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STATE UNIVERSITY OF MEDICINE
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VASILE PROCOPISIN
DEPARTMENT
OF SOCIAL PHARMACY

MANAGEMENT AND PHARMACEUTICAL LEGISLATION

Ministry of Health of the Republic of Moldova

NICOLAE TESTEMIȚANU STATE UNIVERSITY OF MEDICINE AND PHARMACY

FACULTY OF PHARMACY

**VASILE PROCOPISIN DEPARTMENT
OF SOCIAL PHARMACY**

**MANAGEMENT AND
PHARMACEUTICAL LEGISLATION**

*Learning guide and workbook for laboratory
practical work for the 4th year students*

(Name, First name of the student)

Group _____

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MANAGEMENT AND PHARMACEUTICAL LEGISLATION

*Learning guide and workbook for laboratory practical work
for the 4th year students, faculty of Pharmacy*

Edition III, translated from Romanian

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DISTRIBUTION OF TEACHING HOURS BY THEM

Theme	hours	
	Course	Pr. work
1. General features of the management. Management schools.	2	4
2. Functions of management. Elements of management in pharmaceutical activity.		4
3. Management of leading process. Decisions in the leading process.	2	4
4. The organization as a system and object of leadership. Organization management. The ergonomics of workplaces in the organization.		4
5. The manager of the pharmaceutical company. Human resources management. Human resources of the pharmaceutical system.	2	8
Totalization no. 1 on homework 1-5.	-	4
6. Pharmaceutical system. Coordination of the pharmaceutical system.	3	4
7. Pharmaceutical activity and its authorization. Accreditation of pharmaceutical enterprises.		4
8. The medicines and other pharmaceutical products as a study object of pharmaceutical assistance. The marketing authorization of medicinal products.	2	4
9. Quality assurance of medicinal products. State control of the quality of drugs. Pharmacovigilance system.	2	8
10. Industrial production of medicines. Supply of medicines. The pharmaceutical warehouse, its tasks and functions. The pharmaceutical warehouse, its tasks and functions.	2	8
Totalization no. 2 on homework 6-10.	-	4
11. The outpatient pharmaceutical care system. The community pharmacy, its task and functions.	2	8
12. The legal prescribing rules for medicines.	2	4
13. Receiving, pricing and registration of prescription.		8
14. Technology of pharmaceutical compounding in pharmacy and quality control of extemporaneous preparation. Pack labeling and dispensing medicines from pharmacy.	2	4
15. Management and legislation of pharmaceutical assistance in hospital.	2	8
Totalization no. 3 on homework 11-15.	-	4
16. Pharmaceutical records. The prices for drugs and other pharmaceutical products.	2	4
17. Circulation records of pharmaceutical products.	2	4
18. Evidence of other stock movements. Cash flow in pharmaceutical companies.		4
19. Labor and wages records. Consumption and expenditure of pharmaceutical companies. The results of financial and economic activity in pharmaceutical company.	2	4
20. Monitoring management of pharmaceutical activity. Inventory of material assets in pharmaceutical companies.	1	4
Totalization no. 4 on homework 16-20.	-	4

GENERAL FEATURES OF THE MANAGEMENT. MANAGEMENT SCHOOLS.

The purpose of the work. Obtaining knowledge by students in the field of evolution and theory of management and practical skills of planning, organization, coordination, motivation and control of various pharmaceutical activities. Get acquainted with contemporary approaches, doctrines and modern management schools.

Form of training: Seminar and laboratory practical work

Duration: 4 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.

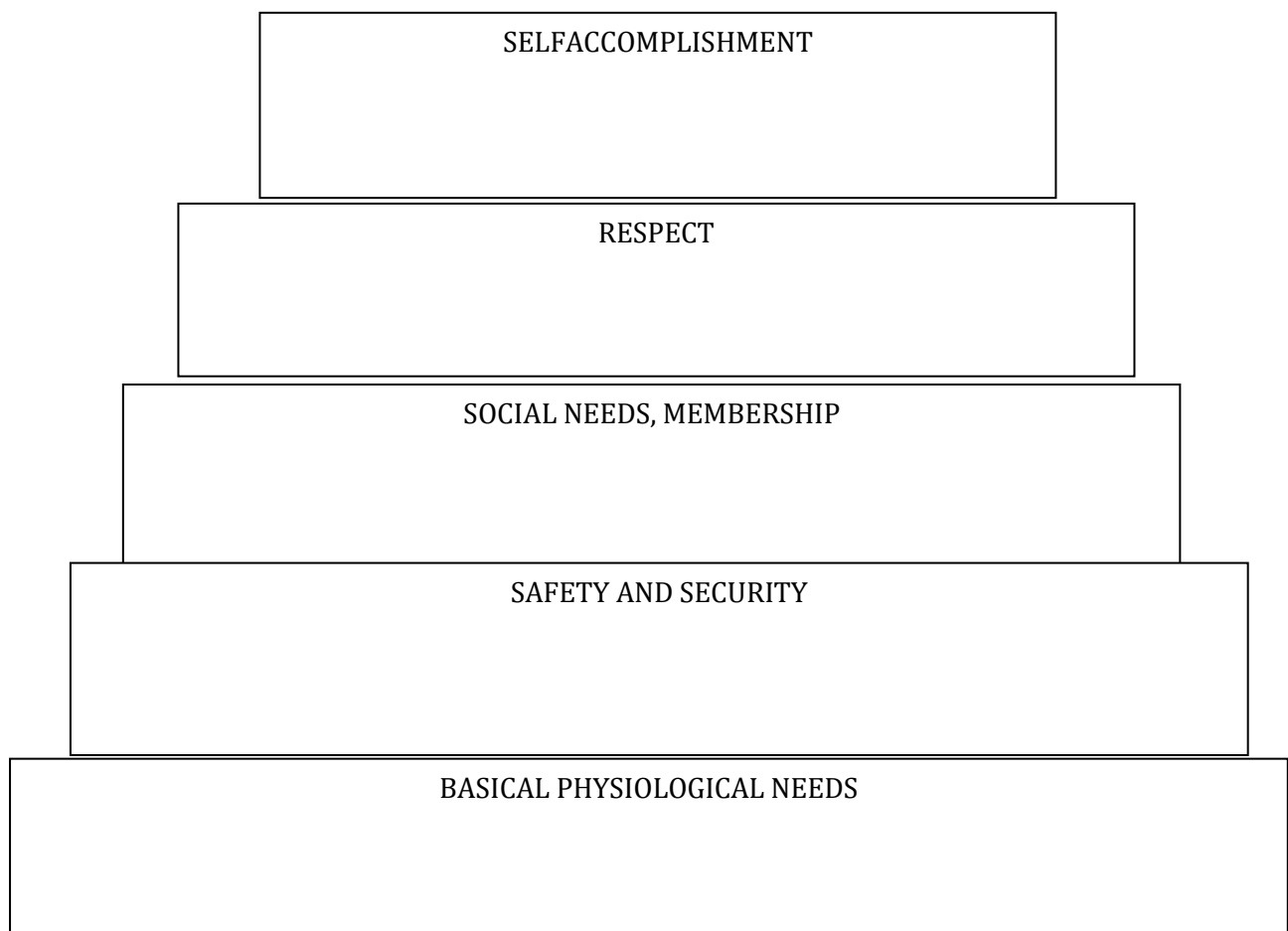
Exercises for self-solving

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. Rationalization 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 employee.	

Scientifically directions and main concepts	Basic concepts used in the modern management
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.

- a) Chain community pharmacy
- b) Individual community pharmacy
- c) Pharmaceutical warehouse
- d) Pharmacy with section of preparing medicines basing on prescriptions
- e) Pharmaceutical factory

Exercise 4. *Case study:* The management team of the enterprise "M-Inter-Pharma", a wholesale and retail trade company of pharmaceuticals, parapharmaceuticals and disinfectants, considers that all management decisions should be taken according to the same system, without analyzing the circumstances each time, because it is impossible to predict all possible situations and changes. For the adoption of decisions, specialists from various subdivisions are involved, but very rarely, since it is considered that it slows down the process of decision-making, and the effect of their application is minimal. As basic criteria for evaluating the managerial activity are considered the discipline of work and the authoritarian style of managerial management.

Identify the actions of managers that are contrary to the fundamental principles of contemporary management. Determine how they influence the efficiency of the decision-making system in the enterprise.

Conclusions and suggestions of the student:

The teacher's signature _____

FUNCTIONS OF MANAGEMENT. ELEMENTS OF MANAGEMENT IN PHARMACEUTICAL ACTIVITY.

The purpose of the work. Get acquainted with the functions of modern management, their role and functions in the work of management and pharmaceutical management. To determine the specifics of pharmaceutical management: structure, goals and functions.

Form of training: Seminar and laboratory practical work

Duration: 4 hours

Questions for self-learning:

1. General features of management functions:
2. Planning function. The importance of planning. Types of planning in an organization.
3. Organizing function.
4. Coordinating function.
5. Motivating function. Financial and non-financial motivation of the staff.
6. Controlling function.

Exercises for self-solving

Exercise 1. Describe the strategic planning of the activities of a community pharmacy located:

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

Exercise 2. 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 with minor children

Exercise 3. Identify and list in the table below what are the strengths and weaknesses (in the internal environment) the development opportunities and risks (from the external environment) of a pharmaceutical company proposed by the professor.

<p>S- Strengths:</p> <ol style="list-style-type: none"> 1. 2. 3. 4. 5. 	<p>W- Weaknesses:</p> <ol style="list-style-type: none"> 1. 2. 3. 4. 5.
<p>O- Opportunites:</p> <ol style="list-style-type: none"> 1. 2. 3. 4. 5. 	<p>T- Threats:</p> <ol style="list-style-type: none"> 1. 2. 3. 4. 5.

Exercise 4. 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 _____

MANAGEMENT OF LEADING PROCESS. DECISIONS IN THE LEADING PROCESS.

The purpose of the work. 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.

Form of training: Seminar and laboratory practical work

Duration: 4 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. Write the meaning of the word *leadership*. Enumerate the styles of leadership and their particularities.

Exercise 2. Propose the characteristics of following types of leadership: linear, functional and matrix.

Exercise 3. In the figure below are presented the managerial styles of management through the prism of the relationship between the manager and the subordinate. Analyzing each of these 3 styles, describe the advantages and disadvantages of each indicated managerial leadership style.



Leadership style	Advantages	Disadvantages
Authoritarian	1.	1.
	2.	2.
	3.	3.
Permissive	1.	1.
	2.	2.
	3.	3.
Democratic	1.	1.
	2.	2.
	3.	3.

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 stocks receive 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 _____

THE ORGANIZATION AS A SYSTEM AND OBJECT OF LEADERSHIP. ORGANIZATION MANAGEMENT. THE ERGONOMICS OF WORKPLACES IN THE ORGANIZATION

The purpose of the work: 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.

Form of training: Seminar.

Duration: 4 hours.

Question 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. 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.

Nr. d/o	American management model	European management model	Japanese management model
1) DEISION FUNCTION			
1.			
2.			
3.			
4.			

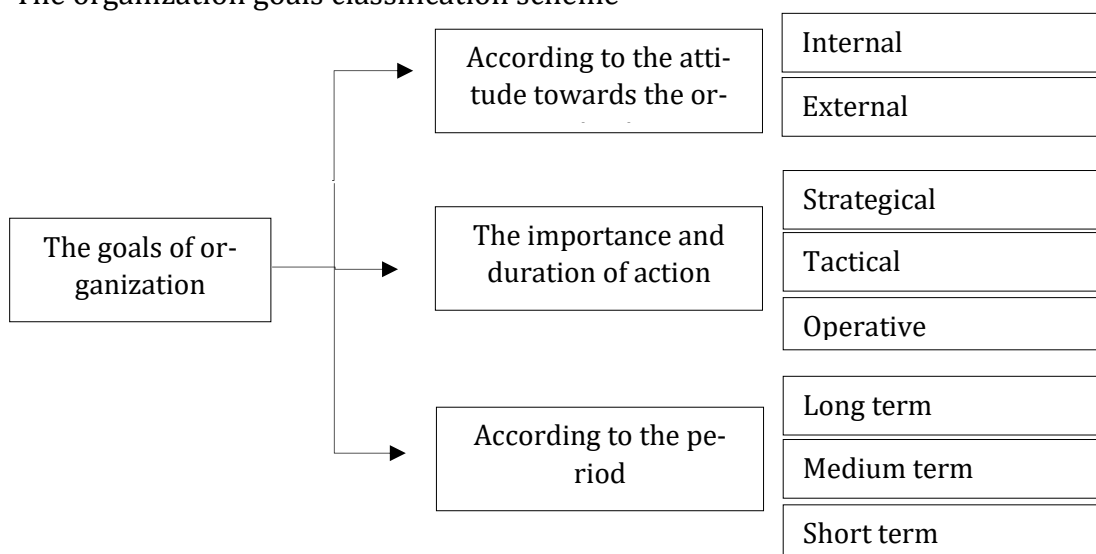
Nr. d/o	American management model	European management model	Japanese management model
2) CONTROL FUNCTION			
1.			
2.			
3.			
4.			
3) ORGANIZATION FUNCTION			
1.			
2.			
3.			
4.			
4) STUFF FUNCTION			
1.			
2.			
3.			
4.			

