. Forov Dorin, 47 years old.</b> Rp.:Tab.Verapamilum 0.04 N 30 DS. One pill a day.</li> </ul>	<ul> <li>Rp.: Tab. Indapamidum 0.0015 N 20 DS. One pill a day.</li> <li><b>7. Tucanov Liubovi, 49 years old.</b> Rp.: Tab.Digoxinum 0.00025 N 50 DS. One pill 2 times per day.</li> <li><b>3. Golovin Alexandru, 58 years old.</b> Rp.: Tab.Amlodipinum 0.05 N 56 DS. One pill a day.</li> <li><b>4. Ciupearcă Vladimir, 23 years old.</b> Rp.: Tab. Acidi folicum 0.001 N 30 DS. One pill 2 times per day.</li> </ul>
<ul> <li>Rp.: Tab.Ramiprilumum 0.01 N 30 DS. One pill a day.</li> <li><b>2. Postolache Ludmila, 58 years old.</b> Rp.: Tab. Spirolactonum 0.025 N 20 DS. One pill a day.</li> <li><b>3. Russu Larisa, 83 years old</b> Rp.: Tab.Indapamidum 0.0025 N 20 DS. One pill a day in the morning.</li> <li><b>4. Forov Dorin, 47 years old.</b> Rp.:Tab.Verapamilum 0.04 N 30 DS. One pill a day.</li> <li><b>1. Ţuică Arsenie, 54 years old.</b></li> </ul>	<ul> <li>Rp.: Tab. Indapamidum 0.0015 N 20 DS. One pill a day.</li> <li><b>7. Tucanov Liubovi, 49 years old.</b> Rp.: Tab.Digoxinum 0.00025 N 50 DS. One pill 2 times per day.</li> <li><b>3. Golovin Alexandru, 58 years old.</b> Rp.: Tab.Amlodipinum 0.05 N 56 DS. One pill a day.</li> <li><b>4. Ciupearcă Vladimir, 23 years old.</b> Rp.: Tab. Acidi folicum 0.001 N 30 DS. One pill 2 times per day.</li> <li><b>1. Duru Ion, 49 years old.</b></li> </ul>
<ul> <li>Rp.: Tab.Ramiprilumum 0.01 N 30 DS. One pill a day.</li> <li><b>2. Postolache Ludmila, 58 years old.</b> Rp.: Tab. Spirolactonum 0.025 N 20 DS. One pill a day.</li> <li><b>3. Russu Larisa, 83 years old</b> Rp.: Tab.Indapamidum 0.0025 N 20 DS. One pill a day in the morning.</li> <li><b>4. Forov Dorin, 47 years old.</b> Rp.:Tab.Verapamilum 0.04 N 30 DS. One pill a day.</li> <li><b>1. Țuică Arsenie, 54 years old.</b> Rp.: Tab.Claritromycinum 0.5 N 14</li> </ul>	<ul> <li>Rp.: Tab. Indapamidum 0.0015 N 20 DS. One pill a day.</li> <li><b>7. Tucanov Liubovi, 49 years old.</b> Rp.: Tab.Digoxinum 0.00025 N 50 DS. One pill 2 times per day.</li> <li><b>3. Golovin Alexandru, 58 years old.</b> Rp.: Tab.Amlodipinum 0.05 N 56 DS. One pill a day.</li> <li><b>4. Ciupearcă Vladimir, 23 years old.</b> Rp.: Tab. Acidi folicum 0.001 N 30 DS. One pill 2 times per day.</li> <li><b>1. Duru Ion, 49 years old.</b> Rp.:Supp. Paracetamolum 0.1 N 10</li> </ul>
<ul> <li>Rp.: Tab.Ramiprilumum 0.01 N 30 DS. One pill a day.</li> <li><b>2. Postolache Ludmila, 58 years old.</b> Rp.: Tab. Spirolactonum 0.025 N 20 DS. One pill a day.</li> <li><b>3. Russu Larisa, 83 years old</b> Rp.: Tab.Indapamidum 0.0025 N 20 DS. One pill a day in the morning.</li> <li><b>4. Forov Dorin, 47 years old.</b> Rp.:Tab.Verapamilum 0.04 N 30 DS. One pill a day.</li> <li><b>1. Țuică Arsenie, 54 years old.</b> Rp.: Tab.Claritromycinum 0.5 N 14 DS One pill 2 times per day.</li> </ul>	<ul> <li>Rp.: Tab. Indapamidum 0.0015 N 20 DS. One pill a day.</li> <li><b>7. Tucanov Liubovi, 49 years old.</b> Rp.: Tab.Digoxinum 0.00025 N 50 DS. One pill 2 times per day.</li> <li><b>3. Golovin Alexandru, 58 years old.</b> Rp.: Tab.Amlodipinum 0.05 N 56 DS. One pill a day.</li> <li><b>4. Ciupearcă Vladimir, 23 years old.</b> Rp.: Tab. Acidi folicum 0.001 N 30 DS. One pill 2 times per day.</li> <li><b>1. Duru Ion, 49 years old.</b> Rp.:Supp. Paracetamolum 0.1 N 10 DS. One supp. in case of fever.</li> </ul>
<ul> <li>Rp.: Tab.Ramiprilumum 0.01 N 30 DS. One pill a day.</li> <li><b>2. Postolache Ludmila, 58 years old.</b> Rp.: Tab. Spirolactonum 0.025 N 20 DS. One pill a day.</li> <li><b>3. Russu Larisa, 83 years old</b> Rp.: Tab.Indapamidum 0.0025 N 20 DS. One pill a day in the morning.</li> <li><b>4. Forov Dorin, 47 years old.</b> Rp.:Tab.Verapamilum 0.04 N 30 DS. One pill a day.</li> <li><b>1. Țuică Arsenie, 54 years old.</b> Rp.: Tab.Claritromycinum 0.5 N 14</li> </ul>	<ul> <li>Rp.: Tab. Indapamidum 0.0015 N 20 DS. One pill a day.</li> <li><b>7. Tucanov Liubovi, 49 years old.</b> Rp.: Tab.Digoxinum 0.00025 N 50 DS. One pill 2 times per day.</li> <li><b>3. Golovin Alexandru, 58 years old.</b> Rp.: Tab.Amlodipinum 0.05 N 56 DS. One pill a day.</li> <li><b>4. Ciupearcă Vladimir, 23 years old.</b> Rp.: Tab. Acidi folicum 0.001 N 30 DS. One pill 2 times per day.</li> <li><b>1. Duru Ion, 49 years old.</b> Rp.:Supp. Paracetamolum 0.1 N 10</li> </ul>
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<ul> <li>Rp.: Tab.Ramiprilumum 0.01 N 30 DS. One pill a day.</li> <li><b>2. Postolache Ludmila, 58 years old.</b> Rp.: Tab. Spirolactonum 0.025 N 20 DS. One pill a day.</li> <li><b>3. Russu Larisa, 83 years old</b> Rp.: Tab.Indapamidum 0.0025 N 20 DS. One pill a day in the morning.</li> <li><b>4. Forov Dorin, 47 years old.</b> Rp.:Tab.Verapamilum 0.04 N 30 DS. One pill a day.</li> <li><b>1. Țuică Arsenie, 54 years old.</b> Rp.: Tab.Claritromycinum 0.5 N 14 DS One pill 2 times per day.</li> <li><b>2. Rîcun Igor, 57 years old.</b> Rp.:Tab.Famotidinum 0.02 N 20</li> </ul>	<ul> <li>Rp.: Tab. Indapamidum 0.0015 N 20 DS. One pill a day.</li> <li><b>7. Tucanov Liubovi, 49 years old.</b> Rp.: Tab.Digoxinum 0.00025 N 50 DS. One pill 2 times per day.</li> <li><b>3. Golovin Alexandru, 58 years old.</b> Rp.: Tab.Amlodipinum 0.05 N 56 DS. One pill a day.</li> <li><b>4. Ciupearcă Vladimir, 23 years old.</b> Rp.: Tab. Acidi folicum 0.001 N 30 DS. One pill 2 times per day.</li> <li><b>1. Duru Ion, 49 years old.</b> Rp.:Supp. Paracetamolum 0.1 N 10 DS. One supp. in case of fever.</li> <li><b>2. Voroniuc Larisa, 48 years old.</b> Rp.: Tab.Acidum valproicum 0.2 N 50</li> </ul>
<ul> <li>Rp.: Tab.Ramiprilumum 0.01 N 30 DS. One pill a day.</li> <li><b>2. Postolache Ludmila, 58 years old.</b> Rp.: Tab. Spirolactonum 0.025 N 20 DS. One pill a day.</li> <li><b>3. Russu Larisa, 83 years old</b> Rp.: Tab.Indapamidum 0.0025 N 20 DS. One pill a day in the morning.</li> <li><b>4. Forov Dorin, 47 years old.</b> Rp.:Tab.Verapamilum 0.04 N 30 DS. One pill a day.</li> <li><b>1. Țuică Arsenie, 54 years old.</b> Rp.: Tab.Claritromycinum 0.5 N 14 DS One pill 2 times per day.</li> <li><b>2. Rîcun Igor, 57 years old.</b> Rp.:Tab.Famotidinum 0.02 N 20 DS. One pill 2 times per day.</li> </ul>	<ul> <li>Rp.: Tab. Indapamidum 0.0015 N 20 DS. One pill a day.</li> <li><b>7. Tucanov Liubovi, 49 years old.</b> Rp.: Tab.Digoxinum 0.00025 N 50 DS. One pill 2 times per day.</li> <li><b>3. Golovin Alexandru, 58 years old.</b> Rp.: Tab.Amlodipinum 0.05 N 56 DS. One pill a day.</li> <li><b>4. Ciupearcă Vladimir, 23 years old.</b> Rp.: Tab. Acidi folicum 0.001 N 30 DS. One pill 2 times per day.</li> <li><b>1. Duru Ion, 49 years old.</b> Rp.:Supp. Paracetamolum 0.1 N 10 DS. One supp. in case of fever.</li> <li><b>2. Voroniuc Larisa, 48 years old.</b> Rp.: Tab.Acidum valproicum 0.2 N 50 DS. One pill 2 times per day.</li> </ul>
<ul> <li>Rp.: Tab.Ramiprilumum 0.01 N 30 DS. One pill a day.</li> <li><b>2. Postolache Ludmila, 58 years old.</b> Rp.: Tab. Spirolactonum 0.025 N 20 DS. One pill a day.</li> <li><b>3. Russu Larisa, 83 years old</b> Rp.: Tab.Indapamidum 0.0025 N 20 DS. One pill a day in the morning.</li> <li><b>4. Forov Dorin, 47 years old.</b> Rp.:Tab.Verapamilum 0.04 N 30 DS. One pill a day.</li> <li><b>1. Țuică Arsenie, 54 years old.</b> Rp.: Tab.Claritromycinum 0.5 N 14 DS One pill 2 times per day.</li> <li><b>2. Rîcun Igor, 57 years old.</b> Rp.:Tab.Famotidinum 0.02 N 20 DS. One pill 2 times per day.</li> <li><b>3. Bujac Constantin, 68 years old.</b> Rp.: Tab.Omeprazolum 0.02 N 14 DS. One pill a day.</li> </ul>	<ul> <li>Rp.: Tab. Indapamidum 0.0015 N 20 DS. One pill a day.</li> <li><b>7 Jucanov Liubovi, 49 years old.</b> Rp.: Tab.Digoxinum 0.00025 N 50 DS. One pill 2 times per day.</li> <li><b>3 Golovin Alexandru, 58 years old.</b> Rp.: Tab.Amlodipinum 0.05 N 56 DS. One pill a day.</li> <li><b>4 Ciupearcă Vladimir, 23 years old.</b> Rp.: Tab. Acidi folicum 0.001 N 30 DS. One pill 2 times per day.</li> <li><b>1 Duru Ion, 49 years old.</b> Rp.:Supp. Paracetamolum 0.1 N 10 DS. One supp. in case of fever.</li> <li><b>2 Voroniuc Larisa, 48 years old.</b> Rp.: Tab.Acidum valproicum 0.2 N 50 DS. One pill 2 times per day.</li> <li><b>3 Ciupa Galina, 53 years old.</b> Rp.: Tab.Carbamazepinum 0.01 N 50 DS. One pill 2 times per day.</li> </ul>
<ul> <li>Rp.: Tab.Ramiprilumum 0.01 N 30 DS. One pill a day.</li> <li><b>2. Postolache Ludmila, 58 years old.</b> Rp.: Tab. Spirolactonum 0.025 N 20 DS. One pill a day.</li> <li><b>3. Russu Larisa, 83 years old</b> Rp.: Tab.Indapamidum 0.0025 N 20 DS. One pill a day in the morning.</li> <li><b>4. Forov Dorin, 47 years old.</b> Rp.:Tab.Verapamilum 0.04 N 30 DS. One pill a day.</li> <li><b>1. Țuică Arsenie, 54 years old.</b> Rp.: Tab.Claritromycinum 0.5 N 14 DS One pill 2 times per day.</li> <li><b>2. Rîcun Igor, 57 years old.</b> Rp.:Tab.Famotidinum 0.02 N 20 DS. One pill 2 times per day.</li> <li><b>3. Bujac Constantin, 68 years old.</b> Rp.: Tab.Omeprazolum 0.02 N 14 DS. One pill a day.</li> <li><b>4. Poderioghin Aliona, 58 years old.</b></li> </ul>	<ul> <li>Rp.: Tab. Indapamidum 0.0015 N 20 DS. One pill a day.</li> <li><b>7. Tucanov Liubovi, 49 years old.</b> Rp.: Tab.Digoxinum 0.00025 N 50 DS. One pill 2 times per day.</li> <li><b>3. Golovin Alexandru, 58 years old.</b> Rp.: Tab.Amlodipinum 0.05 N 56 DS. One pill a day.</li> <li><b>4. Ciupearcă Vladimir, 23 years old.</b> Rp.: Tab. Acidi folicum 0.001 N 30 DS. One pill 2 times per day.</li> <li><b>1. Duru Ion, 49 years old.</b> Rp.:Supp. Paracetamolum 0.1 N 10 DS. One supp. in case of fever.</li> <li><b>2. Voroniuc Larisa, 48 years old.</b> Rp.: Tab.Acidum valproicum 0.2 N 50 DS. One pill 2 times per day.</li> <li><b>3. Ciupa Galina, 53 years old.</b> Rp.: Tab.Carbamazepinum 0.01 N 50 DS. One pill 2 times per day.</li> <li><b>4. Golovan Alexandru, 66 years old.</b></li> </ul>
<ul> <li>Rp.: Tab.Ramiprilumum 0.01 N 30 DS. One pill a day.</li> <li><b>2. Postolache Ludmila, 58 years old.</b> Rp.: Tab. Spirolactonum 0.025 N 20 DS. One pill a day.</li> <li><b>3. Russu Larisa, 83 years old</b> Rp.: Tab.Indapamidum 0.0025 N 20 DS. One pill a day in the morning.</li> <li><b>4. Forov Dorin, 47 years old.</b> Rp.:Tab.Verapamilum 0.04 N 30 DS. One pill a day.</li> <li><b>1. Țuică Arsenie, 54 years old.</b> Rp.: Tab.Claritromycinum 0.5 N 14 DS One pill 2 times per day.</li> <li><b>2. Rîcun Igor, 57 years old.</b> Rp.:Tab.Famotidinum 0.02 N 20 DS. One pill 2 times per day.</li> <li><b>3. Bujac Constantin, 68 years old.</b> Rp.: Tab.Omeprazolum 0.02 N 14 DS. One pill a day.</li> </ul>	<ul> <li>Rp.: Tab. Indapamidum 0.0015 N 20 DS. One pill a day.</li> <li><b>7 Jucanov Liubovi, 49 years old.</b> Rp.: Tab.Digoxinum 0.00025 N 50 DS. One pill 2 times per day.</li> <li><b>3 Golovin Alexandru, 58 years old.</b> Rp.: Tab.Amlodipinum 0.05 N 56 DS. One pill a day.</li> <li><b>4 Ciupearcă Vladimir, 23 years old.</b> Rp.: Tab. Acidi folicum 0.001 N 30 DS. One pill 2 times per day.</li> <li><b>1 Duru Ion, 49 years old.</b> Rp.:Supp. Paracetamolum 0.1 N 10 DS. One supp. in case of fever.</li> <li><b>2 Voroniuc Larisa, 48 years old.</b> Rp.: Tab.Acidum valproicum 0.2 N 50 DS. One pill 2 times per day.</li> <li><b>3 Ciupa Galina, 53 years old.</b> Rp.: Tab.Carbamazepinum 0.01 N 50 DS. One pill 2 times per day.</li> </ul>

1. Hîncu Virginia, 69 years old.	1. Goreanu Elvira, 37 years old.		
Rp.: Tab. Trihexyphenidylum 0.002 N 50	Rp.: Tab.Sorbifer Durulex N 30		
DS. One pill 2 times per day.	DS. One pill 2 times per day.		
2. Rusu Eugenia, 74 years old.	2. Coastă Nicolae, 46 years old.		
Rp.: Tab. Clonazepamum 0.002 N 30	Rp.: Tab.Spironolactonum 0.025 N 20		
DS. One pill a day.	DS.Cîte 1 past. în zi.		
3. Lungu Olga, 47 years old.	3. Frolov Dorin, 58 years old.		
Rp.:Tab.Diazepamum 0.05 N 20	Rp.: Supp. Paracetamolum 0.25 N 10		
DS. One pill a day in the morning.	DS. One pill 2 times per day.		
4. Laptea Sergiu, 63 years old.	4. Cot Radu, 39 years old.		
Rp.: Tab. Losartanum 0.05 N 30	Rp.:Sol. Ergocalciferolum 0.125% 10 ml		
DS. One pill a day.	DS. 5 drops 2 times a day.		
1. Talbot Nicolae, 17 years old.	1. Iahneva Ecaterina, 70 years old.		
Rp.: Tab. Pancreatinum 10000 N 20	Rp.:Tab.Metforminum 0.5 N 60		
DS. One pill at mealtime.	DS. One pill 2 times per day.		
2. Chircă Anatol, 69 years old.	2. Cozacevscaia Ana, 61 years old.		
Rp.: Tab.Desloratadinum 0.005 N 10	Rp.:Tab.Glibenclamidum 0.0035 N 60		
DS. One pill a day.	DS. One pill 2 times per day.		
3. Gagiu Andrei, 52 years old.	3. Guzun Maria, 48 years old.		
Rp.:Tab.Clemastinum 0.001 N 20	Rp.:Tab.Sulpiridum 0.05 N 30		
DS. One pill 2 times per day.	DS. One pill a day.		
4. Juc Ana, 58 years old.	4. Iațco Oleg, 60 years old.		
Rp.: Tab.Theophyllinum 0.02 N 10	Rp.: Tab. Risperidonum 0.002 N 30		
DS. One pill a day.	DS. One pill a day in the morning.		