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. 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



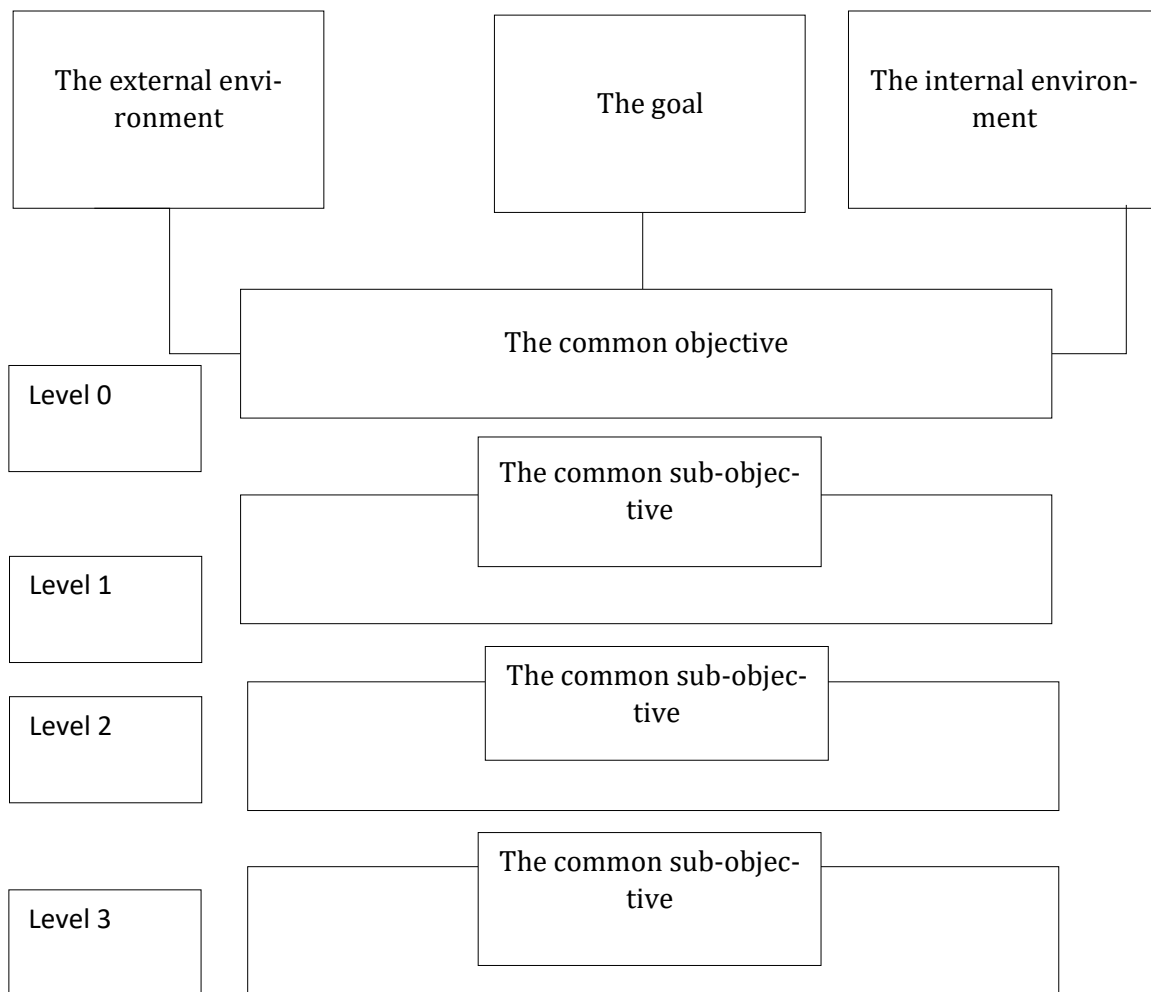
b) The rules of drawing the objective tree:

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 (1st level), ways (2nd level), problems and tasks (3rd, 4th, 5th 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 3. Choose from literature and fulfill the objective and the tasks of ergonomics:

ERGONOMICS - content:

Objective:

Tasks in order to achieve the objective:

Tasks for ergonomically work organization:

Exercise 4. Write the methods to study the work:

Time research:

Photographing the workday:

Exercise 5. 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 de facto activities of the pharmacist? Use the Eisenhower matrix.
- c) How could a pharmacist optimize the use of time?

[Empty rectangular box for student work]

Conclusions and suggestions of the student:

[Empty rectangular box for student conclusions and suggestions]

The teacher's signature _____

THE MANAGER OF PHARMACY. MANAGEMENT HUMAN RESOURCES. HUMAN RESOURCES OF THE PHARMACEUTICAL SYSTEM.

The purpose of the work. 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 leading staff and of communication manager-subordinate, manager-patient.

Form of training: Seminar and laboratory practical work

Duration: 8 hours

Questions for self-learning:

1. Pharmacy staff, nomenclature of specialties and pharmaceutical workplaces. Leading jobs in pharmaceutical companies.
2. Main aspects of leading in pharmaceutical companies. Requirements to the pharmacy manager personality.
3. Managerial roles and responsibilities.
4. Manager and management hierarchy. Performances and abilities needed by a pharmacy manager.
5. Organizing the pharmacist manager work. Relationship pharmacist manager - subordinate.
6. Aspects of managerial ethics. Pharmaceutical ethics and deontology.
7. Human resources management in pharmaceutical enterprises.
8. Functions of human resources management.
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.
12. General aspects of the certification of pharmacists.

Exercises for self-solving.

Exercise 1. Propose 5 mandatory characteristics (requirements) to the leader personality and 5 characteristics that are not admitted to the leader. Argue the answer.

Mandatory characteristics (requirements) to the leader personality	Characteristics that are not admitted to the leader

Activity	Duration	Content and deadline

Exercise 4. Indicate the content and principles of human resources management:

Exercise 5. Indicate the functions of human resources management and how to apply them:

Exercise 6. If the company has a vacancy, it can take various actions to hire a specialist in this position. Here, (in no order), are the main actions to be taken.

- Reception of applications
- Convening of selected candidates for interviews and tests
- Employment decision
- Sending the employment letter
- Sending the rejection letter
- Job description
- The first selection of candidates declared admitted based on the prepared file
- Defining the candidate's psychological and professional profile
- Conducting tests and employment interview
- Publishing an ad
- Employee integration

Develop the algorithm of the stages of hiring a person at work.

Exercise 7. When hiring a specialist, certain actions that require specific means must be carried out.

Determine the correlation between the elements in the two columns of the following table:

Operations and means necessary for the employment of staff

Nr.	Operations to be performed	Nr.	Means to carry them out
1.	Proposing a job	a.	A discussion with the candidate
2.	Employment decision	b.	Requesting references
3.	Knowing the candidate	c.	Publishing an ad
4.	Assessment of the candidate's professional competences	d.	Requesting a curriculum vitae
5.	Knowledge of the candidate's profile	e.	Sending a letter of employment
6.	Knowledge of the candidate's past performance	f.	Subjecting the candidate to a test

Answers: (for each digit, indicate the corresponding letter)

1. - _____
2. - _____
3. - _____
4. - _____
5. - _____
6. - _____

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.

The action algorithm

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
-	-
-	-
-	-
-	-
-	-

Pharmacist manager	Pharmacist
5. Gets _____(what?)	5. Completes _____(what?)
6. Concludes and signs in two copies _____ (what document?)	6. Completes and signs: - -
7. Issues _____ (what document?)	7. Signs _____(what?)
8. Forwards the copy of the order to the accountancy for opening your personal account.	8. Receives a copy of the individual labor contract.
9. perfects your personal file	9. Provides the necessary documents and completes the Personal Record Sheet.
10. Spends general and primary introductory training on health and safety at work.	10. After passing the general and primary training on health and safety at work, it proceeds to the fulfillment of the functional 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.

The collective discussion of the decisions made about the way out of conflict situations. Argue.

Exercise 10. 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)

2. Workplace _____
(the name of department, unity)

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. Holiday 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 18 _____

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) 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:

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

Exercise 11. 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 individual material liability contract

No. _____

„____“ _ ____ 20__

In order to ensure integrity _____

(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 financial-material 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

Address _____

Signature _____

PSH

Employee

Address _____

Signature _____

Exercise 12. 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. _____ „ ” _____ 20__

In order to ensure integrity _____

(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)

(name of section, direction, department, other subdivision)

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.

3. 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 (brigade).
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 affected 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 13. Indicate the purpose, principles and conditions of certification of pharmaceutical personnel.

Exercise 14. List the documents submitted to the Attestation Commission on the basis of which the certification of pharmacists takes place.

Conclusions and suggestions of the student:

The teacher's signature _____

TOTALIZATION no. 1 ON HOMEWORK 1 – 5.

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.

PHARMACEUTICAL SYSTEM. COORDINATION OF THE PHARMACEUTICAL SYSTEM.

The purpose of the work: 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.

Form of training: Seminar and laboratory practical work.

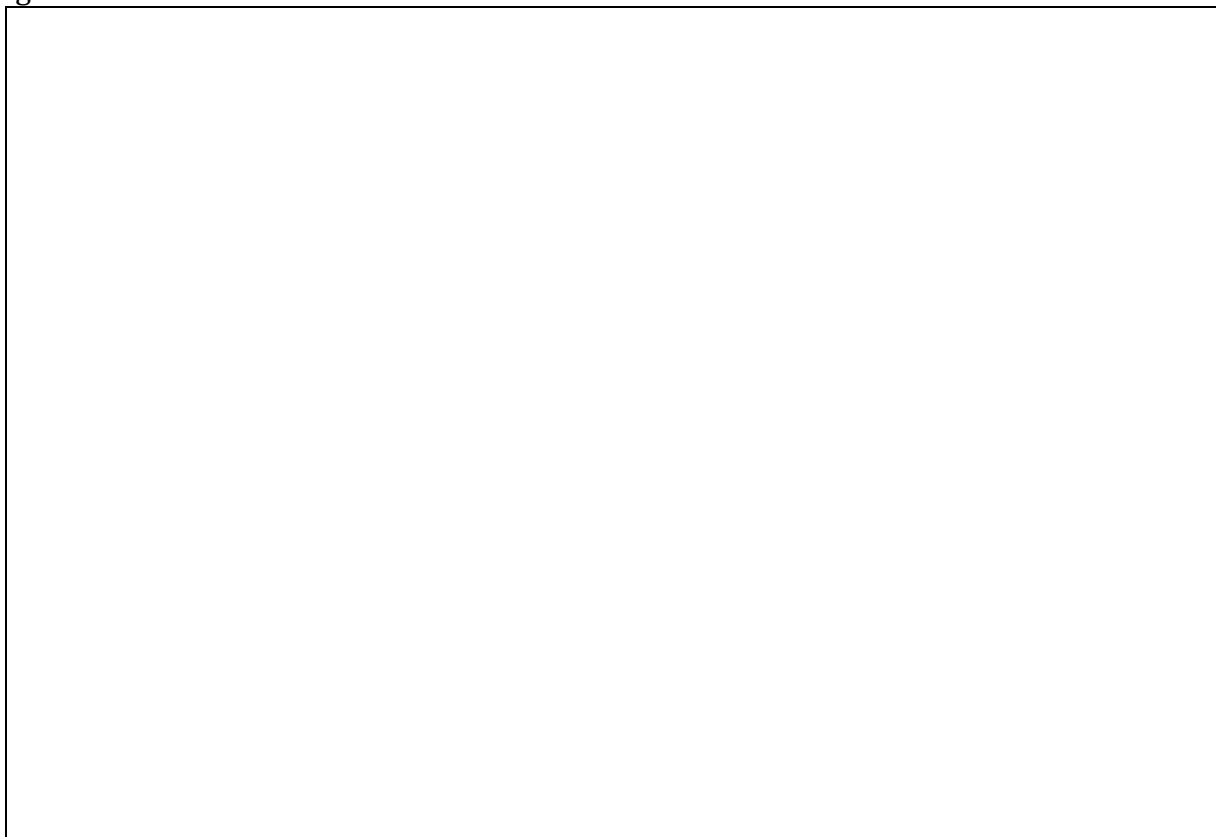
Duration: 4 hours.

Questions for self-learning:

1. General notions about system and coordination.
2. General features of the pharmaceutical system.
3. Coordination of the pharmaceutical system.
4. National and international organizations in the pharmaceutical field.
5. The pharmaceutical system. Reform of the pharmaceutical system. Development directions.

Exercises for self-solving:

Exercise 1. Draw up the graphic scheme of the organization of the health system in the Republic of Moldova. Highlight the public authorities involved in the provision, financing, regulation and administration of health services.



Exercise 2. List the mission and basic tasks of international pharmaceutical organizations (see official websites: <https://www.who.int/>; <https://www.ema.europa.eu/en/about-us>; <https://www.fda.gov/about-fda/what-we-do>; <https://www.fip.org/who-we-are>, etc.).

Exercise 3. Enumerate the functions and attributions of the Ministry of Health of the Republic of Moldova in the pharmaceutical field. (see the official website <https://ms.gov.md/>).

Exercise 4. List the basic functions and missions of the Medicines and Medical Devices Agency (see the official website <https://amdm.gov.md/ro/about>).

Exercise 5. Indicate the basic principles of health care organization based on mandatory insurance in medicine. List the types of healthcare and the range of services to which people are entitled in the compulsory healthcare insurance system established in the Single Program.

Exercise 6. Study the National Health Strategy 2022-2031 (Drugs and Medical Devices section) and list the proposed development directions in the pharmaceutical field.

Conclusions and suggestions of the student:

The teacher's signature _____

PHARMACEUTICAL ACTIVITY AND ITS AUTHORIZATION. ACCREDITATION OF PHARMACEUTICAL COMPANIES.

The purpose of the work: To learn basically notions about pharmaceutical legislation, the content of pharmaceutical activity and conditions of authorization the exercise of pharmaceutical activity.

Form of training: Laboratory practical work.

Duration: 4 hours.

Questions for self-learning:

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

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.

No. _____ from _____

**APPLICATION
for license issuance**

64 License for pharmaceutical activities

Name and legal form of enterprise organization _____

Legal address _____

Company tax code _____

name, surname, identification 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 warehouse
- within the industrial pharmaceutical enterprise
- with the right to work with the substances narcotics psychotropics precursors
- without the right to work with the narcotics, psychotropics and precursors

The address of the licensed activity _____

To the application are annexed the next documents:

- the copy of the property act of the building where the licensed activity will take place (*Copy of the extract from the Real Estate Register or the building lease agreement*);
- copies of graduation diplomas of the higher institution or of college in the pharmaceutical field;
- a copy of the certificate confirming the continuous education; continuing medical education certificate;
- copies of the employment orders of the heads of the pharmaceutical company and their subsidiaries.

I confirm on my own responsibility the observance of the licensing conditions for carrying out the type of activity for which I am applying and the veracity of the documents attached to the application

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

signature

STATEMENT ON OWN RESPONSIBILITY

By this, _____

(applicant's name, tax code, address)

through the representative person _____

(name, surname, function, no. of identity card)

(mandate) _____ declares the truthfulness of the submitted information, according to the questionnaire, in order to confirm compliance with the requirements of the in force legislation for the exercising of pharmaceutical activity:

No.	Requirements	Conformable		Comments with reference to documents proving the answer
		YES	NO	
1.	Compliance with the location regulations according to point (4) art. 19 of the Law no. 1456 of 25.05.1993 on pharmaceutical activity			
2.	Compliance with demographic norms according to point (5) art. 19 of the Law no. 1456 of 25.05.1993 on pharmaceutical activity			
3.	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 29.12.2006 regarding the approval of the qualification requirements for the pharmaceutical staff.			
4.	Compliance of the pharmacy surface with the norms 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.			
5.	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.			
6.	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 endowment 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 pharmaceutical preparations.			

Date _____

Signature _____

PSH

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

Exercise 6. List the criteria and requirements for medical and pharmaceutical service providers for their evaluation and accreditation (Chapter II, Law No. 552 on health evaluation and accreditation of 18.01.2001).

Exercise 7. List the criteria of the evaluation and accreditation standards and describe the method of assessing the results (Chapter II, art. 44 and art. 49 of the Order of the Ministry of Health No. 1289 regarding the approval of the Regulation on the evaluation and accreditation procedure in health of 12.11.2018).

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Exercise 8. Based on the report on the evaluation of the pharmaceutical activity of a branch of pharmacy "X" proposed by the teacher, fill in the tables with the accumulated points for each standard and calculate the total. Present the accreditation decision according to the obtained percentage (see exercise no. 7).

Chapter (standards)	Appreciation of correspondence (points)	The organization's comment (points accumulated)	Expert commentary (points accumulated)
Chapter I			
Chapter II			
Chapter III			
Chapter IV			
Chapter V			
Total points accumulated			

--

Exercise 9. Indicate the authority responsible for health assessment and accreditation and list its main duties (refer to the WEB page of the assessment and accreditation authority).

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Conclusions and suggestions of the student:

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The teacher's signature _____

THE MEDICINES AND OTHER PHARMACEUTICAL PRODUCTS AS A STUDY OBJECT OF PHARMACEUTICAL ASSISTANCE. THE MARKETING AUTHORIZATION OF MEDICINAL RO-

The purpose of the work: 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.