**Exercise 5.** List the principles (content) of the concept of rational use of medicines.

Conclusions and suggestions of the student:

The teacher's signature \_\_\_\_\_

# Lesson 13. RECEIVING, PRICING AND REGISTRATION OF PRE-SCRIPTION.

*The aim of lesson:* Acquisition of general rules and practical skills of receiving, pricing and registering prescriptions for ambulatory patients.

*The type of learning:* Seminar and laboratory practical work. *Lesson duration:* 8 hours.

# **Questions for self-learning:**

- 1. The purpose and functions of production department.
- 2. Functions of the pharmacist at receiving prescriptions and dispensing medications.
- 3. Controlling the veracity of prescribing prescriptions at the stage of their receipt.
- 4. Registration of prescriptions containing errors and prevention measures of prescription.
- 5. Rules for prescriptions charging.
- 6. Methods for regulating the receipt of prescriptions for outpatient patients.
- 7. The formulations. Attribute and record.

# **Exercises for self-solving.**

**Exercise 1.** Verify compliance with prescribing and regulation rules for received prescriptions (each student receives a set of prescriptions):

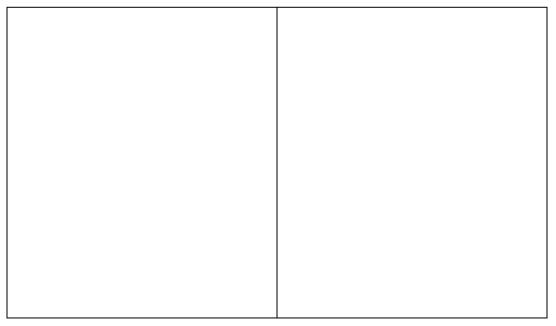
a) the term of validity;

b) the presence of necessary requisites;

c) maximum doses for one administration and for 24 hours;

d) single delivery rules for a single prescription.

Correctly transcribe the contents of the prescription in the workbook.



No	Name of the medicinal substance	Maximum dose for one administration	Maximum dose for 24 hours
1.	Aethaminali natrium	0,3 g	0,6 g
2.	Aethylmorphini hydrochloridum	0,03 g	0,1 g
3.	Amidopyrinum	0,5 g	1,5 g
4.	Anaesthezinum	0,5 g	1,5 g
5.	Analginum	1,0 g	3,0 g
6.	Atropini sulfas	0,001g	0,003 g
7.	Barbamylum	0,3 g	0,6 g
8.	Barbitali natrii	0,5 g	1,0 g
9.	Bromizovalum	1,0 g	2,0 g
10.	Codeinum (Codeini phosphatis)	0,05 g	0,2 g
11.	Coffeini-natrii -benzoatis	0,05 g	1,5 g
12.	Dibazolum	0,05 g	0,15 g
13.	Dimedrolum	0,1 g	0,25 g
14.	Ephedrini hydrochloridum	0,05 g	0,15 g
15.	Erythromycinum	0,5 g	2,0 g
16.	Euphyllinum	0,5 g	1,5 g
17.	Extr.Belladonnae 1:2	0,05 g	0,15 g
18.	Laevomicetinum	1,0 g	4,0 g
19.	Morphini hydrochloridum	0,02 g	0,05 g
20.	Natrii bromidum	1,0 g	4,0 g
21.	Norsulphazolum natrium	2,0 g	7,0 g
22.	Novocainum	0,25 g	0,75 g
23.	Omnoponum	0,03 g	0,1 g
24.	Papaverini hydrochloridum	0,2 g	0,6 g
25.	Paracetamolum	0,5 g	1,5 g
26.	Pentazacinum	0,05 g	0,6 g
27.	Phenadonum	0,01 g	0,03 g
28.	Phenobarbitalum	0,2 g	0,5 g
29.	Plathyphyllini hydrotartratis	0,01 g	0,03 g
30.	Promedolum	0,05 g	0,2 g
31.	Sulfacylum - natrium	2,0 g	7,0 g

# List of maximum doses for one administration and for 24 hours

**Exercise 2.** Report errors-containing prescriptions. Classify errors found in correctable and uncorrectable. Recipes containing errors that can not be corrected, cancel them by applying the "Invalid Recipe" stamp, record them in the "Registry of invalid recipes".

REGISTRY OF INVALID RECIPES							
Nr. d/o	Pre- scrip- tion Nr.	НСІ	The name of the doctor	Characteristic of detected prescrib- ing errors	Taken measures	Pharma- cist's name	Signa- ture
	Nr. d/o	Nr. scrip-	Nr. d/c Scrip- HCI	Nr. scrip-HCI The name of	Nr. Pre- scrip- HCI The name of Characteristic of detected prescrib-	Nr.         Pre- scrip-         The name of HCI         Characteristic of the dester         Taken	Nr. Pre- scrip- HCI The name of detected prescrib- the detected prescrib- Taken Cist's

**Exercise 3.** All prescriptions written in the workbooks, charge them according to the regulations in force.

**Exercise 4.** Record all recipes received during the lab work on the current date in the "Recipe Register". For each recipe, indicate the total price, including the cost of ingredients, purified water, and fares.

from the retail price list of medicines						
The name	UM	Price (MDL)	The name	UM	Price (MDL)	
Ac. acethylsalic.	1,0	0,33	Extr. rad. Althaeae	1,0	0,73	
Ac. aminocapronicum	1,0	0,32	Extr.Belladonnae 1:2	1,0	1,00	
Ac. ascorbinicum	1,0	1,07	Extr.Valerianae spir.	1,0	1,30	
Ac. boricum	1,0	1,24	Vial 10 ml	1 fl	0,70	
Ac. folicum	1,0	0,92	Vial 100 ml	1 fl	1,25	
Ac. glutaminicum	1,0	3,00	Vial 250 ml	1 fl	2,50	
Ac. hidrochlorid. dil.	1,0	0,80	Vial 50 ml	1 fl	0.85	
Ac. nicotinicum	1,0	2,18	Furacilinum	1,0	0,58	
Ac. salicylicum	1,0	1,54	Furazolidonum	1,0	1,00	
Adonizidum	10 ml	1,90	Glucosum	1,0	0,36	
Adrenalini h/c sol.0,1%	1 ml	4,80	Glycerinum	1,0	0,59	
Aethaminali natrium	1,0	1,70	Herba Leonuri	1,0	0,95	
Aethazolum	1,0	0,90	Hexameth-	1,0	0,90	
			ylentetramin			
Aetheri med.	1 ml	1,83	Ichtiolum	1,0	0,21	
Aethylmorphini h/c	1,0	1,70	Iodum	1,0	0,94	
Amidopirine	1,0	0,75	Kalii bromidum	1,0	1,01	
Anaesthezinum	1,0	0,48	Kalii iodidum	1,0	0,47	
Analginum	1,0	0,53	Laevomicetinum	1,0	0,50	
Antipyrinum	1,0	1,20	Lanolinum anh.	1,0	0,69	
Aq. Menthae	100 ml	1,47	Liquor ammonii	1ml	0,82	
			anis.			
Aq. purificata	100 ml	1,25	Magnezii oxydum	1,0	0,77	
Atropini sulfas	1,0	2,00	Magnezii sulfas	1,0	0,44	
Barbamylum	1,0	3,40	Mentholum	1,0	0,67	
Barbitali natrii	1,0	1,70	Methyleni coeruleum	1,0	1,97	
Benzylii benzoas	1,0	2,07	Methyluracilum	1,0	0,67	
Bismuti subnitras	1,0	1,22	Morphine	1,0	4,00	
Jar 50,0	1	1,00	Natrii benzoas	1,0	0,27	
Bromizovalum	1,0	1,30	Natrii bromidum	1,0	0,19	
Butirum cacao	1,0	0,95	Natrii chloridum	1,0	0,12	
Calcii chloridum	1,0	1,42	Natrii hidrocarb.	1,0	0,37	
Calcii glycerophosfatis	1,0	1,54	Natrii salicylatis	1,0	0,39	
Calcii lactatis	1,0	0,98	Nitroglycerin.sol.	1 ml	1,00	

**EXCERPT** from the retail price list of medicines

The name	UM	Price (MDL)	The name	UM	Price (MDL)
Camphora trita	1,0	0,66	Norsulfazolum	1,0	0,89
Citralum sol. sp. 1%	1,0	0,87	Novocainum	1,0	0,50
Codeini phosphas	1,0	2,50	Olei olivarum	1,0	0,78
Codeinum	1,0	2,60	Olei vaselinum	1,0	0,96
Coffeini natrii-benzoat	1,0	1,41	Oleum Helianthi	1,0	0,84
Box for powder	1	0,50	Omnopon	1,0	1,23
Dibazolum	1,0	1,20	Osarsolum	1,0	0,60
Dicainum	1,0	1,30	Papaverini h/c	1,0	4,81
Difeninum	1,0	1,40	Paracetamol	1,0	0,57
Dimedrolum	1,0	0,97	Pentazocine	1,0	1,45
Dimexydum	1,0	2,02	Pentoxylum	1,0	1,50
Ephedrini h/c	1,0	2,10	Pepsinum	1,0	0,97
Eritromicine	1,0	3,06	Perhidrolum	1 ml	0,50
Euphyllinum	1,0	0,68	Phenadone	1,0	5,03
Phenili salicylas	1,0	0,71	Sulfacylum - natrium	1,0	0,31
Phenobarbitalum	1,0	0,33	Sulfadimezinum	1,0	1,00
Piridoxini h/c	1,0	0,94	Sulfur depuratum	1,0	0,78
Pix liquida	1,0	2,30	Sulfur praecipitatum	1,0	0,72
Plathyphyllini h/t	1,0	4,00	Terpini hidratum	1,0	0,78
Prednizolonum	1,0	1,70	Theophyllini	1,0	1,10
Promedolum	1,0	1,70	Tiamini bromidum	1,0	0,97
Protargolum	1,0	6,02	T-rae Belladonnae	1 ml	0,80
Rezorcinum	1,0	0,50	T-rae Convallarie	1 ml	0,89
Rhizoma cum rad.Val.	1,0	0,91	T-rae Crataeghi	1 ml	0,60
Riboflavinum	0,1	1,28	T-rae Leonuri	1 ml	0,79
Rutinum	1,0	0,66	T-rae Menthae pip.	1 ml	0,70
Saccharum	1,0	0,52	T-rae Valerianae	1 ml	0,50
Scopolaminum h/b	1,0	1,02	Trichopol	1,0	1,26
Sirupus Glicerhyzae	1 ml	0,50	Tripsinum	1,0	1,20
Sol. Cytrali spir.1%	1 ml	0,89	Ung. Prednisoloni 0,5%	1,0	1,02
Sp.aethylic. 96%	1,0	0,39	Ung. sulfurat. simpl.	1,0	0,89
Spasmolytinum	1,0	0,80	Validolum	1 ml	0,67
Streptocidum album	1,0	0,33	Vaselinum	1,0	0,34
Streptocidum solu- bile	1,0	0,90	Xeroformium	1,0	1,62
Succi Kolanhoae	1,0	0,91	Zincum oxydatum	1,0	1,10

#### TAXA LABORUM for the preparation of medicaments according to the (individual) prescriptions in the pharmacies

	according to the (individual) prescriptions in the pharmacies						
Nr.	Drug form, technological operation	U.M.	Price				
1.	Sterile solutions. Preparation of bicomponent prescribing with						
	the volume: 400-500 milliliters	vial	14.00				
	200-250 ml	vial	12.95				
	50-100 ml	vial	12.45				
	ad 50 ml	vial	10.20				
2.	Eye drops and ointments, medicinal forms for newborns. Sterile oils. Preparation of bicomponent prescribing.	vial	12.50				
3.	Solutions for internal and external use. Prescr. bicomp., including infusions, decoctions, mucilages: Drops:	vial	11.25 7.50				
4.	Powder and dosed species. Preparation of bicomponent prescrip- tion no.10	form	8.75				
	dosing of each subsequent powder	doses	0.70				
5.	Powders non-endangered species. Preparation of bicomponent prescription	form	7.50				
6.	Suppositories nr. 10. Preparation of bicomponent prescription.	form	20.00				
	dosing of each suppository above 10	doses	0.90				
7.	Ointments, pastes, emulsions, liniments, suspensions. Prescr. bicomponent to 100.0 ml.	form	15.00				
	100,0-200,0 ml.	form	17.50				
	200,0-500,0 ml.	form	20.00				
8.	The subsequent addition of each component (ingredient) into the drug form.	oper.	2.50				
9.	Responsibility for working with toxic and narcotic drugs	oper.	3.75				
10.	Work with irritating, smelling and coloring substances	oper.	3.75				
11.	Measuring (weighing) medicinal substances in their release without further technological operations	form	7.50				

# TAXA LABORUM

# for preparing pharmaceutical preparations in pharmacies

Nr.	Drug form, technological operation	U.M.	Таха
1.	Sterile solutions. Preparation of bicomponent with the volume: 400-500 ml	vial	6.40
	200-250 ml	vial	6.25
	până la 100 ml	vial	5.90
2.	Eye drops and ointments, medicinal forms for newborns. Sterile oils. Preparation of bicomponent prescribing.	vial	7.00
3.	Solutions for internal and external use. Preparation of bicomponent prescribing with volume 5000 ml and more	vial	8.75
	1000-5000 ml	vial	5.65
	400-500 ml	vial.	3.30
	până la 250 ml	vial	2.90

Nr.	Drug form, technological operation	U.M.	Таха
4.	Infusions and decoctions. Preparing bicomponent prescrib-		
	ing: more	vial.	
	than 1000 ml		13.30
	400-500 ml	vial	4.25
	till 250 ml	vial	3.75
5.	Powder and dosed species. Preparation of bicomponent prescrip- tion no.10	form	3.75
	dosing of each subsequent powder	doses	0.40
6.	Powders non-endangered species.	form	3.75
7.	Ointments, pastes, emulsions, liniments, suspensions. Prescr. Bicomponent.	form	7.50
	dosing of each subsequent suppository	doses	0.70
8.	The subsequent addition of each component (ingredient) into the drug form.	oper.	1.00
9.	Responsibility for working with toxic and narcotic drugs	oper.	3.30
10.	Work with irritating, smelling and coloring substances	oper.	3.30
11.	Division of medical remedies and medical confections	oper.	1.25

**Exercise 5.** For 2 registered prescriptions, draw up the receipt, which must be handed to the patient.

# Receipt for ordering the drug

Pharmacy	Date						
Nr. Recipe	Time	_					
The name of patien	The name of patient						
The pricelei	The pricelei bani						
Mixture	Ointment	Powder	Ophthalmic				
Solution	Drops	Suppositories	Sterile				

# Receipt for ordering the drug

Pharmacy	Date						
Nr. Recipe	Time	-					
The name of patien	The name of patient						
The pricelei	The pricelei bani						
Mixture	Ointment	Powder	Ophthalmic				
Solution	Drops	Suppositories	Sterile				

Exercise 6. Draw the balance for one day in the "Recipe Register".

Form F-04 Approved by the Ministry of Health of the Republic of Moldova by order no. \_\_\_\_ from \_\_\_\_\_ and the Decision of the Department of Statistics of the Republic of Moldova no. \_\_\_\_ from \_\_\_\_\_

Name of pharmaceutical unit \_\_\_\_\_\_ Section \_\_\_\_\_

After this pattern, all the sheets are printed.

# **Recipe Register**

		Μ	edicines prep	ared extemp	ooraneous	ly	
Date	No. of	<b>m</b> ) (			Inclu	ıding	D. I. I.
	pre- scrip- tion	The name of patient	Drug form	Release price	Puri- fied water	Taxa labo- rum	Patients address

#### For each shift or work day and for the reported period the following totals are made:

 Number of Extemporary Forms

 Amount in release prices

 Amount of ingredients

 The amount of purified water

 Amount of taxa laborum

Conclusions and suggestions of the student:

The teachers signature \_\_\_\_\_

# Lesson 14. TECHNOLOGY OF PHARMACEUTICAL COMPOUNDING IN PHARMACY AND QUALITY CONTROL OF EXTEMPORA-NEOUS PREPARATION. PACK LABELING AND DISPENS-ING MEDICINES FROM PHARMACY.