Form of training: Laboratory practical work.

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. Analyze 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 2. Basing on International Nonproprietary Names of medicines determine the assortment of pharmaceutical products (trade names of medicines) authorized in the Republic of Moldova.

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

Exercise 3. Indicate the main areas of use of the List of Essential Medicines and specify the recommendations of the WHO regarding its development (see Order of the Ministry of Health No. 162 on the approval of the Regulation and the List of Essential Medicines of 23.04.2007).

Exercise 4. List the rights and attributions of the Medicines Commission (see the Order of the MMDA regarding the Regulation on the organization and operation of the Medicines Commission No. Rg04-000006 of 12.01.2022).

Exercise 5. Look the structure and complete the Report on the Assessment of the Medicinal Product File presented for primary authorization.

Evaluation report of quality (Modules 2.3, 3)	
For the authorization of medicine (trade name, dosage form, dose, packaging)	
3.2.S. Active substance	
1. Origin of active substance (manufacturer, presence of GMP certificate or CPP, notarial authenticated)	
2. Quality of active substance (presence of specification, quality documents)	
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)

5. Stability (according with the norms of specification for all manufacturers, conclusions)	
5.1. Tested batches (industrials, pilot)	
5.2. In real time (period)	
5.3. In accelerated time (period)	
5.4. After the first opening (when is the case)	
Period of validity of active substance	
Storage conditions	
5.5. Objections	
5.6. Conclusions	
The expert:	

Exercise 6. Complete the Marketing Authorization of Medicinal Product. Indicate the documents on which the MA is issued.



**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: <i>Name:</i>	
Formă farmaceutică, doză, mărimea ambalajului: <i>Dosage form, strength and package size:</i>	
Compoziția: <i>Composition:</i>	
Deținător al Certificatului de Înregistrare: <i>Marketing Authorization Holder:</i>	
Producător: <i>Manufacturer:</i>	
Clasificarea ATC: <i>ATC classification:</i>	
Termen de valabilitate: <i>Shelf life:</i>	
Număr de înregistrare, data emiterii: <i>Registration number, and date of issue:</i>	
Anexa 1 <i>Rezumatul caracteristicilor produsului și prospect sau Instrucțiunea pentru administrare</i> <i>Summary of the product and patient information leaflet</i> <i>Instructions for administration</i>	Anexa 2 <i>Informații privind etichetarea</i> <i>Information on the labeling</i>
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 documentația 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 și nu condiționează importul. The Marketing Authorization is valid for 5 years after emission and doesn't guarantee the import of the medicinal product.	

General Manager

Conclusions and suggestions of the student:

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The teacher's signature _____

QUALITY ASSURANCE OF MEDICINAL PRODUCTS. STATE CONTROL OF THE QUALITY OF DRUGS. PHARMACOVIGILANCE SYSTEM.

The purpose of the work: 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.

Form of training: Seminar and laboratory practical work.

Duration: 8 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.

Exercises for self-solving:

Exercise 1. Indicate the authorities of the central public administration with attributions in the field of consumer protection (see the Consumer Protection Law No. 105 of 13.03.2003) and specify the state bodies of public health supervision.

Exercise 2. Indicate the safety information reported to the Medicines and Medical Devices Agency and how to submit petitions online as a consumer of medicines.

Exercise 3. List the normative acts in force that regulate complaints, returns, withdrawals and falsification of medicines, substitution with similar products of pharmaceutical, parapharmaceutical and medical devices at each stage of their circulation.

Exercise 4. 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.

No. _____ from _____

Annex no 4
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
(the name of enterprise)

state control of manufactured medicines / raw materials, at the enterprise.

Attached:

1. copy of the quality certificate from the manufacturer.
2. copy of the customs declaration -1 copy *.
3. copy of the completed customs invoice (in the case of import) - 1 copy or invoice for 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 _____

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	Dosage form	Dose, package	Stored quantity	Manufacturer	Registration no in SMN	Analytical document	Batch	Expiry date	Sampling quantity	Returned quantity
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 5. 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 Chişinău, Korolenko 2/1 str., phone.727203

Quality certificate no. _____ from _____Name Batch

Producer:

Presented at _____ by _____

Received _____ packages, sampled from _____ stored packages, used _____, returned _____.

Analysis according to AD:

No	Criteria	AD limits	Results
1.			
2.			
3.			
4.			

Conclusion: _____

Chief of Laboratory for Medicines Quality Control

Ministry of Health from the Republic of Moldova

MEDICINES AGENCY

Laboratory for Medicines Quality Control

MD 2028 Chişinău, 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	Quantity	Producer	Certificate from the producer	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 3
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 Chişinău, Korolenko 2/1 str., phone.727203

Analysis bulletin no. from

Name Batch

Producer:

Presented at by

Received _____ packages, sampled from _____ stored packages, used _____, returned _____.

Analysis according to AD:

No	Criteria	AD limits	Results
1.			
2.			
3.			
4.			

Conclusion:

Chief of Laboratory for Medicines Quality Control

Exercise 6. The medicine importer disagrees with LMCC MA decision on inappropriate quality of the medicine (see previous problem). Specify the documents required to perform the State Arbitration Control.

Exercise 7. Complete one copy of the "SAFETY NOTICE ABOUT SIDE EFFECTS/or lack of effectiveness of medicines and other pharmaceutical products" and "COMMUNICATION ON SIDE EFFECTS OF MEDICINES AND OTHER PHARMACEUTICAL PRODUCTS" in the National Drug Enhancing Monitoring Center. List the ways to report adverse reactions (see <https://amdm.gov.md/ro/page/raportezaza-o-reactie-adversa>).

*Annex no. 2
to the Order of the Ministry of Health
no. 358 of May 12, 2017*

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		<p>* The side effect caused:</p> <input type="checkbox"/> patient's death, to be indicated (time / date / month / year) _____						
Name or initials:		<input type="checkbox"/> endangering the patient's life						
* Date/ month / year of birth /Age _____		<input type="checkbox"/> hospitalization or prolongation of hospitalization;						
* Sex: <input type="checkbox"/> M <input type="checkbox"/> F		<input type="checkbox"/> important or lasting disability / disability						
* Weight (kg) _____ * Height (cm) _____		<input type="checkbox"/> Developmental anomaly / congenital malformation						
* Allergy (to indicate): <input type="checkbox"/> Yes		<input type="checkbox"/> healing without sequelae (consequences);						
<input type="checkbox"/> Not		<input type="checkbox"/> state without dynamics						
The diagnosis: _____		<input type="checkbox"/> unknown						
Treatment: <input type="checkbox"/> Outpatient <input type="checkbox"/> Stationary <input type="checkbox"/> Self-medication		<input type="checkbox"/> other, indicate _____						
Nº ambulatory card or the observation form _____		<input type="checkbox"/> The lack of efficacy of the drug (LE)						
* Description of side effect (SE):		* Date / time of initiation SE __/__/__ __ : __						
		Date / time of healing SE __/__/__ __ : __						
		* Duration:						
* MEDICINAL PRODUCT (PM) suspected of having a side effect (SE) / Lack of efficacy of the given drug (LE)								
Commercial Name (DC)		International Joint Name (ICC)						
The manufacturer		Country		Series No. / date of manufacture				
Cause of using the remedy (disease or pathological conditions)		The administration	Single dose	Dose / day (nictemeral)	The beginningt of PM administration date / month / year	End of PM administration date / month / year	Date of de-tection SE	The dose that produced SE

				/ /	/ /	/ /	
--	--	--	--	-----	-----	-----	--

OTHER MEDICINES administered concomitantly (at the same time) no yes

Commercial Name (DC)	International Joint Name (ICC)	The administration	Single dose	Dose / day (nictemeral)	The beginning of PM administration date / month / year	End of PM administration date / month / year	Cause of using the remedy (disease or pathological conditions)
					/ /	/ /	
					/ /	/ /	
					/ /	/ /	
					/ /	/ /	

Measures taken to improve SE:

- Suspected drug was discontinued
- The dose of the suspected drug was reduced
- Drug administration has been discontinued concurrently
- Received treatment for SE symptoms (what it was treated for (if you have any information))

- without treatment
- Other, to be indicated _____

Cessation of the suspected medicinal product was followed by regression of the adverse effect? yes no
 PM has not been stopped

Did the repeat or worsening of the adverse effect on the repeated administration of the medicinal product have been determined? yes no PM not administered repeatedly

RA improving drug therapy (if it was necessary)

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 person who has registered SE**

*NS:

* Specialization:

* Workplace:

* Address of the institution:

** Phone:

**Fax:

*e-mail:

* Date of filing:

**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: farmacovigilenta@amed.md**

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

Please fill in the fields that request information about your specialty, job, e-mail address, telephone, fax.

These data are requested so that you can be contacted if additional information is needed about the adverse reaction or the evolution of the patient's condition.

A confirmation of receipt followed by the evaluation of the adverse reaction will be sent to you by e-mail or fax.

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/ month / year of birth /Age__ * Sex: <input type="checkbox"/> M <input type="checkbox"/> F * Weight (kg) _____ * Height (cm) _____		
City (District)_____ The village _____ Phone number _____		
Habits: <input type="checkbox"/> smoking <input type="checkbox"/> Drinking <input type="checkbox"/> Other: _____ Pregnancy <input type="checkbox"/>		
* Allergy (to indicate): <input type="checkbox"/> Yes _____ <input type="checkbox"/> Not _____		
Diseases suffered by the person: _____		
* Description of side effect (symptoms, how it occurred):	*Date/ hour of occurrence SE: __/ __/ __ :__ Date/ hour of curing SE: __/ __/ __ :__ * Duration: _____	* How serious do you consider this SE. <input type="checkbox"/> Light <input type="checkbox"/> Unpleasant, but did not affect physical activity <input type="checkbox"/> Serious, affect physical activity <input type="checkbox"/> Serious to see a doctor <input type="checkbox"/> Required hospitalization <input type="checkbox"/> Caused death
SUSPECTED MEDICINE(S):		
* Medicine Trade Name		
Manufacturer / Country / N° series / date of manufacture (if you have information)		
* Dose frequency, duration, route (eg: 1 tablet, 3 dly, by mouth)		
Cause of using the remedy (disease or pathological conditions)		
Start of administration M (date / month / year) __/ __/ __	End of M administration (date / month / year) __/ __/ __	Duration of administration M (days)
* The medicine was previously used <input type="checkbox"/> no <input type="checkbox"/> yes (specify if it was SE) _____		
* OTHER MEDICINES administered concomitantly (at the same time) <input type="checkbox"/> no <input type="checkbox"/> yes		
If Yes, please specify which medicines		
* Measures taken to improve SE: <input type="checkbox"/> Suspected drug was discontinued <input type="checkbox"/> The dose of the suspected drug was reduced <input type="checkbox"/> Drug administration has been discontinued concurrently <input type="checkbox"/> Received treatment for SE symptoms (what it was treated for (if you have any information) _____ <input type="checkbox"/> without treatment <input type="checkbox"/> Other, to be indicated _____	* How does the person feel at the time of completing the card: <input type="checkbox"/> Does not have the symptoms described <input type="checkbox"/> It still has symptoms, but it feels better <input type="checkbox"/> Still has symptoms, the condition has not improved <input type="checkbox"/> The condition has worsened <input type="checkbox"/> The person died	
* Measures to improve SE were undertaken by: <input type="checkbox"/> physician <input type="checkbox"/> nurse <input type="checkbox"/> pharmacist <input type="checkbox"/> patient <input type="checkbox"/> others _____		
* The person who fulfills the form: <input type="checkbox"/> Patient or drug user <input type="checkbox"/> The patient's relative <input type="checkbox"/> Physician <input type="checkbox"/> pharmacist <input type="checkbox"/> Nurse Other specification _____	Communicated the adverse reaction: Name: _____ Address : _____ ** Phone: _____ **e-mail: _____ * Filling date: _____	
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: farmacovigilenta@amed.md		

Fields marked with* are mandatory. To 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.

Conclusions and suggestions of the student:

The teacher's signature _____

INDUSTRIAL PRODUCTION OF MEDICINES. SUPPLY OF MEDICINES. THE PHARMACEUTI- CAL WAREHOUSE, ITS TASKS AND FUNCTIONS.

The purpose of the work: To acquire the conditions of industrial production of medicines, the development and approval of the Analytical Normative Documentation, the content of the supply cycle of medicines, the order of import, the task, the functions and the structure of the pharmaceutical warehouse.

Form of training: laboratory practical work

Duration: 8 hours.

Questions for self-learning:

1. General requirements for medicines production.
2. Rules of Good Manufacturing Practice (GMP).
3. The organizational structure of the industrial pharmaceutical enterprise.
4. Nomenclature of technological documentation for the manufacture of medicinal products.
5. The general feature of the drug delivery system. Supply cycle.
6. Characteristics of medicines import in Republic of Moldova.
7. Authorization and order of import of medicines in the Republic of Moldova.
8. Contracts of supplying and delivering of medicines.
9. Pharmaceutical warehouse, tasks and functions. The organizational structure.
10. Space, endowment and requirements for the pharmaceutical warehouse. Rules of Good Distribution Practice - GDP.
11. General principles of storage of medicines at the pharmaceutical warehouse.
12. Receiving pharmaceutical products from suppliers.
13. Order of delivery of pharmaceutical products from the warehouse.

Exercises for self-solving:

Exercise 1. List the necessary means for applying the GMP rules (see the Order of the MMDA No. 24 regarding the approval of the guide on the Good Manufacturing Practice (GMP) of medicines for human use from 04.04.2013).

Exercise 2. Specify the component parts of the standard dossier of the place of manufacture provided for in the Regulation on the authorization of the manufacture of medicinal products.

Exercise 3. List the manufacturers of medicines for human use in the Republic of Moldova GMP certified by MMDA.

Exercise 4. List the documents required for the industrial production of medicines specifying for each the order of elaboration (obtaining) and their content.

Exercise 5. Specify the documents required by the economic agent to receive the import authorization for medical products.

--

Exercise 6. Complete the request for the import transaction (the required data will be arbitrarily taken).

Annex no.1
to the Regulation on Authorization Mode
of the import-export of medicines,
other pharmaceutical and parapharmaceutical products

1.Importer, address 2. Reg. No. on _/_/_		8. REQUEST for IMPORT Authorization ORDINARY No. _____ on _/_/_			
3. Manufacturer, address		9. Seller, address 10. Seller country			
4. Country of destination Moldova MD 5. Manufacturing country		11.Expiry date	Requested according to the request _/_/_	According to the authorization _/_/_	
6. Custom	7. Code of custom	12. Transaction type Buying / Selling			
14.Name and characteristics of goods		15.Code of goods	16. Unit of the measure	17. Quantity	18. Value
		13. Currency of payment		19.Value Thousand currency	
20. Grounds for the application for authorization Agreement no. ___ on ___ Specification (annex) no. ___		22. DO NOT COMPLETE			
21. Director of importer company Function DIRECTOR _____ Signed and authorized Date _/_/_		23. DO NOT COMPLETE			
24. Terms and conditions					

Exercise 8. 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).