*The aim of lesson:* Studying the rational organization of workplaces for the preparation of drugs in pharmacies, their equipment and arrangement, the technological process of preparing medicines in the pharmacy according to the prescriptions and organizing the preparation of pharmaceutical elaborations. Acquiring practical skills to document internal pharmaceutical control and the appreciation of the quality of the medicinal forms, the completion of the pharmaceutical forms prepared in the pharmacy.

*The type of learning:* laboratory practical work *Lesson duration*: 4 hours.

# **Questions for self-learning:**

- 1. Rational organization, equipping and arranging workplaces for the preparation of medicines in the pharmacy.
- 2. Measures to accelerate the preparation of medicines and insurance their quality.
- 3. Particularities of organizing the work of the pharmacist in the preparation of drugs containing toxic and narcotic substances.
- 4. Requirements for the preparation of medicinal forms under aseptic conditions. Equipment and arrangement of rooms and workplaces.
- 5. Organization of pharmaceutical preparation and their documentation.
- 6. Organization of pharmacist-analyst activity on quality control of medicinal forms.
- 7. Internal Pharmaceutical Control of Medicines. Types of control.
- 8. Chemical and physico-chemical control in the pharmacy.
- 9. Quality assessment and deviations allowed in the preparation of extemporaneous drug forms.
- 10. Drawing up the documents for the quality control of the medicines.
- 11. Unique rules of labeling of medicines prepared in the pharmacy.
- 12. Labeling of drugs containing toxic substances, narcotics, particularly toxic, concentrated solutions of different drug substances etc.
- 13. The terms and conditions of storage of medicines prepared in the pharmacy.
- 14. Order of drug release, prepared in pharmacy.

# **Exercises for self-solving.**

**Exercise 1.** Draw a layout of the pharmacy preparation rooms in the public pharmacy, indicate the location and specify the equipment at different places of preparation of the medicines.

**Exercise 2.** Indicate the types of mandatory internal pharmaceutical control. to which the forms will be subjected according to prescriptions. (see exercise 1, Lessons No. 12). For 3-4 forms of medicine, make the "Written Verification Document".

**Exercise 3.** Register in the "Register of Pharmaceutical elaborations" the following pharmaceutical elaborations determine the price of the medicated forms obtained as a result of the elaborations.

Variant number	Drug form No. 1	Drug form No. 2
1	Ascorbic acid 0.1 Glucose 0.2 N 20, 20 packs	Sol. Potassium iodide2% -200ml 10 vials
2	Theophylline 0.001 Glucose 0.2 N 20, 20 packs	Sol. Sulfacil sodium 30% -10ml 20 vials
3	Dibazol 0.03 Saccharum 0.2 N 20, 20 packs	Sol.Calcium chloride 10% - 200ml 10 vials
4	Papaverine Hydrochloride 0.1 Glucose 0.2 N 30, 20 packs	Sol.sulfacil sodium 20% - 10ml 30 vials
5	Riboflavin 0.002 Glucose 0.2 N 30, 20 packs	Sol. Protargol 2% - 10 ml 20 vials
6	Pyridoxine hydrochloride 0,001 Glucose 0.2 N 20, 30 packs	Sol. Methylene Blue 2% - 20 ml 20 vials
7	Thiamine hydrochloride 0,001 Glucose 0.2 N 20, 30 packs	Sol. Colargol 2% - 10 ml 30 vials
8	Rutin 0.04 Glucose 0.2 N 30, 30 packs	Sol. Colargol 1% - 10ml 30 vials
9	Phenobarbital 0.005 Glucose 0.2 N 20, 30 packs	Sol. Calcium chloride 5% - 100ml 20 vials
10	Caffeine sodium benzoate 0.03 Glucose 0.2 N 20, 20 packs	Sol.Levomycetine 0.25% - 10ml 20 vials
11	Calcium gluconate 0.2 Glucose 0.2 N 20, 20 packs	Sol. Furaciline 1: 5000 - 500ml 10 vials
12	Folic Acid 0.0003 Glucose 0.2 N 20, 20 packs	Sol. Riboflavin 0.02% - 10ml 20 vials

#### Approved by the Ministry of Health of the Republic of Moldova by order no. \_\_\_\_ from\_\_\_\_\_ and the Decision of the Department of Statistics of the Republic of Moldova no. \_\_\_\_ from \_\_\_\_\_

Name of pharmaceutical unit Section

# EVIDENCE REGISTER OF PHARMACEUTICAL ELABORATIONS

According to this model are printed all sheets.

		Taken in	to w	ork				Prep	oared,	divide	d, taug	ht				
												Т	he ext ifferen	ra		
Date	Charge	Name of material values	MU	The amount	Price	Sum	The name of the fin- ished production	The name of the fin- ished production UM		Price	Sum	Total	Purified water	Taxa laborum	Prepared by	Controlled by

**Exercise 4.** Prepare internal quality control records for the quality of medicines and appreciate their quality:

- a) Register of quality control results of magisterial forms, drug forms in stock, concentrates, semi-finished products.
- b) Registry of Purified Water Quality Control Results.
- c) Register of Drug Determination Results.
- d) The protocol for the collection of medicinal forms for quality control.

All the data necessary for the preparation of the documents are taken from the minutes of the previous laboratory works.

medicinal products prepared in pharmacies Annex no. 2 to the Forms Quality Control Regulation

# drug forms in stock, concentrates, semi-finished products Register of quality control results of magistral forms,

	C
	N
	volu
0	S

Name and signature of performed the qua	the person who lity control			
Conclusio corresponds or doe				
Name and surname o who prepar controlled or pa	red,			
ults	quantitative, formula, index of refraction			
Control results	Qualitative (+) or (-)			
CC	physical organoleptic			
The active pri volume, mass, homoger ture	nciple, neity of the mix-			
Composition of the drug form				
Nr. series of the industr	ial producer			
packaging se	Nr. recipe (bill); packaging series; Nr. filled stangas			
	Nr. d / o who is and Nr. analysis			
Date				

# **Registry of Purified Water Quality Control Results**

	Name and sig- nature of the person who performed the quality control		
	Conclusion: corre- sponds to or does not match		
	CO <sub>2</sub>		
impurities	Reducing substances		
bsence of	NH4 +		
ontrol of a	Ca <sup>2+</sup>		
Results of control of absence of impurities	SO4 <sup>2-</sup>		
H	Cl-		
	Nr. collector (workplace)		
	Nr. d / o who is also Nr. con- trol quality		
	Date of con- trol		
Date	on ob- tainin g (wa- ter train- ing)		

#### Annex no. 4 to the Regulation on Quality Control of Pharmaceutical Preparations in Pharmacies **Register of Drug Determination Results \***

							Sigi	natures
Date	Nr. d / o which is also Nr. analysis	Name	Nr. series or No. MMDA Quality Cer- tificate **	Nr. filled stangas	Determined substance (ion)	The re- sult of control (+) or (-)	The person who filled it	The person who per- formed the quality control

\* This record also records the results of the solution identity determination for the biuret system \*\* Medicines and Medical Devices Agency

> Annex no. 6 to the Regulation for Quality Control of Pharmaceutical Forms in Pharmacies

Pharmacy No. \_\_\_\_\_ City, rayon\_\_\_\_\_

# MINUTES of taking medicinal forms for quality control in pharmacies

"\_\_"\_\_\_\_20\_\_\_

				С	ontrol results			Name and		
No d/o	No. prescrip- tion (bill)	Composition of the drug form	orm of the drug or (fo form form (-) ref.		Quantitative (formula, refractive index)	Physi- cal	Conclusion (satisfactory or unsatis- factory)	surname of the person who pre- pared the medicine		

The signatures:

Name, surname, who performed taking in the presence of the person to be sampled Head- Pharmacist **Exercise 5.** For all forms of drugs according to prescriptions received choose and fulfill the finishing labels and warning inscriptions.

**Exercise 6.** Based on previously received prescriptions, indicate for each drug form the conditions and terms of storage in the pharmacy until release.

**Exercise 7.** Based on previously received prescriptions, complete:

a) "Register of drugs removed due to expiration of the storage term"

b) "Register of drug delivery without receipt".

# REGISTER

# OF DRUGS REMOVED DUE TO EXPIRATION OF THE STORAGE TERM

Date	No. pre- scription	Patients NS	Drug form	Price	Retired (NS)

# REGISTER

# **OF DRUG DELIVERY WITHOUT RECEIPT**

Date	Nr. of prescription	Patients NS	Patients address	Drug form	Price	NS of physician	Signature

Conclusions and suggestions of the student:

The teachers signature \_\_\_\_\_

# Lesson 15. MANAGEMENT AND LEGISLATION OF PHARMACEU-TICAL ASSISTANCE IN HOSPITAL.

*The aim of lesson:* The study of the medical assistance system for stationary patients, the general principles of organization and operation of pharmacies of medical institutions, their attributions, space, endowment and leadership. Study of the clinician's pharmacist's work, his rights and obligations. Acquiring practical skills in using the Pharmacotherapeutic Formulary in the Sanitary Institutions and calculating the need for the medicines included in the Pharmacotherapeutic Formulary.

*The type of learning:* Seminar and laboratory practical work. *Lesson duration:* 8 hours.

# **Questions for self-learning:**

- 1. The characteristic of the pharmaceutical care system for stationary patients.
- 2. Hospital pharmacy and the peculiarities of its activity.
- 3. Minimal requirements for space, location and endowment of the hospital pharmacy. Organizational structure and organization of work places.
- 4. Drug prescribing rules for stationary patients.

c)

- 5. Control of storage and rational use of medicines in hospital wards.
- 6. Records of medicines and medical articles in health care institutions.
- 7. The Formulary system "Rational Pharmaceutical Management".
- 8. Pharmacotherapeutic Formulary and its feature. Pharmacotherapeutic Formulary.
- 9. The role of the Pharmacotherapeutic Formulary Committee of the medical institution in the rational and efficient use of medicines.
- 10. Calculation of the necessary for the medicines included in the Pharmacotherapeutic Formulary of the medical institution.
- 11. Organizing the pharmaceutical supply of medical institutions through the procedures of centralized purchasing.

# **Exercises for self-solving.**

**Exercise 1.** Perform the registration of the pharmaceutical products received from the pharmaceutical stores according to the tax invoices. Each student receives a set of invoices.

**Exercise 2.** Perform the prescription and acceptance (cost determination, registration) of the order for one of the medical institutions, subject to the following conditions:

- a) the order must include industrial and magistral drugs that are subject to quantitative evidence;
- b) all industrial pharmaceutical preparations should be included in the National Pharmacotherapeutic Formulary.
  - consider that the pharmacy fully satisfies the department's order.

**Exercise 3.** Record Order-to-Delivery Bills (see task 2) in the Book of Records of Priced Bills.

**Exercise 4.** Prepare the "Pharmacy Management Report" including the operations performed during the reporting period. (see tasks 1 and 2).

Form F-02

Approved by the Ministry of Health of the Republic of Maldova by order no. din and the Decision of the Department of Statistics of the Republic of Maldava Nr. fram

Name of the pharmaceutical unit

values
material
lo
inputs
lo
Register

Note										
Including		In acquisition prices								
		In realization prices								
		In acquisition prices								
		In realization prices								
	Medicines	In acquisition prices								
		In realization prices								
Total amount		In acquisition prices								
Total 3		In realization prices								
No. Date Provider Accompanying	Accompanying document, date, no									
Provider	Provider									
Date										
No.										

# The standard form F-07

Approved by the Ministry of Health of the Republic of Moldova by order no. \_\_\_\_ from\_\_\_\_\_ and the Decision of the Department of Statistics of the Republic of Moldova no. \_\_\_\_ from \_\_\_\_

Name of pharmaceutical unit (FU)Fiscal Code														
Consignee Fiscal Code														
Section (Cabinet)														
"	"" 20 Through Delegation Nr from													
Purchase Order Number.   Delivery Bonnet Nr.														
from " " from " "														
				The amount		The value		For extem- poraneous						
No. d/o	Drug code	Name of the medicine	UM	re- quest- ed	deliv- ered	Price	Sum	forms, the cost of puri- fied water and "taxa laborum"						
Total														
Fulfilled by Checked by							released by Received by							

# The standard form F-07

Approved by the Ministry of Health of the Republic of Moldova by order no. \_\_\_\_ from\_\_\_\_\_ and the Decision of the Department of Statistics of the Republic of Moldova no. \_\_\_\_ from \_\_\_\_

Name of pharmaceutical unit (FU)Fiscal Code													
Consi	ianee		Fiscal	Code									
JUUI	Section (Cabinet)												
"	"" 20 Through Delegation Nr from												
Purchase Order Number.   Delivery Bonnet Nr.													
from " "				from " "									
	c)			The amount		The value		For extem- poraneous					
No. d/o	Drug code	Name of the medicine	UM	re- quest- ed	deliv- ered	Price	Sum	forms, the cost of puri- fied water and "taxa laborum"					
Total													
		ılfilled by necked by		Checked by re Delivery allow Re			eleased by eceived by	II					

## The standard form F-33

Approved by the Ministry of Health of the Republic of Moldova by order no. \_\_\_\_ from\_\_\_\_\_ and the Decision of the Department of Statistics of the Republic of Moldova no. \_\_\_\_ from\_\_\_\_\_ **Pharmacy** 

## **Book of Records of Priced Bills**

in the month \_\_\_\_\_\_ 20 \_\_\_\_

			Section (oj	ffice) health unit		
	No.			Inc	luding	
Date	bill	Total sum	Medicines		Medical instruments	

## The standard form F-34

Approved by the Ministry of Health of the Republic of Moldova by order no. \_\_\_\_\_ from\_\_\_\_\_ and the Decision of the Department of Statistics of the Republic of Moldova no. \_\_\_\_\_ from \_\_\_\_

Pharmacy

#### "APPROVED"

(chief doctor, signature) \_" \_\_\_\_ **20 \_\_** 

MANAGEMENT REPORT

## about the circulation of value values in value indices for the month \_\_\_\_\_20 \_\_\_

Type of operation, document (number and date)	Medicines	Materials for dressings	Auxiliary Materials (Utensils)	Package	
initial stock la 01					
		IMPUTS			
Total imputs					

Verso for initial y 1 34									
OUTPUTS									
<ol> <li>Delivery for sections, cabi- nets in accordance with " Book of Records of Priced Bills".</li> </ol>									
Total outputs									
2. Losses under settle- ment (document, set- tlement).									
Total crossings loss									
Total outputs									
Final stock la 31									

\_\_\_\_\_ attached documents

Head pharmacist

# Chief accountant

**Exercise 5.** Make an analysis of the List of Essential and Vital Medicines and the National Pharmacotherapeutic Formulary. What medicines on the List of Essential and Vital Medicines are not contained in the National Formulary. Make conclusions.

**Exercise 6.** The patient was prescribed by the doctor \_\_\_\_\_\_. Suggest doctor generic and therapeutic substitution. Justify your decisions.

Tab. Relium 0,005 N20	
Tab. Metrozol 0,5 N20	
Tab. Timonil 0,2 N50	
Tab. Berlipril 0,01 N40	
Tab. Corinfar 0,01 N50	
Sol. Clodifen 75mg/5ml 3ml N5	
Sol. Aminofilin 2,4% -5ml N10	
Sol. Dicloberl 75mg/5ml 3ml N10	
Tab.Movalis 0,015 N10	

**Exercise 7.** Assume that in the hospital "X" an "N" quantity of medication is used (name, form, package price, expenses per year, and total cost - each student receives individually).

- a) Make a classification of drugs used by three key categories for life:
  - V (Vital) vital medicines required
  - E (Essential) Essential Medicines

- N (non-essential) non-essential, secondary preparations.
- b) Calculate the percentage of hospital expenditure for each drug in relation to the total amount of hospital spending for purchasing medicines (ABC Analysis).

Conclusions and suggestions of the student::

The teachers signature\_\_\_\_\_

# THE 3<sup>rd</sup> INTERMEDIARY ASSESSMENT ON LESSONS 12-15.

# Lesson 16. PHARMACEUTICAL RECORDS. THE PRICES FOR DRUGS AND OTHER PHARMACEUTICAL PRODUCTS.

*The aim of lesson:* Acquisition of the principles of organizing the record and the peculiarities of the economic activity of the pharmaceutical enterprises, the principles and the way of forming the prices of medicines and other pharmaceuticals.

*The type of learning:* Laboratory practical work. *Lesson duration:* 4 hours.

## **Questions for self-learning:**

- 1. General characteristic of the record. Notions. Purpose, tasks and requirements for evidence.
- 2. Types and standards of e record. Organizing records in pharmaceutical companies.
- 3. Classification of pharmaceutical companies' funds and their characteristic.
- 4. The objects of record in pharmaceutical companies. Documentary preparation of management operations. Justifying documents. Document requisites.
- 5. Prices and their components. Prices for medicines and other pharmaceuticals.
- 6. The order of price formation of medicines and other pharmaceuticals in Republic of Moldova

# **Exercises for self-solving:**

Exercise 1. According to "Pricing regulation for medicines":

a) Determine purchase prices and wholesale drug "A" based on the following data: The cost for a unit of measurement of the drug - \_\_\_\_ \$ US. 2000 units were imported. Custom duty and state fee - 0.25% of the amount. Import tax - 0% of the amount. Import duty - 0,1% of the amount. Cost of State Quality Control \_\_\_\_ lei. The warehouse markup will be \_\_\_\_%%.

b) beter mine the maximum retain pharmae	y price of the same arag.
Variant 1.	Variant 2.
<b>Cost</b> "A" UM 8-90 \$ US – Import 2000 units	Cost "A" UM 5-50 \$ US – Import 2000 units
Cost of State Quality Control 620 lei	Cost of State Quality Control 924 lei
The warehouse markup 12,1 %	The warehouse markup 14,2 %
c) Drug B $\rightarrow$ 20 units price 11-80	c) Drug B $\rightarrow$ 5 units price. 62-80
Drug C $\rightarrow$ 10 units price.42-20	Drug C $\rightarrow$ 15 units price.32-20
The warehouse markup 13,4%	The warehouse markup 13,5%
Variant 3.	Variant 4.
Cost "A" UM 3-25 \$ US – Import 2000 units	Cost "A" UM 10-36 \$ US – Import 2000 units
Cost of State Quality Control 860 lei	Cost of State Quality Control 862-50 lei
The warehouse markup 13,2 %	The warehouse markup 14,3 %
c) Drug B $\rightarrow$ 20 units price 5-68	c) Drug B $\rightarrow$ 10 units price. 39-82
Drug C $\rightarrow$ 35 units price.14-65	Drug C $\rightarrow$ 15 units price.19-67
The warehouse markup 14,8 %	The warehouse markup 13,9 %
Variant 5. Cost "A" UM 20-69 \$ US – Import 2000	Variant 6. Cost "A" UM 24-21 \$ US – Import
units	2000 units
Cost of State Quality Control 729-80 lei	Cost of State Quality Control 729-00 lei
AC al Depozitului14,5 %	The warehouse markup 14,6 %
c) Drug $B \rightarrow 20$ units price. 15-64	c) Drug B $\rightarrow$ 5 units price. 129-65

Drug C →25 units price. 6-91	Drug l C $\rightarrow$ 10 units price. 72-37
The warehouse markup 13,9 %	The warehouse markup 14,2 %
Variant 7.	Variant 8.
Cost "A" UM 39-62 \$ US – Import 2000 units	Cost "A" UM 12-31 \$ US – Import 2000 units
Cost of State Quality Control 964-50 lei	Cost of State Quality Control 927-00 lei
The warehouse markup 14,6 %	The warehouse markup 14,7 %
c) Drug B $\rightarrow$ 15 units price. 73-27	c) Drug B $\rightarrow$ 15 units price. 15-40
Drug C $\rightarrow$ 10 units price. 94-20	Drug C $\rightarrow$ 35 units price. 7-21
The warehouse markup 14,3 %	The warehouse markup 14,2 %
Variant 9.	Variant 10.
Cost "A" UM 7-93 \$ US – Import 2000 units	Cost "A" UM 10-63 \$ US – Import 2000 units
Cost of State Quality Control 896-00 lei	Cost of State Quality Control 980-00 lei
The warehouse markup 14,6 %	The warehouse markup 14,9 %
c) Drug B $\rightarrow$ 10 units price. 72-93	c) Drug B $\rightarrow$ 10 units price. 37-92
Drug C $\rightarrow$ 30 units price. 18-71	Drug C $\rightarrow$ 15 units price. 41-37
The warehouse markup 14,25 %	The warehouse markup 13,8 %
Variant 11.	Variant 12.
Cost of State Quality Control 925-00 lei	Cost "A" UM 18-20 \$ US – Import 2000 units
The warehouse markup 14,3 %	Cost of State Quality Control 897-00 lei
c) Drug B $\rightarrow$ 10 units price. 79-65	The warehouse markup 13,9 %
Drug C $\rightarrow$ 20 units price. 39-10	c) Drug B $\rightarrow$ 10 units price. 95-40
The warehouse markup 12,9 %	Drug C $\rightarrow$ 15 units price29-70
	The warehouse markup 14,8 %
	-

a)

b)

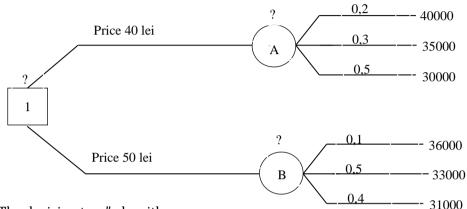
prices for the following import medicines:												
nr d/o	Nar	ne, dosage, pa	ckaging		Imported Quantity	State con- trol costs (lei)	Stat e fee (%)	Trans port cost (lei)	Price from CNPPM (lei)	Price Invois (in foreign curren- cy)	Im- port cur- rency	Exchange rate on the day of devotion
1	Acid ascorbic	draj.	50 mg	N50	5000	500	1	2300	7,57	0,42	USD	19,66
2	Aciran <sup>™</sup> -300	comp. film.	300 mg	N10x2	6500	500	1	4500	21,08	1,17	USD	19,66
3	Alprazolam LPH® 0,5 mg	comp.	0,5 mg	N10x2	5500	350	1	1250	12,47	0,58	EUR	21,96
4	Alzepil®	comp. film.	5 mg	N14x2	5500	350	1	1250	262,51	13,13	USD	19,66
5	Ambrotard 75	caps. elib. prel.	75 mg	N10	7000	250	1	1450	36,15	1,84	USD	19,66
6	Bromhexin	comp.	8 mg	N25x2	4000	450	1	1400	7,60	0,40	USD	19,66
7	Bromhexin	comp.	8 mg	N10x5	6000	500	1	2500	7,60	0,40	USD	19,66
8	Bronolac	sirop	15 mg/5 ml	120 ml N1	5500	350	1	1250	36,26	2,02	USD	19,66
9	Carboplatin	conc./sol . perf.	10 mg/ml	15 ml N1	7000	250	1	1450	262,09	14,55	USD	19,66
10	Cefazolin	pulb./sol. inj.	500 mg	N10	2500	480	1	3000	76,56	4,25	USD	19,66
11	Clafen® 100 mg	sup.	100 mg	N3x2	4500	550	1	2500	7,73	0,35	EUR	21,96
12	Clorhidrat de papaverină	sol. inj.	20 mg/ml	2 ml N10	5000	500	1	2300	12,35	0,65	USD	19,66
1	Clorură de sodiu	sol. inj.	0,9%	10 ml N10	5000	500	1	2300	12,61	0,70	USD	19,66
2	Corvalol®	compri- mate		N10	3500	400	1	3200	9,31	0,49	USD	19,66
3	Diazolin®	draj.	100 mg	N10	5000	500	1	2300	7,93	0,44	USD	19,66
4	Diazolin®	draj.	50 mg	N10x2	4000	450	1	1400	12,43	0,69	USD	19,66
5	Eskazole	compri- mate	400 mg	N12	5500	350	1	1250	252,66	12,86	USD	19,66
6	Etacizin®	comp. film.	50 mg	N10x5	7000	250	1	1450	251,32	11,22	EUR	21,96
7	Extract de Beladonă	sup.	15 mg	N5x2	7000	250	1	1450	9,27	0,42	EUR	21,96
8	Falimint®	draj.	25 mg	N20	4000	450	1	1400	31,36	1,40	EUR	21,96
9	Fastorik™-N	pic. naz., sol.	0,1%	10 ml N1	3500	400	1	3200	21,08	1,17	USD	19,66
10	Ferro- Folgamma®	caps. moi	112+5+0, 01 mg	N10x5	7000	250	1	1450	76,69	3,62	EUR	21,96
11	Ferumbo	sirop	50 mg/5 ml	100 ml N1	2500	480	1	3000	61,25	3,40	USD	19,66
12	Finalgel®	gel	5 mg/g	35 g N1	5000	500	1	2300	43,67	2,25	EUR	21,96
1	Flavamed®	sirop	15 mg/5 ml	100 ml N1	6000	500	1	2500	43,68	1,95	EUR	21,96
2	Glucoză	sol. perf.	5%	250 ml N1	2000	380	1	1240	7,78	0,41	USD	19,66
3	Glucoză	sol. perf.	5%	250 ml N1	2500	480	1	3000	7,80	0,39	USD	19,66
4	Glucoză	sol. perf.	5%	500 ml N1	6500	500	1	4500	9,29	0,49	USD	19,66
5	Glucoză 5%	sol. perf.	5%	250 ml N1	6500	500	1	4500	7,75	0,43	USD	19,66
6	Guna®-Mood	pic. orale, sol.		30 ml N1	4000	450	1	1400	94,14	4,85	EUR	21,96
7	Hidrocarbonat de sodiu	sol. perf.	4%	200 ml N1	2500	480	1	3000	29,31	1,59	USD	19,66
8	Hidroclorotiazid	comp.	25 mg	N10x2	7000	250	1	1450	7,60	0,40	USD	19,66
9	Ibuprofen	comp. film.	200 mg	N10x5	3500	400	1	3200	12,57	0,64	USD	19,66
10	Lucetam®	comp. film.	1200 mg	N20	5000	500	1	2300	21,19	1,06	USD	19,66
11	Lucetam®	comp. film.	400 mg	N60	4500	550	1	2500	29,19	1,46	USD	19,66
12	Macmiror®	comp. film.	200 mg	N10x2	5000	500	1	2300	260,83	12,49	EUR	21,96

# **Exercise 2.** Calculate the purchase price and the maximum wholesale and retail prices for the following import medicines:

**Exercise 3.** Analyze the situation in the "X" pharmacy. Review alternative managerial decisions. Make the choice of the optimal solution using the "decision tree", which provides a quantitative assessment of the consequences of decisions.

## Case situation

Head pharmacist analyzes the pricing situation for the drug "A": 40 lei 50 lei. If it is set the price of 40 lei, then the following variations of turnover are possible: 40000 lei with the probability of 0.2; 35000lei with the probability of 0,3 and 30000 with the probability of 0,5. If it is set the price of 50 lei, then the following variations of turnover are possible: 36000 lei with the probability of 0,1; 33000lei with the probability of 0,5 and 31000 with the probability of 0,4.



"The decision tree" algorithm:

1. For each variant, calculate the average value of the likely volume. Determine the sum of the products between the different probability and turnover variations. Example for case "A", the average value of the realization volume is probably: P1 = 0.2x40000 + 0.3x35000 + 0.5x30000 = 33500. Indicate this number on node "A".

3. Calculate the average value of the likely volume for the node "B".

4. Indicate the optimal value of the likely volume on the node "1".

# Conclusions and suggestions of the student:

The teachers signature\_

# Lesson 17. CIRCULATION RECORDS OF PHARMACEUTICAL PROD-UCTS.

**The aim of lesson:** Learning the principles for determining the current demand in the in pharmaceutical products, controls and records the preparation of pharmaceutical products input. The study of the types of realization of pharmaceutical products and acquiring the practical skills of documenting these operations. Study of the classification, characteristics, destination and analysis of pharmaceutical stock indices.

*The type of learning:* Seminar and laboratory practical work *Lesson duration:* 8 hours.

## **Questions for self-learning:**

- 1. Suppliers of medicines and other pharmaceutical products to pharmacies. Determining current needs in medicines and making orders.
- 2. Receiving pharmaceutical products in pharmacy.
- 3. Record of inputs of pharmaceutical products.
- 4. Summary of the stocks increase sources of pharmaceuticals and their documentation.
- 5. Forms of achievement of pharmaceutical products. Economic feature of the turnover.
- 6. Types and parts of the turnover balance between them.
- 7. Evidence of free delivery and drugs privileges.
- 8. Analysis of the turnover indices. Sources of analysis.
- 9. Pharmaceutical stocks of pharmaceutical companies. Their classification and destination.
- 10. Records of expenses and losses of pharmaceutical products.
- 11. Managing Management Report. Structure, periodicity and method of preparation and presentation of report.
- 12. Quantitative evidence of drug circulation.

# **Exercises for self-solving.**

**Exercise 1.** Determine current pharmacy medicines needs and make an order to the pharmaceutical warehouse based on the following data:

No.		1154	Consum	de-		
d/o	Name of the medicine	UM	Ι	II	III	mand
1						
2						
3						
4						
5						

No.	Name of the medicine, dose,	1	Week	S	No.	Name of the medicine.		Week	(S	
d/o	quantity	Ι	II	III	d/o	dose, quantity	Ι	II	III	
	Variant 1					Variant 2				
1	Verospiron 25 mg N20	6	5	7	1	Flucoral 150mg N1	5	3	4	
2	Novocain 0,5 %-2ml N10	3	2	4	2	Almagel 100ml	7	3	8	
3	Fastum gel 2,5 %-50,0	5	7	5	3	Ampicilin 500mg N10	30	25	26	
4	Choliver N100	6	8	10	4	Halixol 30mg N20	10	12	8	
5	Bromhexin 8mg N50					6	5	8		
	Variant 3			Variant 4						
1	Acidi acetilsalicilici 0,5 N10	56	49	52	1	Almagel A 170ml	2	3	2	
2	Cardiomagnil 75mg N100	11	10	12	2	Spasmalgon N20	10	12	9	
3	Sol.Naftizin 0,1%-10ml	46	43	39	3	Panzinorm 10.000 N21	5	4	3	
4	Trikaxon 1g i.m N1	20	21	26	4	Forsef 1g i/m N1	16	18	20	
5	Capsicam ung.50,0	5	7	3	5	Sol.Naftizin 0,1%- 10ml	26	19	25	
	Variant 5					Variant 6	)			
1	Somnol 7,5mg N20	3	5	4	1	Curiozin gel 15ml	5	6	8	
2	Sirop Patlagina 100ml	5	10	7	2	Cefazolin 1g N10	2	3	4	
3	Oxolin ung. 0,25%-10,0	20	25	23	3	Citramon M N10	62	70	69	
4	Vitrum N60	3	5	2	4	Nimesil plic.3g N30	2	4	2	
5	Cavinton 5mg N50	10	12	11	5	Mycosyst 150mg N2	7	10	8	
	Variant 7				Variant 8					
1	Lorinden A ung.15g	2	1	2	1	Ednyt 20mg N20	12	10	13	
2	Otilin 0,1% spray 10ml	26	21	30	2	Airtal 100mg N60	6	5	4	
3	Liv 52 N100	5	3	4	3	Sanorin 0,1%-10ml	21	19	20	
4	Captopril 25mg N20	12	10	8	4	Halixol sir.100ml	10	8	11	
5	Bromhexin 4mg/5ml -60ml	10	9	12	5	Smecta plic.3,0 N10	3	5	6	
	Variant 9					Variant 1	D			
1	Augmentin 1g N14	3	4	2	1	Nomigren N10	5	3	4	
2	Fencarol 0,15 N10	6	8	7	2	Novocain 2%-2ml N10	7	8	5	
3	Kreon 25000 N20	5	6	8	3	Suprastin N20	5	6	4	
4	Plestal N100	2	1	2	4	Dicloran gel 20g	7	8	9	
5	Inhalipt 30ml aer.	21	18	23	5	Imunal 50ml	3	4	5	
	Variant 11									
1	Mycosyst 50mg N7	6	5	7	1	Nospa forte N20	20	25	23	
2	Panzinorm forte N30	7	8	8	2	Rawel 1,5 N20	10	12	11	
3	Faringosept N20	25	20	30	3	Diroton 5mg N20	15	10	16	
4	Forsef 1g i/m N1	21	19	23	4	Cutivate crem 15g	3	1	2	
5	Rinzasip N10	2	1	2	5	Mezim forte N20	23	16	27	

**Exercise 2.** Register the Fiscal Invoices for Medicines Received from the Pharmaceutical Warehouse "Register of Material Value Entries "(form F-02) (each student receives the set of invoices).

**Exercise 3.** Draw up the re-evaluation of pharmaceutical products (Form F-15). Please note that the following products have been re-evaluated:

No			e name g to variants)		UM	The				of reali:		realization		
l/o	(acco	rding	g to variants)		0141	amount		Until evalua			Afte evalu	r re- ation		
1														
2 3														
4														
5								_		_	_		_	
			Note	_										
- Lin					acquisition prices									
ova by order Meldava Nr.					In realization prices									
ublic of Mald he Republic of			ing.		acquisition prices									
th of the Rep (Statistics of t		values	Including		In realization prices			1		Π	T	Ħ		
mistry of Heal Department o		aterial		ues.	acquisition 1 prices			1		Ħ		Ħ		
Approved by the Ministry of Health of the Republic of Moldova by order no din and the Decision of the Department of Statistics of the Republic of Moldova Nr from		outs of n		Medicines	frealization a prices									
Appro and the l	Т	Register of inputs of material values	ount		acquisition 1 prices						1	Ħ		
		Regist	Total amount		tealization a			1		Ħ	1	Ħ		
	Name of the pharmaceutical unit		Accompanying	document,										
	pharmace		Date Provider							Π		Ħ		
	e of the		Date											
	Name		No.											