Anexa nr.2
la Regulamentul cu privire la modul de
autorizare a importului-exportului de
medicamente ale produse farmaceutice și
parafarmaceutice

_____ 200 _____
din from
_____ 200 _____
din from

Specificația (anexa) nr. _____
Specification (addendum) nr. _____
la contractul nr. _____
to the contract nr. _____

Nr.	Codul medicamentului Medicines code	Codul vamal Customs code	Denumirea comercială a medicamentului Trade name of drug	Forma medicamentoasă Pharmaceutical form	Doza Dosage	Divizare Package	Cantitatea Quantity	Prețul, valuta Price, currency	Suma, valuta Value, currency	Tara producătoare Country of origin	Firma producătoare Manufacturing company	Nr. înregistrare în RM number of registration	Data înregistrare în RM date of registration	Cod ATC	Denumirea Comună Internațională Nonproprietary Name
1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
2															
3															
4															
5															
6															
Total pentru achitare/ Total to be paid									EURO	0,00					

Vânzător / Seller

Denumirea / Name

Adresa / Address
Director

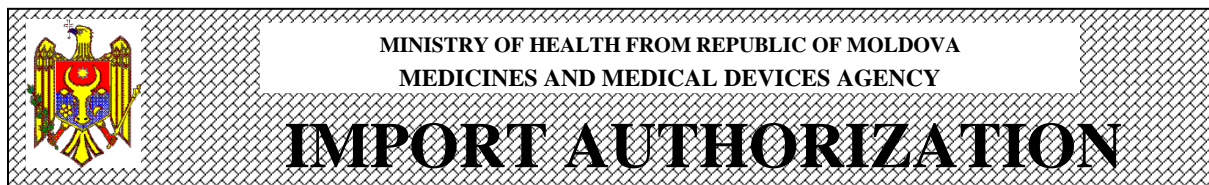
N.P.P., semnatura / sign
stamp

Cumpărător / Buyer

Denumirea / Name

Adresa / Address
Director

N.P.P., semnatura / sign
stamp



1.Importer, address 2. Reg. No. on _/_/_		8. REQUEST for IMPORT Authorization ORDINARY No. _____ on _/_/_			
3. Manufacturer, address		9. Seller, address			
4. Country of destination Moldova MD		11.Expiry date		Requested according to the request	According to the authorization
5. Manufacturing country				_/_/	_/_/
6. Custom	7. Code of custom	12. Transaction type Buying / Selling			
		13. Currency of payment			
14.Name and characteristics of goods	15.Code of goods	16. Unit of the measure	17. Quantity	18.	19.Value Thousand currency
20. Grounds for the application for authorization Agreement no. ___ on ___ Specification (annex) no. ___		22. THE MEDICINES AGENCY N.S. Function General Manager _____ Date _/___/___			
21. Director of importer company Function DIRECTOR _____ Signed and authorized Date _/___/___		23. Import-Export Section of Medicines, Other Pharmaceuticals and Parapharmaceuticals N.S. Function Head Section _____ 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 10. 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.4
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 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.6
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	Code of MP	Custom code	Trade name of MP	Dosage form	Dose	Package	Stored quantity	Price, currency	Total, currency	Producing country	Producing company	No. of import authorization	No. of custom declaration	Batch	Expiry date	Sampling quantity	Returned quantity
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 11. 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 manager
“ ___ ” _____ 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 established:

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	M.U.	Price	Quantity		Divergences (insufficiency, rebut, damage, etc.)		Note
				According to the invoice	Real	Quantity	Amount	

Conclusions and suggestions of the student:

The teacher's signature _____

TOTALIZATION no. 2 ON HOMEWORK 6 - 10.

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

The purpose of the work: 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 the location of pharmacies and their subsidiaries.

Form of training: laboratory practical work

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 storing 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.

1. Number of patients with diabetes
2. Economic significance of the locality
3. Presence of medical institutions
4. Number of residents related to a pharmacy
5. Tourist significance of the locality
6. Density of the population

Variant 2.

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

<p>Variant 3.</p> <ol style="list-style-type: none"> 1. Social-economic significance of the locality 2. Number of pharmacists per 100 thousands residents 3. Presence of medical institutions 4. Number of retired people from the locality 5. Tourist significance of the locality 6. Density of the population 	<p>Variant 4.</p> <ol style="list-style-type: none"> 1. Average age of district residents 2. The number of people related to a pharmacy 3. Social-economic significance of the locality 4. Number of pharmacists per 100 thousands residents 5. Distance and accessibility to the district center 6. Number of pre-school institutions
<p>Variant 5.</p> <ol style="list-style-type: none"> 1. Tourist significance of the locality 2. The number of people related to a pharmacy 3. Density of the population 4. Average age of district residents 5. Economic significance of the locality 6. Number of medical institutions 	<p>Variant 6.</p> <ol style="list-style-type: none"> 1. Number of pharmacists per 100 thousands residents 2. Presence of medical institutions 3. Tourist significance of the locality 4. Density of the population 5. Number of the shopping centers 6. Number of retired people
<p>Variant 7.</p> <ol style="list-style-type: none"> 1. Number of newborns 2. Density of the population 3. Number of pharmacists per 100 thousands residents 4. Presence of medical institutions 5. The number of people related to a pharmacy 6. Distance to the nearest pharmacy 	<p>Variant 8.</p> <ol style="list-style-type: none"> 1. Number of children up to 7 years old 2. Density of the population 3. Number of pharmacists per 100 thousands residents 4. Tourist significance of the locality 5. Presence of medical institutions 6. The number of people related to a pharmacy
<p>Variant 9.</p> <ol style="list-style-type: none"> 1. Average age of district residents 2. Economic significance of the locality 3. The number of people related to a pharmacy 4. Tourist significance of the locality 5. Density of the population 6. Number of pharmacists per 100 thousands residents 	<p>Variant 10.</p> <ol style="list-style-type: none"> 1. Presence of medical institutions 2. Density of the population 3. Number of patients with oncological diseases 4. Number of pharmacists per 100 thousands residents 5. Economic and geographic significance 6. Distance and accessibility to the district center
<p>Variant 11.</p> <ol style="list-style-type: none"> 1. Density of the population 2. Number of medical institutions 3. The number of people related to a pharmacy 4. Number of tuberculosis patients 5. The distance between the planned pharmacy and the pharmacy with the production section 6. The presence of shopping centers 	<p>Variant 12.</p> <ol style="list-style-type: none"> 1. Number of patients with hypertension 2. The number of people related to a pharmacy 3. Density of the population 4. Number of pharmacists per 100 thousands residents 5. Tourist significance of the locality 6. Number of educational institutions

a) _____

b) _____

c) _____

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

Variant	Distance			
	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 25,4 thousands residents, including 13,9 thousands in rural areas. In Edineț district there are 28 pharmacies, including 7 in rural areas.
2. Population of Cahul district is 36,8 thousands residents, including 12,8 thousands in rural areas. In Cahul district there are 20 pharmacies, including 14 in rural areas.
3. Population of Drochia district is 75,5 thousands residents, including 37,2 thousands in rural areas. In Drochia district there are 13 pharmacies, including 17 in rural areas.
4. Population of Cantemir district is 53,4 thousands residents, including 47,1 thousands in rural areas. In Cantemir district there are 8 pharmacies, including 5 in rural areas.
5. Population of Floresti district is 21,5 thousands residents, including 16,3 thousands in rural areas. In Floresti district there are 22 pharmacies, including 15 in rural areas.
6. Population of Briceni district is 71,5 thousands residents, including 51,2 thousands in rural areas. In Briceni district there are 23 pharmacies, including 17 in rural areas.
7. Population of Soroca district is 77,5 thousands residents, including 54,5 thousands in rural areas. In Soroca district there are 20 pharmacies, including 14 in rural areas.
8. Population of Falesti district is 78,6 thousands residents, including 53,4 thousands in rural areas. In Falesti district there are 18 pharmacies, including 10 in rural areas.
9. Population of Anenii-Noi district is 79,6 thousands residents, including 64,5 thousands in rural areas. In Anenii-Noi district there are 16 pharmacies, including 11 in rural areas.
10. Population of Calarasi district is 64,6 thousands residents, including 43,6 thousands in rural areas. In Calarasi district there are 13 pharmacies, including 8 in rural areas.
11. Population of Cimislia district is 49,3 thousands residents, including 38,8 thousands in rural areas. In Cimislia district there are 13 pharmacies, including 8 in rural areas.
12. Population of Causeni district is 81,5 thousands residents, including 61,2 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

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 _____

THE LEGAL PRESCRIBING RULES FOR MEDICINES.

The purpose of the work: 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.

Form of training: Seminar and laboratory practical work.

Duration: 4 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.

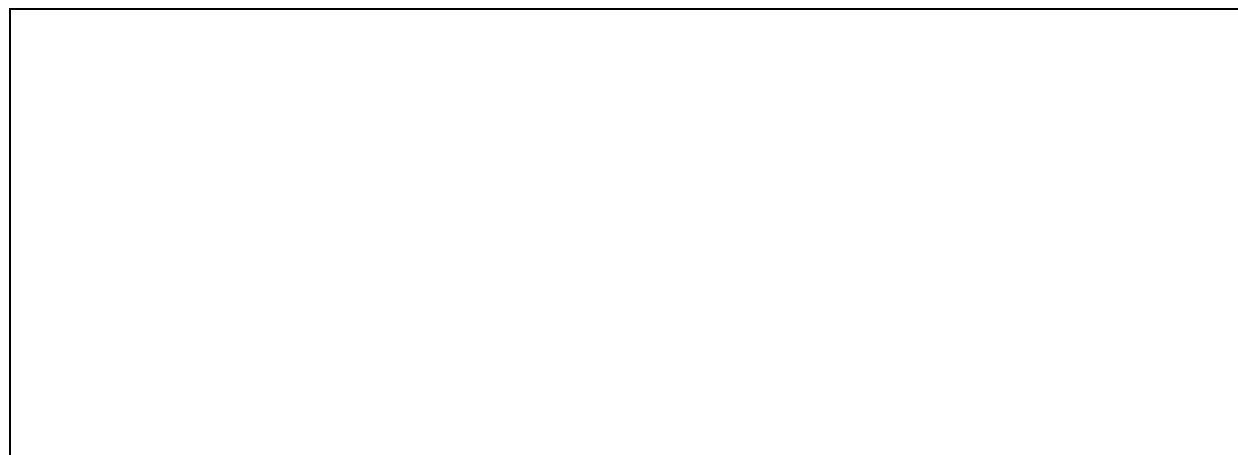
Exercises for self-solving:

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.

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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.

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

List No. 1.	List No. 2.	List No. 3.
1. Morphinum hidrochl.	1. Omnopon neo	1. Trihexifenidylum
2. Zopiclonum	2. Diazepamum	2. Fenobarbitalum
3. Alprozalamum	3. Aminazinum	3. Sotalolum
4. Ketaminum	4. Cabergolinum	4. Dipiridamolum
5. Atropini sulf.	5. Prozerinum	5. Plathyphyllini h/t
6. lorazepamum	6. Streptomycinum	6. Mebendazolum
7. Amlodipinum	7. Ketoconasolum	7. Captoprilum
8. Lidocainum	8. Extraveral	8. Caffeinum
9. Amitriptilinum	9. Piracetamum	9. Doxycyclinum
10. Tetraciclynum	10. Tinidazolum	10. Actovegin
11. Nitroglycerinum	11. Ibuprofenum	11. Streptomicinum
12. Digoxinum	12. Fluconazolum	12. Omnopon neo
13. Diclofenacum	13. Caffeinum	13. Betamethasonum
14. Pilocarpinum	14. Varfarinum	14. Zolpidemum
15. Diazepamum	15. Dexametazonum	15. Clindamicynum
16. Cefepimum	16. Metronidazolum	16. Oxycort
17. Metoprololum	17. Amitriptilinum	17. Lisinoprilum
18. Amoxicillinum	18. Propranololum	18. Rexetinum
19. Ketoprofenum	19. Glucosaminum	19. Bendazolum
20. Meloxicamum	20. Pentoxifilinum	20. Inosinum pranobex
List No. 4.	List No. 5	List No. 6
1. Trimeperidinum	1. Fentanylum	1. Codeinum fosfas
2. Metandrostenolonum	2. Propranololulum	2. Ephedrinum h/c
3. Bromazepamum	3. Bromazepamum	3. Lisinoprilum
4. Azitromicynum	4. Clonazepamum	4. Pilocarpinum h/c
5. Argentum nitras	5. Spiritus aethylic	5. Nandrolonum
6. Nystatinum	6. Metoprololum	6. Cianocobalaminum
7. Platifilinum h/t	7. Atorvastatinum	7. Clonazepamum
8. Trimebutinum	8. Sulfat de magneziu	8. Sertralinum
9. Metoclopramidum	9. Pentoxifilinum	9. Trimeperidinum
10. Glibenclamidum	10. Metiluracilum	10. Atenololum
11. Trihexifenidilum	11. Etambutolum	11. Imipraminum
12. Amlodipinum	12. Oxazepamum	12. Carbamazepinum
13. Metildopaminum	13. Risperidonum	13. Lizinoprilum

14. Hidroclortiazidum	14. Ketoprofenum	14. Cinarizinum
15. Vinpocetinum	15. Nimesulidum	15. Bromazepamum
16. Itraconazolium	16. Dihydroergotamin	16. Fenazepamum
17. Simvastatinum	17. Piracetamum	17. Indometacinum
18. Meloxicamum	18. Codeinum ph.	18. Azitromicinum
19. Finasteridum	19. Hidrocortizonum	19. Ciprofloxacinum
20. Roxitromicin	20. Lamotriginum	20. Acenocoumarolum
List No. 7	List No.8	List No.9
1. Sombrevin	1. Diazepamum	1. Amfetaminum
2. Clordiazepocsid	2. Trimeperidinum	2. Chlordiazepoxide
3. Amplodipinum	3. Teopentalum	3. Droperidolum
4. Diazepamum	4. Hidrocortizonum	4. Tramadolium
5. Dexametazonum	5. Doxycyclinum	5. Cyclodolum
6. Nifedipinum	6. Bromocriptinum	6. Panangin
7. Betametazonum	7. Ranitidinum	7. Rosuvastatinum
8. Gentamicinum	8. Amlodipinum	8. Sulfocamfocainum
9. Estradiolul	9. Hemodez neo	9. Amlodipinum
10. Bromazepamum	10. Morphinum	10. Bromazepamum
11. Ketoconazolium	11. Diphenhydraminum	11. Trimeperidinum
12. Difenhidraminum	12. Metformin	12. Oxitocinum
13. Verapamilum	13. Piridoxinum	13. Ofloxacinum
14. Pentoxifilinum	14. Soludexan	14. Methotrexatum
15. Fenazepamum	15. Atrotininum sulfas	15. Ciclosporinum
16. Zolpidemum	16. Ramiprilum	16. Clozapinum
17. Bisoprololum	17. Propranololum	17. Losartanum
18. Vildagliptinum	18. Platifilinum h/t	18. Mebendazolium
19. Metoclopramidum	19. Aciclovirum	19. Ciprofloxacinum
20. Domperidonum	20. Clotrimazolium	20. Betamethasonum
List No.10	List No.11	List No. 12.
1. Aethylmorphini h/c	1. Alprazolamum	1. Etilmorfinum clorhidrat
2. Ketazolamum	2. Etilamfetaminum	2. Barbitolum natrium
3. Cabergolinum	3. Ciprofloxacinum	3. Tofisopamum
4. Nitrazepamum	4. Diphenhydraminum	4. Nandrolonum
5. Amitriptilinum	5. Vinkristinum	5. Azothyoprinum
6. Cefprozilum	6. Trihexifenidilum	6. Chlorpromazinum
7. Reserpine	7. Lisinoprilum	7. Loratadinum
8. Enalaprilum	8. Diclofenacum	8. Heparinum
9. Co-trimoxazolium	9. Droperidolum	9. Indapamidum
10. Montelukastum	10. Clonazepamum	10. Izoniazidum
11. Ceftriaxonum	11. Pantoprazolum	11. Strofantin K
12. Doxycyclinum	12. Trimeperidinum	12. Haloperidolum
13. Betamethasonum	13. Carbamazepin	13. Tamoxifen
14. Clopidogrelum	14. Oxprenololum	14. Zolpidemum
15. Amiocardinum	15. Doxycyclinum	15. Ofloxacynum
16. Valsartanum	16. Atropinum sulfas	16. Thimeperidinum
17. Naproxenum	17. Piracetamum	17. Gentamycinum
18. Codeinum	18. Clonidinum	18. Metoprololum
19. Caffeinum	19. Amlodipinum	19. Tramadolium
20. Carbamazepinum	20. Pentazocinum	20. Imipraminum