Nr. d/o	Name of the medicine, dose, quantity	The amoun t	Price until	Price after	No. d/o	Name of the medicine, dose, quantity	The amount	Price until	Price after	
	Varia	nt 1				Va	riant 2			
1	Verospiron 25mg N20	10	31-50	32-90	1	Cavinton 5mg N50	3	84-00	77-50	
2	Relif sup.N10	6	61-50	58-20	2	Ketanov 10mg N10	6	18-20	15-00	
3	Clemastin 1mg N20	3	8-20	7-10	3	Hartil 10mg N28	12	59-60	53-15	
4	Sol.Papaverin h/h 2% - 2ml N10	4	9-70	8-30	4	Enap 5mg N20	6	26-80	21-20	
5	Diprosalic ung. 15g	3	126-20	103-00	5	Suprastin 25mg N20	10	43-50	40-50	
	Varia	nt 3				Va	riant 4			
1	Linex N16	5	62-80	58-15	1	Linex N16	5	62-80	58-15	
2	Mezim forte N20	20	22-10	20-00	2	Mezim forte N20	20	22-10	20-00	
3	Prednizolon 5mg N40	5	4-90	4-20	3	Prednizolon 5mg N40	5	4-90	4-20	
4	Trikaxon 1g i/m N1	21	36-15	34-00	4	Trikaxon 1g i/m N1	21	36-15	34-00	
5	Anuzol sup.N10	2	62-50	59-90	5	Anuzol sup.N10	2	62-50	59-90	
	Varia	nt 5			Variant 6					
1	Choliver N100	10	67-00	65-00	1	Virolex 200mg N10	2	186-00	180-00	
2	Ciprinol 500 N10	8	91-00	84-00	2	Funzol 50 mg N7	3	142-00	125-00	
3	Fastum gel 50g	7	60-00	58-00	3	Diroton 10mg N28	20	71-50	69-50	
4	Arava 10mg N30	1	1420-50	1150-00	4	Fromilid 500mg N14	2	127-00	121-00	
5	Clemastin 1mg N20	3	38-00	36-00	5	Forsef 1g i/m N1	30	38-00	34-00	
	Varia	nt 7				Va	riant 8			
1	Metrogil denta 20g	10	28-50	25-00	1	Almagel A 170ml	3	40-70	38-00	
2	Mig 400mg N10	12	36-40	32-00	2	Trikaxon 1g i/m N1	25	38-20	34-20	
3	Lucetam 800mg N30	15	39-50	32-50	3	Vitrum N100	3	162-00	156-00	
4	Vitrum kids N60	5	134-20	120-60	4	Ostalon N4	20	232-00	226-00	
5	Berlipril 10mg N20	20	49-90	46-35	5	Clemastin 1mg N20	20	38-20	36-20	
	Varia	nt 9				Var	iant 10			
1	Alora 100mg N20	5	62-50	57-40	1	Tempalgin N100	2	79-20	69-00	
2	Cremgen 15g	2	49-30	42-00	2	Ketanov 10mg N10	15	16-20	15-00	
3	Histac 150mg N100	2	69-40	65-30	3	Fastum gel 100,0	3	120-95	116-00	
4	Ideos N30	5	19-30	17-90	4	Cavinton 5mg N50	24	76-20	71-50	
5	Trigan D 2ml N5	2	29-60	25-10	5	Espumizan 40mg N25	10	36-00	32-00	
	Varia	nt 11	-	-	Variant 12					
1	Diclofenac 100mg	5	7-90	7-00	1	Cavinton forte N30	20	79-50	75-00	
2	Carbune activat N10	200	2-90	2-50	2	Ketanov 10mg N10	15	18-10	15-00	
3	Kardiket retard 20mg N20	10	24-50	22-50	3	Lioton 10000 gel 50g	5	103-00	99-00	
4	Isicom N100	3	329-90	309-00	4	Mezim forte N20	35	22-50	20-00	
5	Senadexin N100	5	63-20	55-00	5	Dexalgin N10	3	89-30	85-00	

## The standard form F-15

Approved by the Ministry of Health of the Republic of Moldova by order no. \_\_\_\_from\_\_\_\_\_ and the Decision of the Department of Statistics of the Republic of Moldova no. \_\_\_from \_\_\_\_\_

Name of the pharma	aceutical un	it	_ Tax Code		
Section					
	A C	Т No			
	about the r	evaluation of goo	ods		
	of ""	20			
Commission in composition:	chairman				
committee members					
based on	Nr	from ""		20	

has revaluated the following goods. As a result of inventory was revealed::

No	The name		The		Prie	ce			liffer- ice
No. d/o		UM	amou nt		til re- uation	Afte evalu	r re- ation	Ex-	Less
			ļ	Price	Sum	Price	Sum	tra	
				Total					

Signatures:

Chairman of the commission

**Commission members** 

Managed person

**Exercise 4.** On "\_\_\_" day \_\_\_\_\_ 20 \_\_ In the pharmacy have been recorded extemporary prescription and the following elaborations have been made: (see the data from the 12 and 13 topics). The amount of the extra difference from the delivery of extemporal forms to the MSI was 1543 lei, including purified water supply 329 lei. Draw the "Note about the extra difference and the difference in the minus" (form F-14). Take arbitrarily the missing data.

Approved by the Ministry of Health of the Republic of Moldova by order no. \_\_\_\_from\_\_\_\_\_ and the Decision of the Department of Statistics of the Republic of Moldova no. \_\_\_from \_\_\_\_\_

Name of the pharmaceutical unit \_\_\_\_\_\_ Tax Code

Section \_\_\_\_\_

#### "APPROVED" Head - pharmacist

(signature)

#### Note

# about the extra difference and the difference in the minus

	The	e difference
	Extra differ-	In minus
	ence	
Prescription register		Х
Including purified water		Х
Register of Pharmaceutical elaborations		
Including purified water		Х
Delivery Order Receipt		Х
Including purified water		Х
TOTAL		
Including purified water		Х

#### Signatures:

## **Managed person**

## **Checked accountant**

**Exercise 5**. Register in the "The Border of Records of Products Used for Managing and First Medical Aid" following medicines. Remember, that were used:

No. d/o	Name of the medicine form	Price	No. d/o	Name of the medicine form	Price
	Variant 1			Variant 2	
1	Sol.Ammonii caustici 10% - 25ml	5-90	1	Chlorhexidini bigluconati 0,1%- 100 ml	12-50
2	Wadding 60g	3-95	2	Antibacterial soap 300ml	21-75
	Variant 3			Variant 4	

No. d/o	Name of the medicine form	Price	No. d/o	Name of the medicine form	Price
1	Sol. Hydrogen peroxide 3% - 100ml	7-20	1	Wadding 60,0	4-85
2	Antibacterial soap 300ml	19-20	2	Hydrogen peroxide 40ml	6-50
	Variant 5			Variant 6	
1	Starch 500,0	14-00	1	Sol.ammonii caustici 10% - 25ml	6-90
2	Gauze 5m	16-50	2	Gauze 3m	16-30
	Variant 7			Variant 8	
1	Starch 500g	13-50	1	Gauze 3m	12-65
2	Chlorhexidin bigluconat 0,1%- 100ml	12-30	2	Antibacterial soap 300ml	15-20
	Variant 9			Variant 10	
1	Sol. Hydrogen peroxide 3%- 100ml	8-20	1	Chlorhexidin bigluconat 0,1%- 100ml	12-10
2	Antibacterial soap 300ml	18-60	2	Antibacterial soap 60g	6-50
	Variant 11		Variant 12		
1	Gauze 10m	32-10	1	Antibacterial soap 500ml	21-70
2	Starch 400g	11-90	2	Gauze 3m	12-50

#### **Form F-11**

Approved by the Ministry of Health of the Republic of Moldova by order no. \_\_\_\_from\_\_\_\_\_ and the Decision of the Department of Statistics of the Republic of Moldova no. \_\_\_\_from\_\_\_\_\_

Name of the pharmaceutical unit \_\_\_\_\_\_ Tax Code

Section \_\_\_\_\_

	The Border
of Records of Products Use	ed for Managing and First Medical Aid
	20

month \_\_\_\_\_\_ 20\_\_\_\_

No. d/r	Date	Name of material	UM	The amount	In the zation		In pur prie		Purposes	Signa	ture
u/1		values		aniount	Price	Sum	Price	Sum		Delivered	Received
					Total						
Sign	atures						1				
Mar	laged	person				A	ccount	ant			

Managed person

Accountant \_\_\_\_\_

Exercise 6. Register in the "The Border of Records of Products Used for Managing and First Medical Aid " following medicines. Note, that were used for first aid:

No. d/o	Name of the medicine form	Pricel	No. d/o	Name of the medicine form	Price			
	Variant 1		Variant 2					
1	T-ra Leonuri cardiacae 25ml	5-20	1	T-ra Valerianae 25ml	5-20			
2	Tab.Validol N10	2-00	2	Sol.Amoniac 10% -25ml	7-20			
	Variant 3			Variant 4				
1	Sterile gauze 7×14	6-20	1	Sterile gauze 7×14	3-50			
2	Sol.Iodi 5% -10ml	3-95	2	Sol.verde de briliant 1% -10ml	3-55			
	Variant 5		Variant 6					
1	T-ra Valerianae 25ml	5-30	1	Corvalol 25ml	6-20			
2	Gauze 5m	16-50	2	Tab.Validol N10	2-00			
	Variant 7		Variant 8					
1	T-ra Valerianae 25ml	6-20	1	Picături cardiace 50ml	13-00			
2	Sol.Amoniac 10% -25ml	7-15	2	Tifon steril 5×10	3-75			
	Variant 9			Variant 10				
1	Verde de briliant 1% -10ml	3-95	1	Tab.Validol N10	2-00			
2	Sterile gauze 7×14	3-25	2	T-ra Valerianae 25ml	5-10			
	Variant 11			Variant 123				
1	Sterile gauze 7×14	7-25	1	Cardiac drops 25ml	7-10			
2	Sol.verde de briliant 1% - 10ml	3-95	2	Tab.Validol N10	2-10			

By the end of the month there was no case of first medical aid.

#### Form F-11

Approved by the Ministry of Health of the Republic of Moldova by order no. \_\_\_\_from\_\_\_\_\_ and the Decision of the Department of Statistics of the Republic of Moldova no. \_\_\_from\_\_\_\_\_

# Name of the pharmaceutical unit \_\_\_\_\_\_ Tax Code

Section \_\_\_\_\_

The Border

# of Records of Products Used for Managing and First Medical Aid

month \_\_\_\_\_\_ 20\_\_\_\_

No. d/r	Date	Name of material	UM	The amount	In the zation		In pur prie		Purposes	Signa	iture
u/1		values		amount	Price	Sum	Price	Sum	_	Delivered	Received
					Total						

Signatures:

Managed person \_\_\_\_

Accountant \_\_\_\_\_

**Exercise 7**. Considering the data of Tasks 6 and 7 draw up an "Act on the Settlement of Medicines and Other Material Values Used for Household Purposes and for First Medical Assistance.".

#### Formularul tip F-12

Approved by the Ministry of Health of the Republic of Moldova by order no. \_\_\_\_from\_\_\_\_\_ and the Decision of the Department of Statistics of the Republic of Moldova no. \_\_\_from\_\_

## Name of the pharmaceutical unit Tax Code

Section \_\_\_\_\_

#### ACT Nr.

on the Settlement of Medicines and Other Material Values Used for Household Purposes and for First Medical Aid

month \_\_\_\_\_ 20\_\_

Commission composed of: chairman \_\_\_\_\_

commission members

have drawn up this act, about the fact that in the month \_\_\_\_\_\_ 20

medicines, medical supplies and other materials were consumed.

		Sum				
No. d/o	For what purposes they were consumed	Purchase prices	Realization prices			
1.	For household purposes					
2.	For Firs Medical Aid					
	Total:					

Amount in letters: \_\_\_\_\_

Signatures: President

Members of the commission

Managed person

Exercise 8. Draw up the "Act on the alteration of pharmaceutical products" (Form F-13). Consider that the term of validity of the following drugs expired:

No.	Name	UM	Series	Term of	Received (date, supplier)	The				
d/o	Nume	014	561165	validity.	Received (date, supplier)	amount				
			Variar	nta 1						
1	Biseptol 480mg N20	pack	00264	04.04.14	Vinamex, 01.09.12	1				
2	Postinor N2	pack	2732	09.04.14	Tetis, 02.06.12	2				
3	Urolesan 15ml	pack	12782	12.04.14	DitaEstFarm, 02.05.12	1				
4	Xanax 0,5mg N30	pack	064213	21.04.14	Tetis, 02.04.12	1				
Variant 2										
1	Bifi-form N20	pack	012362	10.04.14	Vinamex, 01.06.12	1				
2	Betagen 15g	pack	06321	01.04.14	Tetis, 02.05.12	2				
3	Maninil 3,5 N120	pack	08213	03.04.14	DitaEstFarm, 02.04.12	1				
4	Efitusin 100ml	pack	02472	19.04.14	Vinamex 06.09.12	1				
			Varia	nt 3						
1	Ciprinol 500mg N10	pack	06721	10.04.14	Virim Impex, 06.10.11	1				
2	Sinaflan 0,025% - 25g	pack	01272	16.04.14	DitaEstFarm, 01.06.12	1				
3	Pantotin 500mg N40	pack	042611	26.04.14	RihPangal, 12.02.12	1				
			10-							

			1 1			
No. d/o	Name	UM	Series	Term of validity.	Received (date, supplier)	The amount
4	Pancreatin N60	pack	039126	11.04.14	Maiac Farm, 21.09.11	1
			Varia	nt 4		
1	Imudon, N40	pack	063245	01.04.14	Tetis, 01.02.11	1
2	Salofalc 500mg N10	pack	013216	07.04.14	Tetis, 01.02.11	1
3	Subtil N20	pack	003216	11.04.14	MaiacFarm, 01.03.12	4
4	Vitrum N30	pack	001216	21.04.14	DitaEstFarm, 01.10.11	1
			Varia	nt 5		
1	Hadubo 700ml	pack	03261	20.04.14	Vinamex, 01.02.12	1
2	Maalox, 250ml	pack	01300	13.04.14	Dita, 02.01.12	1
3	Gripostat C N20	pack	04261	10.04.14	Tetis 02.10.11	1
4	Gylalgin, N20	pack	01362	21.04.14	Esculap, 03.03.12	1
			Varia	nt 6		
1	Ketonal 100mg N10	pack	26421	01.04.14	Tetis, 01.02.12	1
2	Imodium 2mg N10	pack	26329	03.04.14	DitaEstFarm, 09.03.12	1
3	Mezim forte N20	pack	26840	09.04.14	Tetis, 02.10.11	1
4	Secrol 150ml	pack	7625	10.04.14	Esculap, 04.09.12	1
			Varia	nt 7		
1	Aerius 5mg N10	pack	26392	02.04.14	DitaEstFarm, 01.02.12	1
2	Bifi form N20	pack	32641	09.04.14	Tetis, 01.07.12	3
3	Ampiox 250mg N10	pack	42321	10.04.14	Vinamex 01.07.12	1
4	Arava N30	pack	61342	12.04.14	DitaEstFarm, 01.03.10	1
			Varia	nt 8	·	
1	Furagin 50mg N30	pack	53267	03.04.14	Vinamex, 09.10.11	1
2	Maalox 250 ml	pack	12364	16.04.14	DitaEstFarm, 01.07.12	1
3	Wenflox-T N20	pack	67432	21.04.14	Tetis 01.07.12	1
4	T-ra Propolis 25ml	pack	12364	13.04.14	Esculap, 16.02.12	1
	•		Varia	nt 9	· •	
1	Famosan 200mg N20	pack	36241	06.04.14	Tetis, 10.02.12	1
2	Almagel Neo 170ml	pack	76325	05.04.14	Vinamex, 12.01.12	1
3	Grippgo N10	pack	3724	12.04.14	RihPangalFarm, 16.01.12	10
4	Salbutamol aer.20ml	pack	37213	14.04.14	DitaEstFarm, 10.01.12	1
			Varian	nt 10		
1	Famosan 20mg N20	pack	36241	06.04.14	Tetis, 10.01.12	1
2	Funit 100mg N5	pack	21734	07.04.14	DitaEstFarm, 17.03.12	1
3	Dimexid 50ml	pack	73217	15.04.14	Vinamex 10.12.11	1
4	Duspatalin 200mg N20	pack	27112	03.04.14	DitaEstFarm, 12.01.12	1
			Varian	nt 11		
1	Abactal 400mg N10	pack	27213	12.04.14	Vinamex, 01.12.11	1
2	Andante N7	pack	32126	10.04.14	Esculap 02.06.11	1
3	Bifi-form, N20	pack	74127	06.04.14	DitaEstFarm, 01.06.11	1
4	Aerius 5mg N10	pack	3253	03.04.14	DitaEstFarm, 06.05.11	1
		<b>A</b>	Varian			
1	Diazolin 0,1 N20	pack	7342	02.04.14	VirimImpex, 21.01.12	2
2	Enalapril 5mg N20	pack	12342	09.04.14	DitaEstFarm, 13.02.11	1
3	Gutalax 30ml	pack	72132	12.04.14	Tetis, 01.06.11	1
4	Pinosol 10ml	pack	27314	14.04.14	Esculap 15.03.11	1
		1 ·			· · · ·	

#### Form F-13

Approved by the Ministry of Health of the Republic of Moldova by order no. \_\_\_\_from\_\_\_\_\_ and the Decision of the Department of Statistics of the Republic of Moldova no. \_\_\_from\_\_\_\_\_

Name of the pharmaceutical unit \_\_\_\_\_ Tax Code \_\_\_\_\_ Section \_\_\_\_\_

# ACT Nr. \_\_\_\_\_ on the alteration of pharmaceutical products din "\_\_" \_\_\_\_\_ 20 \_\_\_\_

Commission composed of: chairman \_\_\_\_\_\_ Commission members \_\_\_\_\_\_ based on \_\_\_\_\_\_ No. \_\_\_\_ from "\_\_" \_\_\_\_20\_ have drafted this act about altering the material values retained in \_\_\_\_\_\_ to be settled. Managed person\_\_\_\_\_\_

No.	Name	UM	The	Purc pri	hase ces	Realiz pri	zation ces	Cause of dam- age No, date of	
d/o	Indilic	UM	amount	Price	Sum	Price	Sum	laboratory analysis	
Const	Tota								
Signat	usion of the commis tures: President	sion							

Members of the commission

Man	aged person							
The Pha	act approves. Losses in rmacist-Head	the amo	unt of	to be pa 20	issed		_	
Not	e the destruction of mat	erial valu	ies settled _					
up 1	<b>k 9.</b> Based on the docu the "Managing Manage ned within one month."	ement Re	port". Cons	ider that	all operati	ons v	vere j	
						Fo	rm F-	- 27
	proved by the Ministry of the Decision of the Depart							
Nan	ne of the pharmaceuti	cal unit _		Tax Co	de			
Sect	ion				"APPROVEI	)"		
					(N.S.)			
				""	signature		20	
	Μ	anaging	Manageme	nt Report	t			
	From ""		to "" _		_20			
	Managed person		S.)	(sig	natura)			
		(11.	5.7	Sum	iuturej			
No.	Name, No. d/r and date of the document Suppli-	Me	dicines	Package	Auxiliary	Other material values		rial
d/o	er	Retail price	Wholesale price	Раскаде	materials			
	Stock at 01.							
	Inputs							
	I		I	l	l	1	1	1

	m . 1									
	Total inputs									
	Outputs									
	Total outputs									
	Stock at 01.									
	Annex:		documents	S						
Re	Report and documents received			Corrections accept. Stock of goods in the amount						
Ve	erified			, tt	,11111111					
	Accountant signature			Managed personsignature						
A	signatur			Sig	nature					

Exercise 10. Determine the balance and fill in the "Record of Drugs and Toxic, Narcotic and Psychotropic Substances" for \_\_\_\_\_\_ per month \_\_\_\_\_\_. Consider: Opening balance\_\_\_\_\_; During the month, inputs were made: Invoice Nr. \_\_\_\_ din \_\_\_\_\_ 20\_\_\_ g, Invoice Nr. \_\_\_\_ din \_\_\_\_\_ 20\_\_ \_\_\_\_g. Deliveries according to prescriptions for ambulatory patients: \_\_\_ g. Deliveries according to order-delivery vouchers of prophylactic curative institutions \_\_g. Task solving data for no. 13 and 14.

1. Etaminal of natrium	2. Morfina hydrohlorid					
January	Ianuarie					
Opening balance 4,8g	Opening balance 5,6g					
Inputs FB 267924 06.01.2010,0	Inputs OD 269243 07.01.2025,0					
FB 28979 19.01.2015,0	OD 321262 21.01.2035,0					
Deliveries Rec.amb.10,5	Deliveries Rec.amb.26,5					
V MSI 10,3 Closing balance 2,96	V MSI 38,0 Closing balance 1,0					
_						

3. Atropin sulfat	4. Promedol
January	January
Opening balance 2,55g	Opening balance 10,5g
Inputs FB 6292472 10.01.20	Inputs OK 27924263 11.01.2020,0
FB 6312003 28.01.20	OK 27993421 27.01.20
Deliveries Rec.amb 8,6	Deliveries Rec.amb.32,6
V MSI Closing balance 6,41	V MSI Closing balance 6,38
5. Dicainum	6. Atropin sulfat
January	January
Opening balance 24,35g	Opening balance 8,51g
Inputs BM 02462924 11.01.2025,0	Inputs BM 026425320 6.01.2025,0
BM 02491920 27.01.20	BM 026429160 27.01.20
Deliveries Rec.amb.28,4	Deliveries Rec.amb.24,4
V MSI 34,5 Closing balance15,3	V MSI 35,7 Closing balance 8,39
7. Fosfat de codeină	8. Morfină chlorid
January	January
Opening balance 15,4g	Opening balance 15,4g
Inputs FB 24962117 5.01.2025,0	Inputs BM 26996432 3.01.2025,0
FB 24986921 26.01.2020,0	BM 26998967 25.01.2020,0
Deliveries Rec.amb.26,8	Deliveries Rec.amb.26,8
V MSI 24,9 Closing balance 8,59	V MSI 24,9 Closing balance 8,6
9. Nitrat de argint	10. Codein fosfat
January	January
Opening balance 20,7g	Opening balance 10,5g
Inputs BM 624000241 4.01.20100,0	Inputs OD 241632721 5.01.2050,0
BM 624120690 26.01.2055,0	OD 241679342 27.01.2065,0
Livrări Rec.amb.98,5	Livrări Rec.amb.48,5
V MSI 75,5 Closing balance 1,55	V MSI 48,5 Closing balance 7,13
11. Morfină hydrohlorid	12. Nitrat de argint
January	January
Opening balance 2,4g	Opening balance 20,7g
Inputs OK 024162294 9.01.2010,0	Inputs OC 249126727 03.01.20100,0
OK 024196201 27.01.2020,0	OC 249296792 23.01.2060,0
Deliveries Rec.amb.9,5	Deliveries Rec.amb.98,5
V MSI 12,8 Closing balance 10,05	V MSI 8,5 Closing balance 1,6

**Exercise 11.** At the end of the month the factual balance of \_\_\_\_\_\_ in the production department constituted \_\_\_\_ g (see task 11). By comparing it with the balance registered in the registry (task 13), determine the amount of divergence. Establish the natural perishability and the extent of over-indebtedness. Make the respective conclusions from the name of the pharmacist.

#### Register

# of evidence of drugs and toxic, narcotic and psychotropic substances in pharmacies

Name of the medicine \_\_\_\_\_

#### Managed person \_\_\_\_\_

		]	Input	s				Out	puts		ion	all s	×		ag-
Month	Initial stock	Supplier, Nr. doc. date	The amount	Total Monthly: inputs stoc	Types of outputs	1	2	3	4	 31	Monthly calculation for each type	Total monthly in all kinds of outputs	Recorded stock	Factic stock	Signature of Manag- ing person
					The ambulatory prescription										
Janu-					Health institutions										
ary					pharmacies' subsidi- aries,										
					pharmacies sections										
					The ambulatory prescription										
Feb-					Health institutions										
ruary					pharmacies' subsidi- aries,										
					pharmacies sections										
					The ambulatory prescription										
March					Health institutions										
March				pharmacies' subsidi- aries,											
					pharmacies sections										
					The ambulatory prescription										
					Health institutions										
					pharmacies' subsidi- aries,										
					pharmacies sections										
					The ambulatory prescription										
Decem cem-					Health institutions										
cem- ber					pharmacies' subsidi- aries,										
					pharmacies sections										

**Exercise 12.** Based on previously received prescriptions (see topics 11,12) prepare the "The act of destroying prescriptions with expired storage term", according to Annex no. 7 of the MS RM Order no. 960 of 01.10.2012.

Annex 7 of the MS RM order no. 960 of 01.10.2012

ACT

# no.\_\_\_ from \_\_\_\_\_ of destroying prescriptions with expired storage term

\_\_\_\_\_

Conclusion of the commission

President \_\_\_\_\_

Members of the commission

have drafted this act of destroying prescriptions with an expired storage term:

No. d/o	Name of the medi- cine	The period for which the medicines were delivered	Number of prescriptions	The amount of re- leased drug

Ways of destroying prescriptions \_\_\_\_\_\_ Signatures: \_\_\_\_\_\_

Conclusions and suggestions of the student:

The teachers signature \_\_\_\_\_

# Lesson 18. EVIDENCE OF OTHER STOCK MOVEMENTS. CASH FLOW IN PHARMACEUTICAL COMPANIES.

*The aim of lesson:* Students learn the structure, records and standardization of other material values in pharmaceutical companies, the classification and the particularities of recording of fixed assets, small value objects and short duration, types of payment by transfer and documenting these operations.

The type of learning: Seminar and laboratory practical work

## Lesson duration: 4 hours.

## **Questions for self-learning:**

- 1. Evidence of circulation of other material values in pharmaceutical enterprises.
- 2. Fixed assets. Classification. Documentation of fixed assets.
- 3. Determining the efficiency of using fixed assets.
- 4. Objects of small value and short duration.
- 5. Evidence of cash. Purpose and tasks.
- 6. Operations of collecting and spending money and their documentation.
- 7. Cash register and control and Cash register and their compilation.
- 8. Cashier revision and control over the observance of discipline.
- 9. Types of settlements by transfer. Evidence of payments with suppliers and buyers of medicines.
- 10. Report on cash flow in pharmaceutical companies.
- 11. Taxation of pharmaceutical companies. Type of taxes established in the Republic of Moldova.

# **Exercises for self-solving.**

**Exercise 1.** Make a note about transferring subsequent packaging in freight for further realization:

No. d/o	Name of the medicine, dose, quantity	The amount	Price	No. d/o	Name of the medicine, dose, quantity	The amount	Price	
u/0	Variant			Variant 2				
		-				_		
1	Glass bottles 5l	6	39-00	1	Wooden boxes	2	25-00	
2	Metal cans 50l	3	120-00	2	Glass bottles 10l	5	70-00	
3	Glass bottles 20l	5	78-00	3	Metal boxes	2	35-00	
	Variant	: 3			Varian	t <b>4</b>		
1	Metal cans 50l	3	89-00	1	Glass containers 5l	6	35-00	
2	Plastic bag	4	62-15	2	Glass bottles 20l	5	85-00	
3	Glass bottles 201	3	62-00	3	Metal cans 50l	3	195-00	
	Variant	: 5		Variant 6				
1	Metal cans 50l	5	182-00	1	Glass bottles 10l	10	68-00	
2	Glass bottles 201	3	69-00	2	Glass bottles 20l	6	75-00	
3	Glass bottles 5l	4	32-00	3	Metal cans 50l	3	170-00	
	Variant	: 7		Variant 8				
1	Metal cans 50l	5	169-00	1	Wooden crate	5	36-00	
2	Glass bottles 201	10	79-00	2	Metal cake	3	164-00	
3	Glass bottles 51	7	29-00	3	Glass bottles 5l	6	81-00	

No. d/o	Name of the medicine, dose, quantity	The amount	Price	No. d/o	Name of the medicine, dose, quantity	The amount	Price		
	Variant	9		Variant 10					
1	Plastic table	5	65-00	1	Glass bottles 5l	10	26-00		
2	Wooden crate	3	38-00	2	Glass bottles 20l	6	58-00		
3	Metal canister	4	158-00	3	Glass bottles 50l	3	102-00		
	Variant	11			Variant	12			
1	Plastic bag	5	78-00	1	Wooden crate	3	37-00		
2	Glass bottles 20l	2	57-00	2	Glass bottles 5l	3	29-00		
3	Metal canister	2	165-00	3	Metal canister	3	167-00		

# **Exercise 2**. Document the collection of the following herbal medicinal product:

No. d/o	Vegetable Product name	The amount	Price	No. d/o	Vegetable Prod- uct name	The amount	Price	
	Varia	nt 1			Varia	ant 2		
1	Nettle leaves o	10 kg	80 lei/kg	1	Hyperici herbae	10 kg	120 lei/kg	
2	Chamomile flow- ers	5kg	125 lei/kg	2	Linden flowers	5kg	150 lei/kg	
	Varia	nt 3			Varia	ant 4		
1	Marigold Flowers	15 kg	90 lei/kg	1	Hyperici herbae	10 kg	120 lei/kg	
2	Sheepfruit	20 kg	75 lei/kg	2	Hawthorn fruits	15 kg	100 lei/kg	
	Varia	nt 5		Variant 6				
1	Linden flowers	15 kg	125 lei/kg	1	Chamomile flowers	10 kg	125 lei/kg	
2	Chamomile flow- ers	10 kg	135 lei/kg	2	Aerial parts of salvia	15 kg	95 lei/kg	
Variant 7				Variant 8				
1	Linden flowers	6 kg	120 lei/kg	1	Mint leaves	10 kg	95 lei/kg	
2	Cascara Bark	10 kg	98 lei/kg	2	Cascara Bark	10 kg	90	

No. d/o	Vegetable Product name	The amount	Price	No. d/o	Vegetable Prod- uct name	The amount	Price
							lei/kg
Variant 9					Varia	na 10	
1	Marigold Flowers	7 kg	95 lei/kg	1	Aerial parts knotweed	10 kg	75 lei/kg
2	Plantain feafs	8 kg	90 lei/kg	2	Mint leaves	10 kg	95 lei/kg
	Varia	nt 11			Varia	nt 12	
1	Chamomile flow- ers	10 kg	125 lei/kg	1	Roots of licorice	6 kg	105 lei/kg
2	Plantain feafs	8 kg	80 lei/kg	2	Leaf-thistle leaves	10 kg	76 lei/kg

### **Form F-09**

Approved by the Ministry of Health of the Republic of Moldova by order no. \_\_\_\_ from\_\_\_\_\_ and the Decision of the Department of Statistics of the Republic of Moldova no. \_\_\_\_\_ from \_\_\_\_\_ Name of the pharmaceutical unit \_\_\_\_\_\_ Tax Code Section \_\_\_\_\_

RECIPE RECIPIENT NO. \_\_\_\_\_ of the medicinal plant product from "\_\_\_\_\_ 20 \_\_\_\_

Received from \_\_\_\_\_\_ Identity Bulletin Series \_\_ Nr. \_\_\_\_\_

Issued by \_\_\_\_\_ to \_\_\_\_\_ Personal code \_\_\_\_\_

No. d/o	Vegetable Product name	UM	The amount	Collection price	The amount in the collec- tion price	Realiza- tion price	Amount in the realiza- tion price	The results of the analy- sis
				Total				

Medicinal herbal product

Sent \_\_\_\_\_\_ signature received \_\_\_\_\_\_ signature

To pay \_\_\_\_\_\_ Amount in letters \_\_\_\_\_\_ (NPP of the supplier)

Signatures: Head-Pharmacist \_\_\_\_\_\_ Accountant \_\_\_\_\_

Supplier of herbal product

**Exercise 3.** Make a note about transferring of herbal product collected according to the "RECIPE RECIPIENT" (task 3) in pharmaceuticals. The documents required for the operation: he positive results of the analysis of the medicinal plant product, carried out "\_\_\_" \_\_\_\_\_ 20 \_ with Nr. \_\_.

#### Form F-10

Approved by the Ministry of Health of the Republic of Moldova by order no. \_\_\_\_ Approved by the Ministry of Health of the Republic of Moldova by order no. \_\_\_\_ from\_\_\_\_ and the Decision of the Department of Statistics of the Republic of Moldova no. \_\_\_\_ from \_\_\_\_

Name of the pharmaceutical unit	Tax Code	
Section		
	ACT No	

about transferring medicinal plant product

from "\_\_\_" \_\_\_\_\_ 20 \_\_\_\_

The composition of the commission: the chairman

Committee members							
On the basis of		Nr. Of '		20	_have drawn up th	is act	
about the following product transfer medicinal plant							

	No d/o	Vegetable Product name	 The amou	Colle	ection	Achiev	vement	Analy- sis
	u/0	name	nt	Price	Sum	Price	Sum	Number
L			 	Total				

Signatures:

Committee Chair	Members of the Committee
Managed person	

**Exercise 4**. Document one of the below-mentioned cash-in-house transactions: cashing from the execution of the industrial section; cashing from pharmacy branches; cashing from the bank for payment of the salary; reimbursement of the advanced and unused amount by the Head-pharmacist.

Name of the co	ompany			Name of the co	ompany
TRANSMISSIC	ON BOOK no			<b>RECEIPT TEN</b>	IDER BET NO
«»	20			""	20_
The corre- spondence account	Analytical evidence ac- count	The value	Special destina- tion code		
	ו from ו			Received from Based on	
	leib				<i>n letters)</i> iibani
	countant		_Head Accour	itant	

# PAYMENT SERIES AD NO. 029373 \* STANDARD FORM

#### Approved by the joint order of the Department of Statistics of the Republic of Moldova and the Ministry of Finance of the Republic of Moldova no. 24-36 of March 25, 1998

Date								
Company name Tax Code								
Nam	e of the beneficia	ary		T	ax Code			
		Nam	ne, Surname of th	e beneficiary				
	address							
No.	Name of goods (works, services)	U. M.	The amount	Value excluding VAT	VAT amount	Income tax	Total pay- ment	

Total charged \_\_\_\_\_

Beneficiary's signature

**Exercise 5.** Document one of the following cash outflows: payment of salaries according to the payment list; payment for collecting the medicinal plant product; handing over money to the bank; advance for delegation expenses of the pharmacist's deputy assistant.

Company name \_\_\_\_\_

Payment Nr. \_\_\_\_ " \_\_\_\_ " \_\_\_\_\_ 20\_\_\_\_

Analytical evi-	The value	Special desti-
dence account		nation code
	Analytical evi- dence account	-

		(Name, surname)		
Based on			lei	_ bani
		(value in letters)		
Annex				
Head pharmacist		Chief accountant		
Received		lei		_bani
		(value in letters)		
"	20	Signature		
Identity card				
-		(series, number, date and place of release)		
Paid the cashier				

**Exercise 6.** Through the "Payment Order" document payment by transfer for pharmaceutical products received in the pharmacy. Consider that the pharmacy has purchased \_\_\_\_\_\_ worth of \_\_\_\_\_ lei.

1. Dita EstFarm worth 25360 lei	2. Maiac Farm worth 29479 lei
3. EsculapFarm worth 32620 lei	4. Farmina worth 46240 lei
5. RihPangalFarma worth 31574 lei	6. Iseps Farma worth 50210 lei
7. Sanfarmprim worth 39721-50 lei	8. Gantala worth 27320 lei
9. Vinamex worth 42324-70 lei	10. Lismedfarm worth 41240 lei
11. Tetis International worth 34274 lei	12. Becor worth 72350 lei

Pavment	order	No.			DATA EMITE	RII		.DOC.	TYP. 1
Pay			L	El					
Payer	(R)					IBAN Coo	de		
						CODUL F	FISCAL		
Paying provide	r								
-									
Benefit	(R)					IBAN Coo Tax code			
						1 ax code			
PRESTATORUL	BENEFICIAR								
Payment destinat	tion					Trans	sfer Type L/URGENT		
						NORMA	L/URGENT		
							N	/	
								( L.	.s.)
						-			
Transaction code		Date of receipt		Date of ex	ecution				
						Signature	es of the Issuer		
				Signati	ure of the provider				
						L. S.			
		Reason for refusa	1			1			

**Exercise 7.** Select from the Fiscal Code the types and amounts of taxes paid by pharmaceutical companies.

Conclusions and suggestions of the student:

The teachers signature\_\_\_\_\_

# Lesson 19. LABOR AND WAGES RECORDS. CONSUMPTION AND EXPENDITURE OF PHARMACEUTICAL COMPANIES. THE RESULTS OF FINANCIAL AND ECONOMIC ACTIVI-TY IN PHARMACEUTICAL COMPANY.