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

Header stamp of healthcare unit	
Doctor _____ phone _____	
Prescription	
Date of prescribing " " 20	
_____ (name and surname of the patient) Age _____ years	
Price	Rp.:
L.P.	
Signature and stamp of Doctor _____	
The prescription is valid for 30 days, 2 months (specify)	

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

DOCUMENT OF STRICT RECORD Header stamp of healthcare unit (enterprise)	
Doctor _____ Phone _____	
Prescription	
Series _____ Nr. _____ Date of prescribing " " 20	
_____ (name and surname of the patient) Age _____ years. Medical Sheet No. _____	
Price	Rp.:
L.P.	
Signature and stamp of Doctor _____	
The prescription is valid for 10 days	

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

Header stamp of healthcare unit	
Doctor _____ phone _____	
Prescription	
Date of prescribing " " 20	
_____ (name and surname of the patient) Age _____ years	
Price	Rp.:
L.P.	
Signature and stamp of Doctor _____	
The prescription is valid for 30 days, 2 months (specify)	

Recipe Form No. 3 for free prescription and delivery of medicines (size 100 X 200)

Header stamp of healthcare unit				
		(1)		
Doctor _____ Phone. _____				
		(2)		
Prescription				
Seria _____ Nr. _____				
Date of prescribing " " 20				
P A T I E N T	_____ (name and surname of patient)			
	Age __ years. Medical File No. . . _____		(3)	
	Address _____			
Price	Rp.:			
L.P.				
Signature and stamp of Doctor _____				
The prescription is valid for 10., 30 days or 2 month (specificare)				

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

Header stamp of healthcare unit	
Doctor _____ phone _____	
Prescription	
Date of prescribing " " 20	
_____ (name and surname of the patient) Age _____ years	
Price	Rp.:
L.P.	
Signature and stamp of Doctor _____	
The prescription is valid for 30 days, 2 months (specify)	

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

DOCUMENT OF STRICT RECORD Header stamp of healthcare unit (enterprise)	
Doctor _____ Phone _____	
Prescription	
Series _____ Nr. _____ Date of prescribing " " 20	
_____ (name and surname of the patient) Age _____ years. Medical Sheet No. _____	
Price	Rp.:
L.P. Signature and stamp of Doctor _____	
The prescription is valid for 10 days	

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

Header stamp of healthcare unit	
Doctor _____ phone _____	
Prescription	
Date of prescribing " " 20	
_____ (name and surname of the patient) Age _____ years	
Price	Rp.:
L.P.	
Signature and stamp of Doctor _____	
The prescription is valid for 30 days, 2 months (specify)	

Recipe Form No. 3 for free prescription and delivery of medicines (size 100 X 200)

Header stamp of healthcare unit				
		(1)		
Doctor _____				
Phone. _____		(2)		
Prescription				
Seria _____ Nr. _____				
Date of prescribing " " 20				
P A T I E N T				
	_____ (name and surname of patient)	(3)		
	Age __ years. Medical File No. . . _____ Address			
Price	Rp.:			
L.P.				
Signature and stamp of Doctor _____				
The prescription is valid for 10., 30 days or 2 month (specificare)				

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

Header stamp of healthcare unit	
Doctor _____ phone _____	
Prescription	
Date of prescribing “ ” 20	
_____ (name and surname of the patient) Age _____ years	
Price	Rp.:
L.P.	
Signature and stamp of Doctor _____	
The prescription is valid for 30 days, 2 months (specify)	

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

Header stamp of healthcare unit	
Doctor _____ phone _____	
Prescription	
Date of prescribing “ ” 20	
_____ (name and surname of the patient) Age _____ years	
Price	Rp.:
L.P.	
Signature and stamp of Doctor _____	
The prescription is valid for 30 days, 2 months (specify)	

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Header stamp of healthcare unit	
Doctor _____ phone _____	
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Price	Rp.:
L.P.	
Signature and stamp of Doctor _____	
The prescription is valid for 30 days, 2 months (specify)	

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

Header stamp of healthcare unit	
Doctor _____ phone _____	
Prescription	
Date of prescribing " " 20	
_____ (name and surname of the patient) Age _____ years	
Price	Rp.: <div style="text-align: right;">L.P.</div> Signature and stamp of Doctor _____
<i>The prescription is valid for 30 days, 2 months (specify)</i>	

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

Header stamp of healthcare unit	
Doctor _____ phone _____	
Prescription	
Date of prescribing " " 20	
_____ (name and surname of the patient) Age _____ years	
Price	Rp.: <div style="text-align: right;">L.P.</div> Signature and stamp of Doctor _____
<i>The prescription is valid for 30 days, 2 months (specify)</i>	

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Price	Rp.:
L.P.	
Signature and stamp of Doctor _____	
The prescription is valid for 30 days, 2 months (specify)	


Prescription-model
for compensated drugs offset by
compulsory health insurance funds

 Prescription seria 000 nr. 0000000 for compensated drugs offset by compulsory health insurance funds	Ministry of Health of the Republic of Moldova Form No. 3 / C Approved by the Common Order MS and NMHC No. _____ from _____
1. _____ <small>the MSI header stamp</small>	
2. Cod MSI <input style="width: 30px; height: 15px;" type="text"/> <input style="width: 30px; height: 15px;" type="text"/> <input style="width: 30px; height: 15px;" type="text"/>	3. <input style="width: 30px; height: 15px;" type="text"/> <input style="width: 30px; height: 15px;" type="text"/> 20 <input style="width: 30px; height: 15px;" type="text"/>
<small>prescription date</small>	
4. <input style="width: 100%; height: 15px;" type="text"/>	6. <input style="width: 30px; height: 15px;" type="text"/>
<small>patient's name Age</small>	
5. <input style="width: 100%; height: 15px;" type="text"/>	7. <input style="width: 100%; height: 15px;" type="text"/>
<small>patient's surname IDNP / nr. patient identification act</small>	
8. <u>Rp.</u>	
9. <input style="width: 100%; height: 15px;" type="text"/>	
<small>name surname GP L.S.</small>	
10. <input style="width: 30px; height: 15px;" type="text"/>	11. _____
<small>IDNP GP GPs signature</small>	
<small>The prescription is valid for 10 days, 30 days or 2 months from the date of prescribing (underline)</small>	
12. <u>Drug code</u> <input style="width: 30px; height: 15px;" type="text"/>	13. <u>Number of tablets</u> <input style="width: 30px; height: 15px;" type="text"/>
14. <u>Retail price</u> <input style="width: 30px; height: 15px;" type="text"/> lei <input style="width: 30px; height: 15px;" type="text"/> bani	15. <u>Amount offset</u> <input style="width: 30px; height: 15px;" type="text"/> lei <input style="width: 30px; height: 15px;" type="text"/> bani
16. Amount paid by patient <input style="width: 30px; height: 15px;" type="text"/> lei <input style="width: 30px; height: 15px;" type="text"/> bani	
17. <input style="width: 30px; height: 15px;" type="text"/>	18. <input style="width: 30px; height: 15px;" type="text"/> <input style="width: 30px; height: 15px;" type="text"/> 20 <input style="width: 30px; height: 15px;" type="text"/>
<small>contract number / with NHC date of drug release</small>	
19. Amount paid by patient in words _____ _____ _____ L.S.	


Prescription-model
for compensated drugs offset by
compulsory health insurance funds

 Prescription seria 000 nr. 0000000 for compensated drugs offset by compulsory health insurance funds	Ministry of Health of the Republic of Moldova Form No. 3 / C Approved by the Common Order MS and NMHC No. _____ from _____
1. _____ <small>the MSI header stamp</small>	
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<small>prescription date</small>	
4. <input style="width: 100%; height: 15px;" type="text"/>	6. <input style="width: 30px; height: 15px;" type="text"/>
<small>patient's name Age</small>	
5. <input style="width: 100%; height: 15px;" type="text"/>	7. <input style="width: 100%; height: 15px;" type="text"/>
<small>patient's surname IDNP / nr. patient identification act</small>	
8. <u>Rp.</u>	
9. <input style="width: 100%; height: 15px;" type="text"/>	
<small>name surname GP L.S.</small>	
10. <input style="width: 30px; height: 15px;" type="text"/>	11. _____
<small>IDNP GP GPs signature</small>	
<small>The prescription is valid for 10 days, 30 days or 2 months from the date of prescribing (underline)</small>	
12. <u>Drug code</u> <input style="width: 30px; height: 15px;" type="text"/>	13. <u>Number of tablets</u> <input style="width: 30px; height: 15px;" type="text"/>
14. <u>Retail price</u> <input style="width: 30px; height: 15px;" type="text"/> lei <input style="width: 30px; height: 15px;" type="text"/> bani	15. <u>Amount offset</u> <input style="width: 30px; height: 15px;" type="text"/> lei <input style="width: 30px; height: 15px;" type="text"/> bani
16. Amount paid by patient <input style="width: 30px; height: 15px;" type="text"/> lei <input style="width: 30px; height: 15px;" type="text"/> bani	
17. <input style="width: 30px; height: 15px;" type="text"/>	18. <input style="width: 30px; height: 15px;" type="text"/> <input style="width: 30px; height: 15px;" type="text"/> 20 <input style="width: 30px; height: 15px;" type="text"/>
<small>contract number / with NHC date of drug release</small>	
19. Amount paid by patient in words _____ _____ _____ L.S.	

Prescription-model
for compensated drugs offset by
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 Prescription seria 000 nr. 0000000 for compensated drugs offset by compulsory health insurance funds	Ministry of Health of the Republic of Moldova Form No. 3 / C Approved by the Common Order MS and NMHC No. _____ from _____
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<small>prescription date</small>	
4. <input style="width: 100%; height: 15px;" type="text"/>	6. <input style="width: 30px; height: 15px;" type="text"/>
<small>patient's name Age</small>	
5. <input style="width: 100%; height: 15px;" type="text"/>	7. <input style="width: 100%; height: 15px;" type="text"/>
<small>patient's surname IDNP / nr. patient identification act</small>	
8. <u>Rp.</u>	
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<small>name surname GP L.S.</small>	
10. <input style="width: 30px; height: 15px;" type="text"/>	11. _____
<small>IDNP GP GPs signature</small>	
<small>The prescription is valid for 10 days, 30 days or 2 months from the date of prescribing (underline)</small>	
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17. <input style="width: 30px; height: 15px;" type="text"/>	18. <input style="width: 30px; height: 15px;" type="text"/> <input style="width: 30px; height: 15px;" type="text"/> 20 <input style="width: 30px; height: 15px;" type="text"/>
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<small>prescription date</small>	
4. <input style="width: 100%; height: 15px;" type="text"/>	6. <input style="width: 30px; height: 15px;" type="text"/>
<small>patient's name Age</small>	
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<small>patient's surname IDNP / nr. patient identification act</small>	
8. <u>Rp.</u>	
9. <input style="width: 100%; height: 15px;" type="text"/>	
<small>name surname GP L.S.</small>	
10. <input style="width: 30px; height: 15px;" type="text"/>	11. _____
<small>IDNP GP GPs signature</small>	
<small>The prescription is valid for 10 days, 30 days or 2 months from the date of prescribing (underline)</small>	
12. <u>Drug code</u> <input style="width: 30px; height: 15px;" type="text"/>	13. <u>Number of tablets</u> <input style="width: 30px; height: 15px;" type="text"/>
14. <u>Retail price</u> <input style="width: 30px; height: 15px;" type="text"/> lei <input style="width: 30px; height: 15px;" type="text"/> bani	15. <u>Amount offset</u> <input style="width: 30px; height: 15px;" type="text"/> lei <input style="width: 30px; height: 15px;" type="text"/> bani
16. Amount paid by patient <input style="width: 30px; height: 15px;" type="text"/> lei <input style="width: 30px; height: 15px;" type="text"/> bani	
17. <input style="width: 30px; height: 15px;" type="text"/>	18. <input style="width: 30px; height: 15px;" type="text"/> <input style="width: 30px; height: 15px;" type="text"/> 20 <input style="width: 30px; height: 15px;" type="text"/>
<small>contract number / with NHC date of drug release</small>	
19. Amount paid by patient in words _____ _____ _____ L.S.	

Variants to solve the problem no. 4.

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

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

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

Conclusions and suggestions of the student:

The teacher's signature _____

RECEIVING, PRICING AND REGISTRATION OF PRESCRIPTION FUNCTIONS OF MANAGEMENT.

The purpose of the work: Acquisition of general rules and practical skills of receiving, pricing and registering prescriptions for ambulatory patients.

Form of training: Seminar and laboratory practical work.

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.
8. Quantitative evidence of the circulation of medicines.

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.

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

Date	Nr. d/o	Pre-scription Nr.	HCI	The name of the doctor	Characteristic of detected prescribing errors	Taken measures	Pharmacist's name	Signature

Date	Nr. d/o	Pre-scription Nr.	HCI	The name of the doctor	Characteristic of detected prescribing errors	Taken measures	Pharmacist's name	Signature

Correctly transcribe the contents of the prescription in the workbook.

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List of maximum doses for one administration and for 24 hours

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.	Barbamyllum	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.	Dibazolium	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

No	Name of the medicinal substance	Maximum dose for one administration	Maximum dose for 24 hours
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

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.