*The aim of lesson:* Acquisition of the principles for the determination of the tariffs of pharmacies, staff records and working time, calculation of salary, bonuses, increments and supplements, salary deductions, salary payment order. Determining the results of the economic and financial activity and ways to increase the efficiency of the activity of the pharmaceutical enterprises.

*The type of learning:* Seminar and laboratory practical work *Lesson duration:* 8 hours.

## **Questions for self-learning:**

- 1. The purpose of labor and wages records. Evidence of staff and time sheet.
- 2. Salary systems and forms in pharmaceutical enterprises.
- 3. Basic labor and pay indexes and their characteristics.
- 4. The basic and additional labor remuneration and their characteristics.
- 5. Determination rate of wages of pharmaceutical personnel. Supplements to wages and bonuses.
- 6. Charges from salary.
- 7. Social assistance.
- 8. General concepts of consumption and expenditure. Consumption composition. Composition of expenditure.
- 9. Determination of consumption and expenditure. Record of expenditures in pharmaceutical companies. Analysis of expenditure on items and amount.
- 10. General considerations on the taxation of pharmaceutical companies.
- 11. Commercial payment and economic characteristics. Formation of commercial rebate. His destination. Prime cost.
- 12. Determination of realized and unrealized added value.
- 13. Results of financial-economic activity of pharmaceutical companies.

#### **Exercises for self-solving.**

**Exercise 1**. Establish pharmacy staff. In the pharmacy activate the production sections with material stocks and industrial forms. Pharmacy activity program between  $8^{\circ\circ}$  and  $20^{00}$ , with no rest days.

**Exercise 2**. Determine the rate of wages of pharmaceutical personnel.

Company Name

## Staffing for the year \_\_\_\_\_

No.	Name, Surname	Job title	Units	Wage rate or function salary

Foaie de boală презно steoperate stra 2 2 1 54 å 3 7 3 ន 24 2 Sectia 6 90 Foaie colectivă de prezență Luna 5 Data 9 5 2 -2 Ξ 2 6 10 P ---Conducătorul întreprinderii ÷ 4D ŝ e4 Sef de sectie \_ Postul. funțiu Denumirca intreprinderii Numele, prenumele žŝ

**Exercise 3.** Calculate the amount of the insurance subsidy during the temporary working incapacity of a pharmacist with a seniority in work \_\_\_\_ years.

**Exercise 4.** Calculate the size of the payment for ordinary leave for a worker in pharmacy. Use the data from previous tasks.

**Exercise 5.** Compile the supplementary working time table for pharmacists. Consider that during the inventory, the pharmaceutical staff worked additionally for 2 hours for 2 days in the current month. Calculate payment for extra hours worked.

**Exercise 6.** Calculate payment for working on holidays. Calculate payment for working on holidays. Please note that during two holiday days a pharmacist worked within the monthly balance of working hours and the second - in addition to the balance sheet with salaries of \_\_\_\_\_ lei. Also, under such conditions were two pharmacist laborers for one day of feast with the monthly salary of \_\_ lei.

#### THE TABLE OF EVIDENCE OF ADDITIONAL WORKING TIME FOR PHARMACISTS

No. d/o	Name, Surname, Patronymic	Function	Monthly salary	For 7 hours	For one hour	For 2 addi- tional hours	For more than 2 hours	Totally to pay

Totally sum \_\_\_\_\_

**Exercise 7.** Calculate payment for working on holidays. Please note that during two holiday days a pharmacist worked within the monthly balance of working hours and the second - in addition to the balance sheet with salaries of \_\_\_\_\_ lei. Two such pharmacists were also working under such conditions for a holiday day with a monthly salary of \_\_\_ lei.

**Exercise 8.** Based on 7 task data, calculate the total cost of the pharmacy spend for the previous (managed) period per item and amount.

Name of the document, (No. of the topic)	Value, lei	Expenditure item

**Exercise 9.** Based on exercise 8 data, calculate the total cost of the pharmacy spend for the previous (managed) period per item and amount.

No. d/o	Item name	Value, lei	Share (%) to turno- ver of pharmacy

## Pharmacy \_\_\_\_\_

# Draft expenditure for the year 20 \_.

# Turnover in the reporting year \_\_\_\_\_. The project turnover for the

# year 20\_.

N d/o	Item name		Fulfilling for the reported year		The project for the year 20_	
		Sum	%	Sum	%	
1.	Auxiliary materials					
2.	Salary					
3.	Contributions for social insurance and social pro- tection					
4.	Maintenance and repair costs of fixed assets for administrative and general economic purposes					
5.	Expenditure on fuel, gas, electricity, water					
6.	Ensuring enterprise assets					
7.	Amortization of intangible assets					
8.	Wear of inventory items (dishes, special sanitary clothing, underwear)					
9.	Expenditure on packaging operations					
10.	Current expenditure on rent of premises and equipment, unrelated to production					
11.	Payments for banking, auditing, legal and other ser- vices					

i			 
12.	Losses due to degradation of values and gaps in the limits and over norms of natural perishability		
13.	Losses due to interruptions		
14.	Expenses related to the acquisition of marketing licenses for the appropriate types of activity		
15.	Expenditure on maintenance of security and fire safety assurance		
16.	Judicial and arbitration costs		
17.	Office, post, telephone and telegraph charges		
18.	Payments to charity organizations		
19.	Expenditure on studies (training of staff)		
20.	Expenses related to development, for research, design and experimentation		
21.	Fees, fees, and other mandatory payments except for income tax (profit)		
22.	Expenditure on labor remuneration and security techniques		
23.	Travel expenses		
24.	Expenditure on transport employees		
25.	Expenditure on environmental protection		
26.	Other administrative and general expenses of the household		

**Exercise 10**. Calculate the value and amount of the rebate made for the month \_\_\_\_\_\_. Please note the data in the table below:

Current situation	Value	e (lei)	Current situation	Value	e (lei)		
and circulation of pharmaceuticals	In the realization prices	In acquisi- tion prices	and circulation of pharmaceuticals	In the realization prices	In acquisi- tion prices		
Variant 1			V	ariant 2			
Balance Mar 01.03	460341-90	368273-40	Balance Mar 01.03	804680-20	643744-25		
March inputs	480063-20	384051-23	March inputs	800160-15	640130-20		
Realization	390321-15	-	Realization	420360-12	-		
other outputs	861-83	690-40	other outputs 836-45		670-20		
Balance 01.04 April			Balance 01.04 April				
V	ariant 3		Variant 4				
Balance Mar 01.03	748352-40	598682-60	Balance Mar 01.03	824342-02	659473-65		
March inputs	699090-20	559279-50	March inputs	881200-40	705004-20		
Realization	596968-15	-	Realization	621225-16	-		
other outputs 2001- 40 1608-80		other outputs 1050-80 84		840-60			
Balance 01.04 April			Balance 01.04 April				

V	ariant 5		Variant 6				
Balance Mar 01.03	959348-52	809699-56	Balance Mar 01.03	152349-36	125645-52		
March inputs	932150-40	745720-40	March inputs	148003-95	119010-50		
Realization	800262-63	-	Realization	138960-25	-		
other outputs	2383-09	1906-45	other outputs	331-55	265-30		
Balance 01.04 April			Balance 01.04 April				
V	ariant 7	•	V	ariant 8			
Balance Mar 01.03	436726-42	350455-20	Balance Mar 01.03	983004-00	786403-28		
March inputs	426053-20	340842-40	March inputs	890123-40	801951-53		
Realization	396943-65	-	Realization	729240-26	-		
other outputs	1002-00	801-60	other outputs	3460-02	2768-05		
Balance 01.04 April		Balance 01.04 April					
V	ariant 9		Variant 10				
Balance Mar 01.03	983004-02	786403-25	Balance Mar 01.03	799330-69	639473-35		
March inputs	990120-60	801951-54	March inputs	880059-70	705004-20		
Realization	824161-50	-	Realization	792310-25	-		
other outputs	3450-63	2768-02	other outputs	1045-90	840-60		
Balance 01.04 April			Balance 01.04 April				
Va	riant 11		Variant 12				
Balance Mar 01.03	800340-96	649280-30	Balance Mar 01.03	740068-40	592056-48		
March inputs	790956-90	632764-80	March inputs	763012-65	618039-80		
Realization	632013-57	-	Realization 692030-50		-		
other outputs	2002-12	1602-45	other outputs 2049-90 164		1640-80		
Balance 01.04 April			Balance 01.04 April				

**Exercise 11.** Calculate the coefficient and the level of prime cost for the same period.

**Exercise 12.** During the management period were sold medications in the amount of\_\_\_\_\_ lei. The average level of the commercial rebate constituted \_\_\_\_%. Calculate the amount of the rebate shopping done, coefficient and level of prime cost for this period

P			
1Realizing 420.3	2. Realizing 780.12	3. Realizing 625.2	4. Realizing
thousand lei	thousand lei thousand lei		629,3 thousand lei
N RC=23,1%	N RC=20,3%	N RC=21,3%	N RC=21,6%
5. Realizing 462.16	6. Realizing 296.6	7. Realizing	8. Realizing
thousand lei	thousand lei	320,9 thousand lei	390 thousand lei
N RC=21,2%	N RC=19,8%	N RC=16%	N RC=21,5%
9. Realizing 562.36	10. Realizing	11. Realizing	12. Realizing
thousand lei	396,5 thousand lei	926,3 thousand lei	621,7 thousand lei
N RC=18,9%	N RC=19,8%	N RC=18,6%	N RC=19,1%

**Exercise 13.** The volume of realization of pharmaceutical products (turnover of the pharmacy, a legal entity of 20 \_\_ constituting \_\_\_\_\_\_ lei. The average commercial rebate on the same time - \_\_\_%. Pharmacy revenue from other activities was \_\_\_\_\_\_ lei. Operating expenses of the basic activity \_\_\_\_\_\_ lei, other expenses \_\_\_\_\_\_ lei. Determine the results of your pharmacy's financial and economic activity for this year (global income, income before tax, amount of taxes to be paid, benefit, profitability). Draw up the report on "The results of the economic and financial activity" of the pharmaceutical company.

ui company.			
<b>2</b> . The volume of realization	<b>3</b> . The volume of realization		
- 794,25 th. lei, Pharmacy	- 1060,3 th. lei, Pharmacy		
revenue from other	revenue from other activi-		
activities.25,2 th lei	ties 27,1 th. lei		
N RC= 21,2%	N RC= 20,7%		
Operating expenses of the	Operating expenses of the		
basic activity 139,5 th. lei	basic activity 188,7 th lei		
Other expenses. 2,567th lei	Other expenses. 4,624 th lei		
<b>5</b> . The volume of realization	<b>6</b> . The volume of realization		
- 2650,5 th lei, Pharmacy	- 5264,7 th lei, Pharmacy		
revenue from other activi-	revenue from other		
ties 9,2 th lei	activities.13,6 th lei		
N RC= 17,9%	N RC= 18,4%		
Operating expenses of the	Operating expenses of the		
basic activity. 412,3 th lei	basic activity. 863,2 th lei		
Other expenses. 6,234 th lei	Other expenses. 9,264 th lei		
	2. The volume of realization - 794,25 th. lei, Pharmacy revenue from other activities.25,2 th lei N RC= 21,2% Operating expenses of the basic activity 139,5 th. lei Other expenses. 2,567th lei 5. The volume of realization - 2650,5 th lei, Pharmacy revenue from other activi- ties 9,2 th lei N RC= 17,9% Operating expenses of the basic activity. 412,3 th lei		

7 The volume of realization -	8. The volume of realization	<b>9</b> . The volume of realization		
6321,8 th lei, Pharmacy	- 4279,87 th lei, Pharmacy	- 7329,7 th lei, Pharmacy		
revenue from other activi-	revenue from other activi-	revenue from other activi-		
ties 10,24 th lei	ties 8,720 th lei	ties 12,120 th lei		
N RC= 21,4%	N RC= 21,3%	N RC= 18,7%		
Operating expenses of the	Operating expenses of the	Operating expenses of the		
basic activity. 1002,37 th lei	basic activity. 792,8 th lei	basic activity. 1063,2 th lei		
Other expenses. 12,3 th lei	Other expenses. 13,275 th	Other expenses. 23,720 th		
	lei	lei		
<b>10</b> . The volume of realiza-	<b>11</b> . The volume of realiza-	<b>12</b> . The volume of realiza-		
tion - 5927,3 th lei, Pharma-	tion - 8102,3 th lei, Phar-	tion - 7942,7 th lei, Pharma-		
cy revenue from other	macy revenue from other	cy revenue from other activ-		
activities.7,2 th lei	activities. 9,240 th lei	ities. 11,272 th lei		
N RC= 20,3%	N RC= 20,7%	N RC= 21,05%		
Operating expenses of the	Operating expenses of the	Operating expenses of the		
basic activity 1017,3 th lei	basic activity 1298,7 th lei	basic activity. 1197,8 th lei		
Other expenses. 12,7 th lei	Other expenses. 24,7 th lei	Other expenses. 23,25 th lei		

(name of pharmaceutical company, fiscal code)

#### Results of the economic and financial activity for the year 20 \_\_\_\_

Nr.	Name of indexes	Value
1.	Net sales (turnover volume)	
2.	Cost of sales (prime cost)	
3.	Gross Profit (Total Loss) - (Commercial Refund) is determined as the value difference of the indices in row 1 and 2	
4.	Other operating income	
5.	Commercial expenses	
6.	General and administrative expenses	
7.	Other operating expenses	
8.	The result of the operational activity is determined according to the expression from the indices in the rows $(3 + 4-5-6-7)$	
9.	The result of the investment activity	
10.	The result from financing activities	
11.	The result of economic and financial activity is determined according to the expression in the lines $(8 + 9 + 10)$	
12.	Exceptional result	
13.	Profit before tax	
	is determined according to the expression in the lines (11 + 12)	
14.	Income tax expense	
15.	Net profit (benefit) is determined as the value difference of indices in lines 13 and 14	

Conclusions and suggestions of the student:

The teachers signature\_\_\_\_\_

# Lesson 20. MONITORING MANAGEMENT OF PHARMACEUTICAL ACTIVITY. INVENTORY OF MATERIAL ASSETS IN PHARMACEUTICAL COMPANIES.

*The aim of lesson.:* Study of the principles and conditions for the accreditation of pharmaceutical companies, the state control system for the exercise of pharmaceutical activity, the organization of the inspection activity in the pharmaceutical enterprises, the legal provisions and the acquisition of practical skills regarding the inventory of the material values of the pharmaceutical enterprises.

*The type of learning:* Seminar and laboratory practical work *Lesson duration:* 4 hours.

#### **Questions for self-learning:**

- 1. General terms of pharmaceutical control function.
- 2. Characteristic of the state control system over pharmaceutical activity.
- 3. Organization of pharmaceutical inspection.
- 4. Evaluation and accreditation of pharmaceutical companies.
- 5. legal provisions on the inventory of material values in pharmaceutical companies.
- 6. Commission of inventory.
- 7. The inventory overview mode
- 8. Inventory particularities of different types of material values.
- 9. Determination of inventory results. Natural perishability
- 10. Notes on forms used in the inventory.

### **Exercises for self-solving.**

**Exercise 1.** Specify, with reference to current legislation, the criteria and requirements for pharmaceutical companies for their assessment and accreditation.

**Exercise 2.** Each student, according to the approved preventive timetable, will perform an inventory of a group of medicines, as instructed by the professor Head of Section of the University Pharmacy and on the basis of the data obtained will perfect the documents below.

pharmaceutical company name

Inventory decision (Order)
Nofrom20
In order to perform inventory at
inventory committee is established in the following composition: President (position, name, surname)
Commission members (position, name, surname) 1
2
3
<i>(indicated divisions, goods to be inventoried)</i> Inventory begins at and ends at
Reason for inventory
(the reason is given: control, delivery-receipt, reassessment, etc.) The inventory shall be carried out in accordance with the Inventory Regulation in force.
Control of inventory results and drafting of the report is carried out I function until the
Head pharmacist
pharmaceutical company name INVENTORY DECLARATION
The undersigned manager of the name of the subdivisio
Name surname the name of the subdivisio
appointed by decision no from, in the presence of the cor mittee I declare:
1. All goods under the management of the undersigned are located in the ware- houses (rooms):
2. Posed (not posed) goods belonging to
3. I have (I do not have) knowledge of the existence of pluses worth (quantity)
<ol> <li>I have (i do not have) released goods without legal documents. Beneficiary</li> </ol>
5. I have (I do not have) goods not accepted or to be dispatched, for which the r lated documents have been prepared in the amount of
6. have (I do not have) receipt / surrender documents that have not been taught

accounting \_\_\_\_\_

- 7. I own (do not own) cash from the sale of the goods under management \_\_\_\_\_ lei.
- 8. The last entry documents are:

	type	no	from		
	type	no	from		
9. Latest exit docu	iments:				
	type	no	from		
	type	no	from		
10. The last mana	gement report	was drawn up	on	for the period	
11. Other mention	S				

Taught in our presence	Signatures	Manager
		Date Hour

pharmaceutical company name

#### **MINUTES OF SIGILATION**

No.\_\_\_ from \_\_\_\_\_ 20\_\_\_\_

In order to execute the	, the under-		
signed	, member of the invento	ory commission,	in the presence of
the manager	, and the assistant	,	we proceeded to
sealing the following	deposits for keeping the	money and mor	ney in the locality
	, street	nr	·

A seal was applied \_\_\_\_\_

(indicate the number and characteristics of the seal applied)

Sealing was also done when handing over the keys to the second row of locks to the chairman of the sealed access doors indicated above.