EXCERPT
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. hydrochlorid. 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	Hexamethylentetramin	1,0	0,90
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 anis.	1 ml	0,82
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

The name	UM	Price (MDL)	The name	UM	Price (MDL)
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
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
Dimexydim	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
Rezorcium	1,0	0,50	T-rae Convallariae	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 Glycerhyzae	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 solubile	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

Nr.	Drug form, technological operation	U.M.	Price
1.	Sterile solutions. Preparation of bicomponent prescribing with the volume: 400-500 milliliters	vial	14.00
		vial	12.95
		vial	12.45
		vial	10.20
2.	Eye drops and ointments, medicinal forms for newborns. Sterile oils. Preparation of bicomponent prescribing.	vial	12.50

Nr.	Drug form, technological operation	U.M.	Price
3.	Solutions for internal and external use. Prescr. bicomponent, including infusions, decoctions, mucilages: Drops:	vial	11.25 7.50
4.	Powder and dosed species. Preparation of bicomponent prescription 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

Recipe Register

Date	Medicines prepared extemporaneously						Patients address
	No. of prescription	The name of patient	Drug form	Release price	Including		
					Purified water	Taxa laborum	

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 _____

Exercise 5. Draw the balance for one day in the "Recipe Register".

Exercise 6. 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 patient _____			
The price _____ lei _____ bani			
Mixture	Ointment	Powder	Ophthalmic
Solution	Drops	Suppositories	Sterile

Receipt for ordering the drug

Pharmacy _____ Date _____			
Nr. Recipe _____ Time _____			
The name of patient _____			
The price _____ lei _____ bani			
Mixture	Ointment	Powder	Ophthalmic
Solution	Drops	Suppositories	Sterile

Exercise 7. 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.

<p>1. Etaminal of natrium</p> <p>January</p> <p>Opening balance 5,5g</p> <p>Inputs FB 267924 06.01.23.....15,0g</p> <p style="padding-left: 40px;">FB 28979. 19.01.20</p> <p>.....10,0g</p> <p>Deliveries Rec.amb.11,5</p> <p>V MSI 11,3 Closing balance 7,65g</p>	<p>2. Morphine hydrochloride</p> <p>January</p> <p>Opening balance 6,5g</p> <p>Inputs OD 269243 07.01.23.....35,0</p> <p style="padding-left: 40px;">OD 321262 21.01.2325,0</p> <p>Deliveries Rec.amb.26,5</p> <p>V MSI 39,0 Closing balance</p> <p>1,93g</p>
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<p>3. Atropine sulfate</p> <p>January</p> <p>Opening balance 4,58g</p> <p>Inputs FB 6292472 10.01.23.....15,0 FB 6312003 22.01.2310,0</p> <p>Deliveries Rec.amb 10,7g</p> <p>V MSI 10,5 g Closing balance 8,3g</p>	<p>4. Promedol</p> <p>January</p> <p>Opening balance 12,5g</p> <p>Inputs OK 27924263 11.01.23.....25,0g OK 27993421 24.01.2330,0g</p> <p>Deliveries Rec.amb. 32,6 g</p> <p>V MSI 31,5 Closing balance 3,1</p>
<p>5. Dicainum</p> <p>January</p> <p>Opening balance 23,57g</p> <p>Inputs BM 02462924 11.01.23.....30,0 BM 02491920 23.01.2325,0</p> <p>Deliveries Rec.amb.28,4</p> <p>V MSI 34,5 Closing balance 15,3</p>	<p>6. Atropine sulfate</p> <p>January</p> <p>Opening balance 8,51g</p> <p>Inputs BM 026425320 6.01.23.....25,0 BM 026429160 21.01.2335,0</p> <p>Deliveries Rec.amb.25,4</p> <p>V MSI 37,5 Closing balance 6,35</p>
<p>7. Codeine phosphate</p> <p>January</p> <p>Opening balance 18,8g</p> <p>Inputs FB 24962117 5.01.23.....25,0 FB 24986921 26.01.2330,0</p> <p>Deliveries Rec.amb.28,9</p> <p>V MSI 30,5 Closing balance 14,10</p>	<p>8. Morphine hydrochloride</p> <p>January</p> <p>Opening balance 15,4g</p> <p>Inputs BM 26996432 3.01.23.....25,0 BM 26998967 25.01.2320,0</p> <p>Deliveries Rec.amb.25,5</p> <p>V MSI 29,5 Closing balance 5,8g</p>
<p>9. Silver nitrate</p> <p>January</p> <p>Opening balance 21,7g</p> <p>Inputs BM 624000241 4.01.23.....100,0 BM 624120690 22.01.2365,0</p> <p>Deliveries Rec.amb.96,5</p> <p>V MSI 75,5 Closing balance 11,4g</p>	<p>10. Codeine phosphate</p> <p>January</p> <p>Opening balance 16,7g</p> <p>Inputs OD 241632721 5.01.23.....65,0 OD 241679342 27.01.23100,0</p> <p>Deliveries Rec.amb.95,5</p> <p>V MSI 68,5 Closing balance 16,5g</p>
<p>11. Morphine hydrochloride</p> <p>January</p> <p>Opening balance 15,4g</p> <p>Inputs OK 024162294 9.01.23.....25,0 OK 024196201 21.01.2330,0</p> <p>Deliveries Rec.amb.20,35</p> <p>V MSI 35,5g Closing balance 14,45</p>	<p>12. Silver nitrate</p> <p>January</p> <p>Opening balance 21,8g</p> <p>Inputs OC 249126727 03.01.23.....50,0 OC 249296792 19.01.2360,0</p> <p>Deliveries Rec.amb.45,5 g</p> <p>V MSI 70,5 Closing balance 15,1</p>

Exercise 8. At the end of the month the factual balance of _____ in the production department constituted ___ g (see data exercise 9). 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 _____

Month	Initial stock	Inputs			Types of outputs	Outputs						Monthly calculation for each type	Total monthly in all kinds of outputs	Recorded stock	Factic stock	Signature of Managing person
		Supplier, Nr. doc. date	The amount	Total Monthly: inputs		1	2	3	4	...	31					
January					The ambulatory prescription											
	Health institutions															
	pharmacies' subsidiaries,															
	pharmacies sections															
February					The ambulatory prescription											
	Health institutions															
	pharmacies' subsidiaries,															
	pharmacies sections															
...					The ambulatory prescription											
	Health institutions															
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...					The ambulatory prescription											
	Health institutions															
	pharmacies' subsidiaries,															
	pharmacies sections															
December					The ambulatory prescription											
	Health institutions															
	pharmacies' subsidiaries,															
	pharmacies sections															

Exercise 9. 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 _____

Signatures: President _____

Members of the commission _____

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

No. d/o	Name of the medicine	The period for which the medicines were delivered	No. of pre- scriptions	The amount of released drug

Ways of destroying prescriptions _____

Signatures: _____

Conclusions and suggestions of the student:

The teachers signature _____

TECHNOLOGY OF PHARMACEUTICAL COMPOUNDING IN PHARMACY AND QUALITY CONTROL OF EXTEMPORANEOUS PREPARATION. PACK LABELING AND DISPENSING MEDICINES FROM PHARMACY

The purpose of the work: 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.

Form of training: laboratory practical work

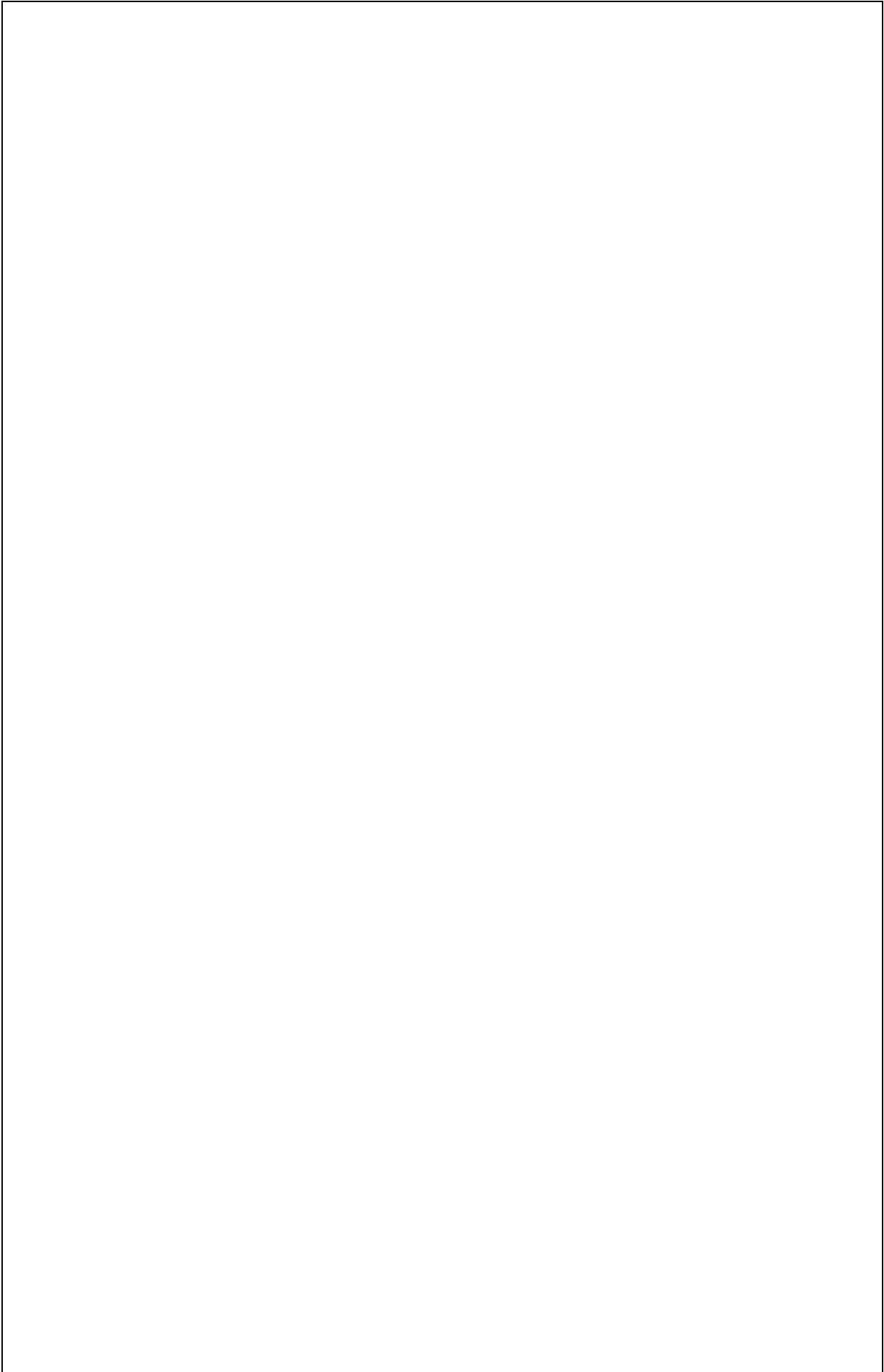
Duration: 4 hours.

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 3, Theme no.s No. 13). 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 iodide 2% - 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

TAXA LABORUM

for preparing pharmaceutical preparations in pharmacies

Nr.	Drug form, technological operation	U.M.	Taxa
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
4.	Infusions and decoctions. Preparing bicomponent prescribing: more than 1000 ml	vial.	13.30
	400-500 ml	vial	4.25
	till 250 ml	vial	3.75
5.	Powder and dosed species. Preparation of bicomponent prescription 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 4. Prepare internal quality control records for the quality of medicines and appreciate their quality:

- Register of quality control results of magisterial forms, drug forms in stock, concentrates, semi-finished products.
- Registry of Purified Water Quality Control Results.
- Register of Drug Determination Results.
- 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.

*Annex no. 2 to the Forms Quality Control Regulation
medicinal products prepared in pharmacies*
**Register of quality control results of magisterial forms,
drug forms in stock, concentrates, semi-finished products**

Name and signature of the person who performed the quality control				
Conclusion: corresponds or does not match				
Name and surname of the person who prepared, controlled or packaged				
Control results	quantitative, formula, index of refraction			
	Qualitative (+) or (-)			
	physical organoleptic			
The active principle, volume, mass, homogeneity of the mixture				
Composition of the drug form				
Nr. series of the industrial producer				
Nr. recipe (bill); packaging series; Nr. filled stangas				
Nr. d / o who is and Nr. analysis				
Date				

Registry of Purified Water Quality Control Results

Date of obtaining (water training)	Date of control	Nr. d / o who is also Nr. control quality	Nr. collector (workplace)	Results of control of absence of impurities						Conclusion: corresponds or does not match	Name and signature of the person who performed the quality control
				Cl ⁻	SO ₄ ²⁻	Ca ²⁺	NH ₄ ⁺	Reducing substances	CO ₂		

REGISTER OF DRUG DETERMINATION RESULTS *

Date	Nr. d / o which is also Nr. analysis	Name	Nr. series or No. MMDA Quality Certificate **	Nr. filled stangas	Determined substance (ion)	The result of control (+) or (-)	Signatures	
							The person who filled it	The person who performed 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__

No d/o	No. prescription (bill)	Composition of the drug form	The price of the drug form	Control results			Conclusion (satisfactory or unsatisfactory)	Name and surname of the person who prepared the medicine
				Quality (+) or (-)	Quantitative (formula, refractive index)	Physical		

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	Pa- tients NS	Patients address	Drug form	Price	NS of physician	Signature

Conclusions and suggestions of the student:

The teachers signature _____

MANAGEMENT AND LEGISLATION OF PHARMACEUTICAL ASSISTANCE IN HOSPITAL.

The purpose of the work: 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.

Form of training: Seminar and laboratory practical work.

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.
5. Control of storage and rational use of medicines in hospital wards.
6. Records of medicines and medical articles in health care institutions.
7. Clinical pharmacy and its role in the quality of medical treatment of inpatients.
8. The Formulary system - "Rational Pharmaceutical Management".
9. Pharmacotherapeutic Formulary and its feature. Pharmacotherapeutic Formulary.
10. The role of the Pharmacotherapeutic Formulary Committee of the medical institution in the rational and efficient use of medicines.
11. Calculation of the necessary for the medicines included in the Pharmacotherapeutic Formulary of the medical institution.
12. 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.
- c) 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.

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 ___

Name of the pharmaceutical unit _____

Register of inputs of material values

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

The standard form F-07

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 _____

Name of pharmaceutical unit (FU) _____ Fiscal Code _____

Section _____
 Consignee _____ Fiscal Code _____

Section (Cabinet) _____

(deputy chief physician signature issues curative)
 " ___ " _____ 20 __

Through _____ Delegation Nr. ___ from _____

Purchase Order Number. _____ Delivery Bonnet Nr. _____

from " ___ " _____ from " ___ " _____

No. d/o	Drug code	Name of the medicine	UM	The amount		The value		For extemporaneous forms, the cost of purified water and "taxa laborum"	
				re-requested	delivered	Price	Sum		
Total									

Fulfilled by _____ Checked by _____ released by _____
 Checked by _____ Delivery allow _____ 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 Nr. ____ from _____

Name of pharmaceutical unit (FU) _____ Fiscal Code _____

Section _____

Consignee _____ Fiscal Code _____

Section (Cabinet) _____

(deputy chief physician signature issues curative)

" ____ " _____ 20 ____

Through _____ Delegation Nr. ____ from _____

Purchase Order Number. _____ Delivery Bonnet Nr. _____

from " ____ " _____

from " ____ " _____

No. d/o	Drug code	Name of the medicine	UM	The amount		The value		For extemporaneous forms, the cost of purified water and "taxa laborum"	
				requested	delivered	Price	Sum		
Total									

Fulfilled by _____

Checked by _____ released by _____

Checked by _____

Delivery allow _____ Received by _____

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 Nr. ___ from _____

Pharmacy _____

Book of Records of Priced Bills

in the month _____ 20 ____

Section (office) health unit							
Date	No. bill	Total sum	Including				
			Medicines	Materials for dressings	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 Nr. ___ 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)	Drags	Materials for dressings	Auxiliary Materials (Utensils)	Package		
Initial stock la 01. __ . __						
INPUTS						
Total inputs						

OUTPUTS						
1. Delivery for sections, cabinets in accordance with “ Book of Records of Priced Bills”.						
Total outputs						
2. Losses under settlement (document, settlement).						
Total crossings loss						
Total outputs						
Final stock la 31. __ . __						

_____ attached documents **Head pharmacist** _____

Verified _____ **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 _____

TOTALIZATION no. 3 ON HOMEWORK 11 – 15.