Inventory Commission \_\_\_\_ Manager \_\_\_\_ Assistants \_\_\_\_\_

Today, \_\_\_\_ hour \_\_\_, the following access doors were unsealed \_\_\_\_\_ after prior checking of the applied seal, which was found intact.

Inventory Commission \_\_\_\_ Manager \_\_\_\_ Assistants \_\_\_\_\_

#### Form INV-1

Enterprise			LIST OF INVENTORY								
Subd	Subdivision			from 20						Page	
	ied	nber			ac-	ICe	ı ac-	e			precia- tion
No. d/o	Name goods inventoried	Code or inventory number	Measure units	Effective quantity	Amount recorded in ac- counting	Quantitative difference	Unit price recorded in ac- counting	Balance sheet value	Inventory Value	Value	Reason (code)
Α	1	2	3	4	5	6=4-5	7	8=4x7	9	1 0	11
										0	
	Total on the page	Х	X				Х				X
		mber: Co	s of th ommi	ne Inve ission	ntory	Mai	nager	-	an- er *	Ac- count ant	
Signature											

To be signed by the receiver of the goods, in the case of handing over-receipt of management.

Verso Form INV-1

							r	r		0010.	
No. d/o	Name goods in- ventoried	Code or invento- ry number	Measure units	Effective quanti- ty	Amount record- ed in accounting	Quantitative dif- ference	Unit price rec- orded in ac- counting	Balance sheet value	Inventory Value	Depi	reciation
	Total on the page	Х	Х				Х				Х
Nam	e and surname	Mei		s of th ommi	ie Inve ssion	ntory	Mana	iger	Mai	*	Ac- count- ant.
Signa	ature										

\* It shall be signed by the receiver of the goods in the case of handing-over of the management.

Total on the list: ordinary numbers				
-	in figu	res	in let	ters
Total actual units				
	in figu	ires	in let	ters
Chairman of the commission				
	function	name, surna	те	signature
Members of the commission				
	function	name, surna	те	signature
	function	namo surna		signature
	Junction	name, surna	me	signature
	function	name, surno	ате	signature

All goods registered in this list at no. \_\_\_\_\_ to no. \_\_\_\_\_ have been effectively verified by the commission, as well as the fact that prices, quantities, qualities and units of measurement have been established in my (our) presence for which we have no objections to the inventory committee.

The goods listed in this list are kept under my responsibility (ours).

Man	ager (s	):					
	0 (	-	function	n	ame, surname	signature	
u	"	20	function	n	ame, surname	signature	
						Form INV	'-2
Ente	rprise					Page	
Secti	on					1	
		LIST OI	F INVENTORY fro	om	20		
No. cr	С	ode or name	Characteris- tic	UM	Effective inventory	Inventory recorde in accounting	d
А		1	2	3	4	5	
	Total o	on the page	х	Х			
		Inventory Com- mission	Signature	Gesti	onar (i)	Signature	
	ne and name						
				Acco	ountant	Signature	
	INV-2 Ma	I Inagement related re	cords in quantitat	tive express	ion		

Total on the list: ordinary numbers			
-	in figures	s in	letters
Total actual units			
	in figures	s in	letters
Chairman of the commission			
	function	name, surname	signature
Members of the commission			
	function	name, surname	signature
	function	name, surname	signature
	function	name, surname	signature

All goods registered in this list at no. \_\_\_\_\_ to no. \_\_\_\_\_ have been effectively verified by the commission, as well as the fact that prices, quantities, qualities and units of measurement have been established in my (our) presence for which we have no objections to the inventory committee.

The goods listed in this list are kept under my responsibility (ours).

Manager (s):			
	function	name, surname	signature
<i>(( ))</i>	function	name, surname	signature
······································	20		

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		ences.	Short- com- ings	12-9-																		
		Differences, (lei)	Pluses	11=10- 9																		
	lts	Actual value.	(lei)	10=5×8																		
	Inventory resultsInventory results	Value reg- istred in	General Ledger, (lei)	9=4×8																		
esults	r resultsI	Unit Price,	(lei)	8																		×
verification of inventory results	nventory	Differences	Short- com-	7																		
of inv	I	Differ	Pluses	9																		
cation			Actu- ally	9																		
of verific		Sold	Registered General Ledger	4																		
	Unit of	ure-	ment	6																		×
	Code	or In- ventory	ber	2																		
	ame of	entoried goods		٦																		

REGISTER rerification of inventory result

ENTORY COMMITTEE:

n of the Inventory Commission: of the Inventory Commission:

(angnature)	(signature)
aurname	amenna
(name,	(name.

55	Value		38												
Final Shortcomings	Quantity V		25											2	(Signature)
	Value		24											ie resul	<sub>2</sub>
Final	Quantity		23											The manager (I have no objection to the results received.	(Manu Minu)
_	ading od uses	Value	22											e no obj	
Officets between aproas	Shortcoming covered from Pluses	Quantity	21											ger (I hav) '.	
rts betw	d Plus the	Value	20											The manage	
Office	Distributed Plus To cover the Shortcoming	Quantity	19											<u>د ع</u>	
	5	Account	18										×		
ling er	Shortcomings	Value	17												
djusted based on the finding Records in General Ledger	Sho	Quantity	16											1	2
Adjusted based Records in Ge		Account	15										×	1. I.	
Adju Rec	Pluses	V'alue	14											Canal Contract	
		Quantity	13											Accountant:	

Entity Subdivision

+

#### Minutes No. about inventory of money and financial documents from \_\_\_\_\_\_ 20 \_

#### Statement

At the start of inventory all payment and cash receipts were taught in the general ledger and all funds received in my liability and issued are recorded.

Manager \_\_\_\_\_ (function) (Signature) (Nama surname) Based on the order (disposition) on making inventory No.\_\_\_\_ from "\_\_\_\_" \_\_\_\_\_ 20\_\_\_ the inventory of funds was carried out according to the situation at "\_\_\_" \_\_\_\_\_ 20\_\_\_ Following the inventory were established: 1. Cash: in national currency \_\_\_\_\_ lei \_\_\_\_\_ bani In the currency Foreign \_\_\_\_\_ ) In foreign currency ( 2. Postal marks lei bani 3. Travel tickets \_\_\_\_\_ lei \_\_\_\_ bani 4. Excise Stamps lei bani lei bani 5. (Monetary document name) TOTAL actual: in national currency \_\_\_\_\_ lei \_\_\_\_\_ bani In foreign currency (\_\_\_\_\_ According to the accounting data: in national currency \_\_\_\_\_ lei \_\_\_ In foreign currency (\_\_\_\_\_\_ bani Inventory results: Pluses lei bani Pluses Pluses \_\_\_\_\_\_ Iei \_\_\_\_\_ bani \_\_\_\_\_ Last numbers of the provisions: Collection No.\_\_\_\_\_ from \_\_\_\_\_ 20 \_\_\_ Payment No.\_\_\_\_\_ from 20 Inventory Commission: Chairman of the Inventory Commission: (Name, surname) (Signature) (Sunction) Members of the Inventory Commission: (Name, surname) (Signature) (Concerned) Conclusions and suggestions of the student:

The teachers signature

# THE 4<sup>th</sup> INTERMEDIARY ASSESSMENT ON LESSONS 16-20.

# THE CONTENT OF THE INDIVIDUAL WORKS FOR HE II SEMES-TER.

The requirements for individual work are outlined on pages 68-69.

	Topics for individual work of students in the II s	emester.
5.	Legal prescribing and release rules for medicines. Ra-	Case scenarios
	tional use of medicines	Report
6.	Pharmaceutical supply system of hospitals.	Case scenarios
		Essay
7.	Records and primary management in pharmaceutical	Case scenarios
	companies.	Essay
8.	Monitoring management of pharmaceutical activity.	Case scenarios
		Report

#### Topics for individual work of students in the II semester.

## Lesson 5. LEGAL PRESCRIBING AND RELEASE RULES FOR MEDI-CINES. RATIONAL USE OF MEDICINES

**Tasks of the individual study:** - identifying and solving case scenarios, problem situations with a reference environment in the area of drug delivery of the population. **Expected product:** Case scenarios, Report.

### Tasks for self-solving

#### Task 1

In the "L-Farm" pharmacy, a patient was referred to whom the doctor gave him a medical prescription, in fact, a sheet with the following content:

1.Sol. Ciprofloxacin 10.0; 2pic. three times in the eye.

2.Sol.Albucidi 30% 10.0; 2pic. three times in the eye.

The pharmacist refused to release prescription drugs. The patient requested the "Complaints Register", where he wrote a complaint to the pharmacist who did not release the required drugs.

#### Questions:

1. Indicate physician errors in this prescription.

2. Indicate steps to be taken by the pharmacist to solve the problem and regulatory normative acts.

3. What contraventions would the pharmacist tolerate if he releases the medicines according to this prescription.

4. Propose effective methods in prescribing medication.

#### Task 2

It is solved as a Case scenario.

In the "K-Farm" pharmacy, t. Chişinău addressed a man with a prescription for his father, with the following content:

Sol. Promedol 1% 2ml N.30. Recipe prescribed on form N.3.

The pharmacist refused to release the prescribed medicine without any explanation. The restless patient left the pharmacy.

1. Indicate the reasons for the refusal.

2. What consequences can occur due to the failure to resolve this case in time.

3. How do you think this problem has to be solved.

#### Task 3

*It is solved as a Report.* Topic: WHO recommendations on the rational use of medicines.

### Task 4

#### It is solved as a Report

Topic: The role of the pharmacist in implementing the concept of rational use of medicines.

## Lesson 6. PHARMACEUTICAL SUPPLY SYSTEM OF HOSPITALS.

**Tasks of the individual study:** *setting business objectives, designing integration, searching and evaluating, re-evaluating, improving, creating.* **Expected product:** *Case scenarios; essay* 

#### Tasks for self-solving

#### Task 1.

It is solved as a Case scenario.

Analyze the Pharmacotherapeutic Formulary of an MSI, perform a VEN and ABC analysis of the drugs included in the Formulary. Make these conclusions and suggestions.

#### Questions:

1. What laws regulate the use of medicines included in the Pharmacotherapeutic Formulary.

2. Indicate the criteria for including the medicines in the Pharmacotherapeutic Formulary.

3. Argument the results of the study.

#### Task 2.

It is solved as a Case scenario.

Superior Assistance of the Surgery Department of the hospital Drochia presented an order receipt - delivery to the hospital pharmacy, in this receipt were prescribed:

1. Sol, Morphini hydrochloride 1% 1 ml N, 10 10 cans

2. Sol, Natrii chloride 0.9% 500ml 20 vials.

3.Sol. Cefazolin 1.0 30 vials

4.Gossypium. 500,0 10 pieces

The order-delivery coupon was signed by the senior assistant of the section.

The Pharmacist at receipt of delivery orders refused to deliver the medications on this order-delivery receipt.

#### **Questions**:

1. Indicate if the pharmacist has acted correctly in this situation and the reasons for the refusal.

2. Count the records of the circulation of medicines in the hospital pharmacy.

3. Indicate the rules for keeping the prescribed medication in the order-delivery order.

## Task 3.

It resolves as an essay.

*Topic*: Highlighting drug delivery problems in stationary conditions.

## Lesson 7. RECORDS AND PRIMARY MANAGEMENT IN PHARMA-CEUTICAL COMPANIES.

**Tasks of the individual study:** *essay writing, time budget distribution, database identification and search and evaluation materials, re-evaluation, improvement and production, innovative creation.* 

Expected product: case scenario; essay.

## Tasks for self-solving.

## Task 1.

It is solved as a Case scenarios.

At the beginning of the month, the head of the pharmacy production department "X" verified balance factor of morphine hydrochloride powder that registered. Analyzing the movement of this substance over the managed month (data below), a divergence has been established.

The balance at 01. of the month constituted - 0.3 (g) Entries over the month - 4.0 (g) Exit extensions: 0.4 (g); 02 (g); 0.4 (g); 0.9 (g); 1.4 (g); The balance at the end of the month constituted 0.98 (g)

## Questions:

- 1. What primary evidence has served as a basis for establishing the final balance of Morphine hydrochloride.
- 2. Determine the difference between the registered balance and the facultative balance.
- 3. Compare the results with natural perishability.
- 4. Indicate which primary records will complete the head of the production department.

## Task 2.

It is solved as a Case scenario.

Perform an economic analysis of the plan, taking into account the factors (the number of recipes and the average cost of a prescription) that influence the achievement of the Medication Plan, using the data below:

		The curre	ent year	
Economic Indicators	Plan	Factice	Absolute	Growt
	r idll	rattice	growth	h in %

Output according to outpatient reci- pe (thousands of lei)	2540.0	3425.0	
Prescriptions (thousand units)	80	90	
The average price of a prescription			

#### **Questions:**

1. Determine the average cost of a faced and planned recipe

2. Determine the absolute and percent increase (or decrease) of the indices analyzed.

3. Determine the impact of each factor analyzed in the revenue obtained.

4. Make the respective conclusions.

## Task 3.

It resolves as an essay.

Topic:

Organization of primary evidence of medicines in the Community pharmacy.

## Task 4.

It is solved as a Case scenarios.

The student should analyze the situation below, then complete the Control System Matrix and answer the questions.

You work (theoretically) for a small but growing pharmacies network (a company). The organization grew very fast, and managers did not have time to assess and monitor activity control. The manager asked you to develop an action plan to optimize the quality control system.

You have decided to start work by completing the Control Matrix that requires identification of the necessary control for the three categories of resources - human, material, and informational.

There are three categories of control. The first category is the Preliminary Control that controls the entries in the organization system. The second category is the Examination Control that controls the transformation processes. The third category is Posterior Control that controls the outputs of the organization system.

Your task is to complete the Control Matrix by identifying different controls that can be set for the three resources at each stage of the control.

Phases	Material re-	Human re-	Information re-
T hases	sources	sources	sources
Preliminary control			
Examination control			
Subsequent control			

# Questions:

- 1. Which of the 3 resources (material, human and informational) is the most important for the control system? Why?
- 2. Which of the 3 resources is the least subject to control? Why?

## Lesson 8. MONITORING MANAGEMENT OF PHARMACEUTICAL AC-TIVITY.

**Tasks of the individual study:** *integration, search and evaluation, reevaluation, improvement, innovative creation, drafting of papers.* **Expected product:** *case scenario; report.* 

### Tasks for self-solving.

#### Task 1.

It is solved as a Case scenario.

As a result of the planned control of the M-Farm pharmacy by the pharmaceutical inspectorate, the following violations were found:

1. There was a medicine box in the box on the floor, with no accompanying documents.

2. Two packs of Allopurinol 0.1N50 tablets were detected, which were kept together with other non-expired medicines.

 Many prescriptions with errors have been detected during the examination of recipes remaining in the pharmacy for one month (medicines are prescribed under the trade names, the units of measurement of the drug are incorrectly indicated).
 Only a pharmacist (pharmacist-supervisor) and a pharmacist are active in the pharmacy, noting that the pharmacy works from 8.00 to 20.00 without interruption and free days.

## Questions:

1. Indicate the essence of drug control and indicate the violations found.

2. Indicate how to record and store medicines with an expired term.

3. Indicate which normative acts are violated in the pharmaceutical department.

4.What legislative and normative acts are violated in the activity of this pharmacy. 5.While the document will be drawn up at the end of the control of the pharmaceu-

tical activity of the pharmacy "M-Farm"

6. Indicate the contraventions that can be applied based on the control performed.

## Task 2.

It is resolved as a report. Topics:

- The regulation of the control of the pharmaceutical activity at national and international level.
- 2. Controlling the integrity of material, financial and human resources in pharmaceutical enterprises.

## **BASIC LITERATURE**

- 1. V. Safta, M. Brumărel, N. Ciobanu, S. Adauji Management și legislație farmaceutică, - F.E.P. "Tipografia Centrală", - Chișinău, 2012. – 800 p.
- V. Procopişin, V. Safta, M. Brumărel Bazele activității farmaceutice, F.E.P. "Tipografia Centrală", - Chişinău, 2002. – 492 p., versiunea în limba rusă, ediția 2003. – 488 p.
- Reglementarea activității farmaceutice. (Culegere de acte legislative şi normative)/Colectiv de autori: redactor responsabil – V. Procopişin, Editura "Vector", 2007, – FEP "Tipografia Centrală". – Chişinău, 2007. – 1038 p.
- 4. Ețco C. Management în sistemul de sănătate. Ed. Epigraf, Chișinău, 2006, 862 p.
- 5. Carata A. Management, marketing și legislație farmaceutică. Vol.1. management în domeniul farmaceutic. Editura Didactică și Pedagogică, R.A., București, 2008, 303 p.
- 6. Мескон М., Альберт М., Хедоури Ф. Основы менеджмента. Изд. ДЕЛО, Москва, 1998, 701 с.
- 7. Legislative and normative acts regulating the pharmaceutical activity available on the web page of the "Vasile Procopişin" Social Pharmacy Department// <u>http://farmaciesociala.usmf.md/info-studenti/acte-normative-de-reglementare-a-activitatii-farmaceutice</u>
- 8. Lecture notes.