PHARMACEUTICAL RECORDS. THE PRICES FOR DRUGS AND OTHER PHARMACEUTICAL PRODUCTS .

The purpose of the work: 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.

Form of training: Laboratory practical work.

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 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. Describe the notion of "evidence", indicate what are the requirements for evidence.

Exercise 2. Represent in the form of a diagram the characteristic of funds of pharmaceutical enterprises.

Exercise 3. 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 duty - 0,1% of the amount. Cost of State Quality Control ___ lei. The warehouse markup will be in accordance with the legal provisions.
- b) Determine the maximum retail pharmacy price of the same drug.

Variant 1. The price of the medicine „A” UM 9-90 \$ US Import 2000 units Cost of State Quality Control 820 lei	Variant 2. The price of the medicine „A” UM 8-50 \$ US Import 2000 units Cost of State Quality Control 994 lei
Variant 3. The price of the medicine „A” UM 6-25 \$ US Import 2000 units Cost of State Quality Control 890 lei	Variant 4. The price of the medicine „A” UM 11-36 \$ US Import 2000 units Cost of State Quality Control 985-50 lei
Variant 5. The price of the medicine „A” UM 21-78 \$ US Import 2000 units Cost of State Quality Control 829-90 lei	Variant 6. The price of the medicine „A” UM 12-25 \$ US Import 2000 units Cost of State Quality Control 828-00 lei
Variant 7. The price of the medicine „A” UM 29-62 \$ US Import 2000 units Cost of State Quality Control 998-50 lei	Variant 8. The price of the medicine „A” UM 17-43 \$ US Import 2000 units Cost of State Quality Control 1227-00 lei
Variant 9. The price of the medicine „A” UM 8-96 \$ US Import 2000 units Cost of State Quality Control 996-00 lei	Variant 10. The price of the medicine „A” UM 11-64 \$ US Import 2000 units Cost of State Quality Control 989-00 lei
Variant 11. The price of the medicine „A” UM 8-95 \$ US Import 2000 units Cost of State Quality Control 972-00 lei	Variant 12. The price of the medicine „A” UM 11-92 \$ US Import 2000 units Cost of State Quality Control 997-00 lei

a)

b)

Exercise 4. Determine the maximum retail price of the following drugs by the pharmacy:

Variant 1. a) Drug B → 20 units price 29-80 The warehouse markup 15% b) Drug C → 5 units price 680-20 The warehouse markup 4,95%	Variant 2. a) Drug B → 5 units price. 62-80 The warehouse markup 12,5 % b) Drug C → 15 units price 199-20 The warehouse markup 7,9%
Variant 3. a) Drug B → 5 units price 295-00 The warehouse markup 4,8 % b) Drug C → 10 units price 52-20 The warehouse markup 11,4 %	Variant 4. a) Drug B → 25 units price 25-80 The warehouse markup 15 % b) Drug C → 10 units price 102-50 The warehouse markup 10 %
Variant 5. a) Drug B → 10 units price 101-80 The warehouse markup 10 % b) Drug C → 3 units price. 842-00 The warehouse markup 5 %	Variant 6. a) Drug B → 30 units price 29-80 The warehouse markup 14,9 % c) Drug C → 10 units price 242-50 The warehouse markup 5 %
Variant 7. a) Drug B → 50 units price 4-80 The warehouse markup 15 % b) Drug C → 5 units price. 442-20 The warehouse markup 5 %	Variant 8. a) Drug B → 20 units price 115-80 The warehouse markup 10 % b) Drug C → 10 units price 145-50 The warehouse markup 8 %
Variant 9. a) Drug B → 40 units price 12-85 The warehouse markup 14,5 % b) Drug C → 10 units price 192-50 The warehouse markup 8 %	Variant 10. a) Drug B → 20 units price 11-60 The warehouse markup 14,9 % b) Drug C → 10 units price 142-20 The warehouse markup 7,9 %
Variant 11. a) Drug B → 5 units price 421-70 The warehouse markup 4,9 % b) Drug C → 10 units price 95-50 The warehouse markup 10 %	Variant 12. a) Drug B → 25 units price 21-95 The warehouse markup 14,5 % b) Drug C → 10 units price 119-90 The warehouse markup 10 %

a)

b)

Exercise 5. Calculate the purchase price and the maximum wholesale and retail prices for the following import medicines:

nr d/o	Name, dosage, packaging				Imported Quantity	State control costs (lei)	State fee (%)	Transport cost (lei)	Price from CNPPM (lei)	Price Invois (in foreign currency)	Import currency	Exchange rate on the day of devotion
1	MIG® pentru copii	Sus. orală	20mg/1ml	100ml	5000	550	1	2300	45,59	2,33	EUR	20,25
2	Lerkamen®	comp. film.	10 mg	N14x2	6500	590	1	4500	78,26	4,00	EUR	20,25
3	L-Thyroxin 100mcg BCh	comp	100mcg	N25x4	5500	550	1	1250	30,72	1,57	EUR	20,25
4	Prostamol Uno®	capsule moi	320 mg	N25x4	5500	580	1	1250	306,97	15,69	EUR	20,25
5	Bronchipret®	sirop		100ml	7000	650	1	1450	82,17	4,20	EUR	20,25
6	Ampicillin	p. p/u sol. inj	1 g	N50	4000	750	1	1400	193,56	10,05	USD	19,66
7	Diazolin	drajeuri	100mg	N10	6000	500	1	2500	8,86	0,46	USD	19,66
8	Ciprinol®	Com. filmate	750mg	N10	5500	650	1	1250	72,39	2,00	EUR	20,25
9	Siofor®	Com. filmate	1000 mg	N15x4	7000	750	1	1450	49,69	2,54	EUR	20,25
10	Cyanocobalmina	sol.inject.	0,5mg/1ml	N10	2500	880	1	3000	10,97	0,57	USD	19,66
11	Nixar®	comprimat	20mg	N10	4500	550	1	2500	41,67	2,13	EUR	20,25
12	Fastum® gel	gel	25mg/g	100g n	5000	500	1	2300	81,39	4,16	EUR	20,25

nr d/o	Name, dosage, packaging				Imported Quantity	State control costs (lei)	State fee (%)	Transport cost (lei)	Price from CNPPM (lei)	Price Invois (in foreign currency)	Import currency	Exchange rate on the day of devotion
1	Lioton®	gel	1000UI/g	30g N1	5000	500	1	2300	78,06	3,99	USD	19,66
2	Spasmomen®	comp. film.	40mg	N10x3	3500	600	1	3200	89,80	4,39	USD	19,66
3	Berlipril®	comp.	10 mg	N10x3	5000	590	1	2300	30,32	1,55	EUR	20,25
4	Flavamed®	comp.	30 mg	N10x2	4000	650	1	1400	27,78	1,42	EUR	20,25
5	Movalis®	Compr.	15 mg	N10x2	5500	650	1	1250	40,11	2,05	EUR	20,25
6	Gentamicina	sol.inject.	80 mg/2ml	2ml N10	7000	750	1	1450	39,48	2,05	USD	19,66
7	Sulfamicin	pic.of. sol	30mg/ml	10mlN1	7000	650	1	1450	11,36	0,59	USD	19,66
8	Quamatel® mini	comp.film.	10 mg	N14	4000	650	1	1400	25,63	1,31	EUR	20,25
9	Rovaltro	comp. film.	10mg	N10x3	3500	550	1	3200	451,54	23,45	USD	19,66
10	Enap®	comp.	5mg	N10x2	7000	670	1	1450	9,20	0,47	EUR	20,25
11	Fromilid®	comp. film.	250 mg	N7x2	3500	680	1	3000	51,06	2,61	EUR	19,66
12	Finalgel®	gel	5 mg/g	35 g N1	5000	500	1	2300	43,67	2,25	EUR	20,25

nr d/o	Name, dosage, packaging				Imported Quantity	State control costs (lei)	State fee (%)	Transport cost (lei)	Price from CNPPM (lei)	Price Invois (in foreign currency)	Import currency	Exchange rate on the day of devotion
1	Naclofen® duo	capsule	75mg	N10x2	6000	600	1	2500	35,02	1,79	EUR	20,25
2	Gliclada®	comp.cu elib.prel.	30mg	N15x2	5000	680	1	1240	22,30	1,14	EUR	20,25
3	Roswera®	comp.film	20mg	N10x3	5500	780	1	3000	80,80	4,13	USD	20,25
4	Tenox®	comp.	10mg	N10x3	6500	590	1	4500	25,04	1,60	USD	20,25
5	Fusis®	comp.	50mg	N10	6500	600	1	4500	31,30	0,43	USD	19,66
6	Dexalgin®	comp.film.	25mg	N100	8000	650	1	1400	39,91	2,04	EUR	20,25
7	No-Spa®	comp.	40mg	200 ml N1	5500	680	1	3000	75,13	3,84	USD	20,25
8	Captopril	comp.	50 mg	N10x3	7000	550	1	1450	13,29	0,69	USD	19,66
9	Azitrox®	comp. film.	500 mg	Nx3	4500	630	1	3200	52,04	2,66	USD	19,66
10	Zeloxin®	sol.inj.	15mg/1,5ml	1,5ml N3	5000	570	1	2300	17,69	0,92	EUR	20,25
11	Neohemodez	sol.perf.	60 mg/ml	200ml N1	4500	750	1	2500	54,70	2,84	USD	19,66
12	Niperten®	comp.film	5mg	N10x3	5000	580	1	2300	17,80	0,91	EUR	20,25

Empty rectangular box for student input.

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Conclusions and suggestions of the student:

Empty rectangular box for student input.

The teachers signature _____

CIRCULATION RECORDS OF PHARMACEUTICAL PRODUCTS.

The purpose of the work: 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.

Form of training: Seminar and laboratory practical work

Duration: 4 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. Record of inputs of pharmaceutical products.
3. Summary of the stocks increase sources of pharmaceuticals and their documentation.
4. Forms of achievement of pharmaceutical products. Turnover. Types and parts of the turnover balance between them.
5. Economic feature of the turnover. Analysis of the turnover indices.
6. Pharmaceutical stocks of pharmaceutical companies. Their classification and destination.
7. Records of expenses and losses of pharmaceutical products.
8. 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. d/o	Name of the medicine	UM	Consumption in the last 3 weeks			Demand
			I	II	III	
1						
2						
3						
4						
5						

No. d/o	Name of the medicine, dose, quantity	Weeks			No. d/o	Name of the medicine, dose, quantity	Weeks		
		I	II	III			I	I	II
Variant 1					Variant 2				
1	Naclofen Duo 75mg N.20	7	5	7	1	Roswera 10mg N.30	15	12	18
2	Movalis 15mg N.20	5	4	5	2	Tenox 5mg N.30	12	15	18
3	Fastum gel 2,5 %-30,0	5	8	7	3	Fusis 50mg N.10	5	6	7
4	Spazmomen 40mg N30	6	5	4	4	Dexalgin 25mg n.10	10	12	14
5	Siofor 1000mg N.60	10	12	9	5	Kaptopril 25mg N.20	13	7	10
Variant 3					Variant 4				
1	No-Spa 40mg N.24	16	19	15	1	Neohemodez 200ml	5	6	4
2	Azitrpox 500mg N.3	11	10	12	2	Niperten 5mg N.30	10	12	19
3	Panzinorm 20 000N.10	10	12	14	3	Normodipin 10mg N.30	15	24	23
4	Corvalol 25ml	25	21	26	4	Lioton gel 30.0g	10	11	9
5	Naftizin 0,1% 10ml	25	27	30	5	Citramon P N.10	96	119	125
Variant 5					Variant 6				
1	Cavinton 10mg N.30	5	6	5	1	Fromilid 500mg N.14	5	6	8
2	Flavamed 30mg N.20	8	10	9	2	Rovaltro 10mg N.30	2	3	4
3	Senadexin N.10	45	35	40	3	Gliclada 60mg N.30	8	10	12
4	Quamatel mini 10mg N.14	6	5	4	4	Nimesil plic.3g N30	5	4	6
5	Enap 10mg N.20	10	12	18	5	Halixol 30mg N.20	11	10	13
Variant 7					Variant 8				
1	Spazz 40mg N.20	12	11	12	1	Nurofen 200mg N.12	12	10	13
2	Melox Fort 15mg N.30	7	8	6	2	Strepsils N.24	6	8	7
3	Etol Fort 400mg N.14	5	3	4	3	Famotidin 40mg N.30	10	9	11
4	Aksef 500mg N.10	7	10	8	4	Piracetam 200mg N.10	60	58	61
5	Carbo activatis 250mg N.10	58	60	83	5	Dexametazon 4mg N.20	3	5	4
Variant 9					Variant 10				
1	Tempalgin N.100	3	4	2	1	Suprastin 25mg N.20	5	7	6
2	Lagosa 150mgN.100	5	6	7	2	Novocain 2%-2ml N10	4	3	2
3	Galazolin 0,1% 10ml	15	16	18	3	Terbisil cremă 15g	5	6	8
4	Ofloxin 200mg N.20	6	4	6	4	Dicloran gel 20g	7	8	10
5	Inhalipt 30ml aer.	12	18	15	5	Groprinosin 250mg N.50	3	4	5
Variant 11					Variant 12				
1	Diroton 10mg N.56	6	5	8	1	Ciprinol 500mgN.10	5	7	4
2	Atoris 10mg N.30	7	8	8	2	Rawel 1,5 N20	18	21	30
3	Duovit N.40	5	6	4	3	Diroton 5mg N56	15	10	16
4	Forsef 1g i/m N1	24	20	28	4	Cameton spray 30ml	10	11	14
5	Rinzasip N10	8	6	7	5	Enap HL N.20	5	6	7

Exercise 2. Prepare the act on the re-evaluation of pharmaceutical products. Please note that the following products have been re-evaluated:

Nr. d/o	Name of the medicine, dose, quantity	The amount	Price until	Price after	No. d/o	Name of the medicine, dose, quantity	The amount	Price until	Price after
Varianta 1					Varianta 2				
1	Frontin 0,25mg N.30	10	24,20	23,45	1	Cavinton forte 10mg N30	5	69-90	67-80
2	Anuzol N.10	6	21-50	20-20	2	Alfa-lipon 600mg N.30	3	235-85	233-90
3	Clemastin 1mg N20	3	18-20	17-10	3	Hartil 10mg N28	10	59-60	53-15
4	Sol. Papaverin h/h 2% - 2ml N10	4	19-70	18-30	4	Enap 5mg N20	6	28-80	27-20
5	Diprosalic ung. 15g	3	126-20	103-00	5	Suprastin 25mg N20	10	43-50	42-50
Varianta 3					Varianta 4				
1	Benevron BF N.N.20	5	108-80	105-50	1	Furagin 50mg N.30	5	42-60	41-50
2	Mezim forte N20	20	25-10	24-60	2	Aksen Fort 550mg N.10	10	22-10	20-00
3	Prednizolon 5mg N40	5	14-90	14-20	3	Furacilin 20mg N.10	15	16-75	16-20
4	Trikaxon 1g i/m N1	20	36-15	35-00	4	Carsil 22,5 N.80	5	105-60	102,-80
5	Neoanuzol sup.N10	2	22-50	21-90	5	Berlipril 10mg N.30	2	52-50	49-90
Varianta 5					Varianta 6				
1	Choliver N100	10	149-00	145-00	1	Galazolin 0,1% 10ml	12	22-50	22-15
2	Ciprinol 500 N10	8	91-00	89-00	2	Funzol 50 mg N7	3	142-00	125-00
3	Fastum gel 50g	7	60-00	58-00	3	Diroton 10mg N28	10	71-50	69-90

Nr. d/o	Name of the medicine, dose, quantity	The amount	Price until	Price after	No. d/o	Name of the medicine, dose, quantity	The amount	Price until	Price after
4	Betadine 10% 120ml	7	81-55	113-05	4	Fromilid 500mg N.14	3	120-20	119-00
5	Cinnarizin 25mg N.50	13	13-00	12-75	5	Forsef 1g i/m N1	30	38-00	37-00
Varianta 7					Varianta 8				
1	Ceftinex 300mg N.10	10	137-50	136-00	1	Floxadex pic. oft.10ml	6	55-50	53,80
2	Mig 400mg N10	12	36- 40	35-00	2	Trikaxon 1g i/m N1	25	38-20	34-20
3	Lucetam 800mg N30	15	39-50	38-50	3	Ciston N100	3	132-50	131-20
4	Cefecon D sup. N.10	5	12-40	11-60	4	Ostalon N4	5	232-00	229-00
5	Berlipril 10mg N20	20	49-90	46-35	5	Maxigra 100mg N.4	4	189-55	184-90
Varianta 9					Varianta 10				
1	Aksef 750mg sol. inj. N.1	3	30-80	29-50	1	Melox 7,5 mg N.30	2	29-50	28-10
2	Albendazol 200mg N.10	2	85-65	83-00	2	Ketanov 10mg N10	15	21-20	19-50
3	Cavinton 5mg N.50	4	80-60	78.20	3	Fastum gel 100,0	3	120-95	119-00
4	Furagin 50mg N.30	5	42-65	41-30	4	ACC 100 N.20	4	49-60	48-10
5	Gaviscon N.16	2	70-00	67-90	5	Flucinalon N 18g ung	7	34-40	33-50
Varianta 11					Varianta 12				
1	Gabagamma 300mg N.100	2	314-80	309-50	1	Cavinton forte N30	10	79-50	75-00
2	Carbune activat N10	300	4-90	4-50	2	Cerebrolizin 10ml N.5	5	609-95	598-90
3	ACC 200 N.20	10	69-00	67-00	3	Adaptol 300mg N.20	4	114-95	113-00
4	Fokusin 0,4 N.30	6	76-35	74-90	4	Alfa-lipon 600mg N.30	5	235-85	230-00
5	Senadexin N10	50	14-20	13-50	5	Aciclovir 200mg N.30	3	61-00	59-50

Name of the pharmaceutical unit _____ Tax Code

Section _____

ACT No. ____
 about the revaluation of goods
 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. d/o	The name	UM	The amount	Price				The difference	
				Until reevaluation		After re-evaluation		Extra	Less
				Price	Sum	Price	Sum		
Total									

Signatures:

Chairman of the commission _____

Commission members _____

Managed person _____

Exercise 3. 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).

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 ___

Name of the pharmaceutical unit _____

Register of inputs of material values

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

Exercise 4. On "___" day _____ 20 __ In the pharmacy have been recorded extemporaneous prescription and the following elaborations have been made: (see the data from the 13 and 14 topics). The amount of the extra difference from the delivery of extemporaneous 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 Nr. ___ from ___

Name of the pharmaceutical unit _____ Tax Code

Section _____

"APPROVED"
Head - pharmacist

(signature)
"___" _____ 20__

NOTE

about the extra difference and the difference in the minus

	The difference	
	Extra difference	In minus
Prescription register		X
Including purified water		X
Register of Pharmaceutical elaborations		
Including purified water		X
Delivery Order Receipt		X
Including purified water		X
TOTAL		
Including purified water		X

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	25-90	1	Chlorhexidini bigluconati 0,1%- 100 ml	22-50
2	Wadding 60g	13-95	2	Antibacterial soap 300ml	21-75
Variant 3			Variant 4		
1	Sol. Hydrogen peroxide 3% - 100ml	8-20	1	Wadding 60,0	14-85
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	26-90
2	Gauze 5m	26-50	2	Gauze 3m	18-30
Variant 7			Variant 8		
1	Starch 500g	13-50	1	Gauze 3m	18-65
2	Chlorhexidin bigluconat 0,1%- 100ml	12-30	2	Antibacterial soap 300ml	19-20

No. d/o	Name of the medicine form	Price	No. d/o	Name of the medicine form	Price
Variant 9			Variant 10		
1	Sol. Hydrogen peroxide 3%-100ml	8-20	1	Chlorhexidin bigluconat 0,1%- 100ml	21-90
2	Antibacterial soap 300ml	18-60	2	Antibacterial soap 60g	10-50
Variant 11			Variant 12		
1	Gauze 10m	38-50	1	Antibacterial soap 500ml	21-70
2	Starch 400g	17-90	2	Gauze 3m	18-50

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 Nr. ___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 values	UM	The amount	In the realization prices		In purchase prices		Purposes	Signature	
					Price	Sum	Price	Sum		Delivered	Received
Total											

Signatures:

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	Price	No. d/o	Name of the medicine form	Price
Variant 1			Variant 2		
1	T-ra Leonuri cardiacaе 25ml	9-20	1	T-ra Valerianaе 25ml	9-80
2	Tab.Validol N10	4-00	2	Sol.Amoniac 10% -25ml	17-20

No. d/o	Name of the medicine form	Price	No. d/o	Name of the medicine form	Price
Variant 3			Variant 4		
1	Sterile gauze 7×14	10-20	1	Sterile gauze 7×14	8-50
2	Sol.Iodi 5% -10ml	8-95	2	Sol.Brilliant green 1% -10ml	9-55
Variant 5			Variant 6		
1	T-ra Valerianae 25ml	9-30	1	Corvalol 25ml	9-20
2	Gauze 5m	26-50	2	Tab.Validol N10	4-00
Variant 7			Variant 8		
1	T-ra Valerianae 25ml	9-20	1	Picături cardiace 50ml	18-00
2	Sol.Amoniac 10% -25ml	13-15	2	Tifon steril 5×10	8-75
Variant 9			Variant 10		
1	Verde de brilliant 1% -10ml	8-95	1	Tab.Validol N10	4-00
2	Sterile gauze 7×14	8-25	2	T-ra Valerianae 25ml	9-10
Variant 11			Variant 123		
1	Sterile gauze 7×14	10-25	1	Cardiac drops 25ml	17-95
2	Sol. Brilliant green 1% - 10ml	8-95	2	Tab.Validol N10	4-10

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 Nr. ___ 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 values	UM	The amount	In the realization prices		In purchase prices		Purposes	Signature	
					Price	Sum	Price	Sum		Delivered	Received
Total											

Signatures:

Managed person _____ Accountant _____

Exercise 7. Considering the data of Tasks 5 and 6 draw up an "Act on the Settlement of Medicines and Other Material Values Used for Household Purposes and for First Medical Assistance."

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 Nr. ___ 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.

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

Amount in letters: _____

Signatures: Head _____

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. d/o	Name	UM	Series	Term of valid- ity.	Received (date, supplier)	The amou nt	The amount
Variant 1							
1	Maxigra 100mg N.4	amb.	00264	04.04.23	Vinamex, 01.09.21	1	189-55
2	Postinor N2	amb.	2732	09.04.23	Tetis, 02.06.21	2	99-70
3	Urolesan 15ml	amb.	12782	12.04.23	DitaEstFarm, 02.05.21	1	57-35
4	Alprazolam 0,5mg N30	amb.	064213	21.04.23	Tetis, 02.04.21	1	39-20
Variant 2							
1	Frontin 0,25mg N.30	amb.	012362	10.04.23	Vinamex, 01.06.21	1	24-20
2	Betagen 15g	amb.	06321	01.04.23	Tetis, 02.05.21	2	76-35
3	Siofor 1000 N60	amb.	08213	03.04.23	DitaEstFarm, 02.04.21	1	64-90
4	Prospan 100ml	amb.	02472	19.04.23	Vinamex 06.09.21	1	98-30
Variant 3							
1	Adep 30mg N30	amb.	06721	10.04.23	Virim Impex, 06.10.21	1	62-90
2	Sinaflan 0,025% -25g	amb.	01272	16.04.23	DitaEstFarm, 01.06.21	1	21-30
3	Furagin 50mg N30	amb.	042611	26.04.23	RihPanGalfarma, 12.02.21	1	42-65
4	Pancreatin N60	amb.	039126	11.04.23	RihPanGalfarma, 21.09.21	1	32-40
Variant 4							

No. d/o	Name	UM	Series	Term of validity.	Received (date, supplier)	The amount	The amount
1	Imudon N40	amb.	063245	01.04.23	Tetis, 01.02.21	1	124-50
2	Adenuric 120mg N.28	amb.	013216	07.04.23	Tetis, 01.02.21	1	290-80
3	Subtil N20	amb.	003216	11.04.23	DitaEstFarm, 01.02.21	1	89-70
4	Fromilid 250mg N14	amb.	001216	21.04.23	DitaEstFarm, 01.10.21	2	71-90
Variant 5							
1	Gabagamma 600mg N.100	amb.	03261	20.04.23	Vinamex, 01.02.21	1	314-90
2	Aksef 750mg sol. inj. N.1	amb.	01300	13.04.23	Dita, 02.01.21	1	30-85
3	Suprastin 25mg N20	amb.	04261	10.04.23	Tetis 02.10.11	1	69-80
4	Cefamed 1g sol inj. N.1	amb.	01362	21.04.23	RihPanGalfarma, 03.03.21	3	41-20
Variant 6							
1	Ketonal 100mg N10	amb.	26421	01.04.23	Tetis, 01.02.21	1	29-60
2	Imodium 2mg N10	amb.	26329	03.04.23	DitaEstFarm, 09.03.21	1	89-70
3	Betamaks 100mg N.30	amb.	26840	09.04.23	Tetis, 02.10.21	1	52-70
4	Ceraxon 100mg/ml 30ml	amb.	7625	10.04.23	RihPanGalfarma, 04.09.21	1	233-65
Variant 7							
1	Aerius 5mg N10	amb.	26392	02.04.23	DitaEstFarm, 01.02.21	1	78-90
2	Kaptopril 25 mg N20	amb.	32641	09.04.23	Tetis, 01.07.21	3	38-50
3	Amoxicilin 500 mg N10	amb.	42321	10.04.23	Vinamex 01.07.21	10	20-10
4	Alflutop 10mg/ml N10	amb.	61342	12.04.23	DitaEstFarm, 01.03.21	1	453-30
Variant 8							
1	Furagin 50mg N30	amb.	53267	03.04.23	Vinamex, 09.10.21	1	42-70
2	Maalox 250 ml	amb.	12364	16.04.23	DitaEstFarm, 01.07.21	1	78-20
3	Betamaks 50mg N.30	amb.	67432	21.04.23	Tetis 01.07.21	1	49-95
4	T-ra Propolis 25ml	amb.	12364	13.04.23	DitaEstFarm, 06.02.21	1	49-75
Variant 9							
1	ACC 200mg N.20	amb.	36241	06.04.23	Tetis, 10.02.21	1	66-90
2	Gaviscon N.16	amb.	76325	05.04.23	Vinamex, 12.01.21	1	70-50
3	Grippgo N10	amb.	3724	12.04.23	RihPangalFarm, 16.01.21	10	19-50
4	Aler-G 10 mg N.20	amb.	37213	14.04.23	DitaEstFarm, 10.01.21	1	55-80
Variant 10							
1	Famotidin 20mg N20	amb.	36241	06.04.23	Tetis, 10.01.21	1	34-50
2	Fokusin 0,4mg N.30	amb.	21734	07.04.23	DitaEstFarm, 17.03.21	1	76-50
3	Dimexid 50ml	amb.	73217	15.04.23	Vinamex 10.12.21	1	53-40
4	Duspatalin 200mg N20	amb.	27112	03.04.23	DitaEstFarm, 12.01.21	1	65-20
Variant 11							
1	Ceftinex 300mg N10	amb.	27213	12.04.23	Vinamex, 01.12.21	1	137-00
2	Cefamed 1.0	amb.	32126	10.04.23	RihPanGalfarma, 02.06.21	1	41-50
3	Klion-D sup.N.10	amb.	74127	06.04.23	DitaEstFarm, 01.06.21	1	78-50
4	Airtal100mg N60	amb.	3253	03.04.23	RihPanGalfarma, 06.05.21	1	172-80
Variant 12							
1	Diazolin 0,1 N20	amb.	7342	02.04.23	RihPanGalfarma	2	29-60
2	Enalapril 5mg N20	amb.	12342	09.04.23	DitaEstFarm, 13.02.21	1	32-15
3	Airtal cremă 60g	amb.	72132	12.04.23	Tetis, 01.06.21	1	99-60
4	Adaptol 500mg N.20	amb.	27314	14.04.23	DitaEstFarm, 01.10.21	1	163-50

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. d/o	Name	UM	The amount	Purchase prices		Realization prices		Cause of damage No, date of laboratory analysis
				Price	Sum	Price	Sum	
Total								

Conclusion of the commission _____

Signatures: Head _____
 Members of the commission _____
 Managed person _____

The act approves. Losses in the amount of _____ to be passed _____
 Pharmacist-Head _____ " _ " _____ 20 _

Note the destruction of material values settled _____

Conclusions and suggestions of the student:

The teachers signature _____

EVIDENCE OF OTHER STOCK MOVEMENTS. CASH FLOW IN PHARMACEUTICAL COMPANIES.

The purpose of the work: Appropriating the operations of recording the circulation of other material values and monetary means in pharmaceutical enterprises and the documentation of these operations and the preparation of the Report on cash flow of the circulation of material values in the pharmaceutical enterprise.

Form of training: Seminar and laboratory practical work

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. The structure, periodicity and method of drawing up and presenting the report.

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
Variant 1				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				Variant 4			
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 20l	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 20l	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 20l	10	79-00	2	Metal cake	3	164-00
3	Glass bottles 5l	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 Product name	The amount	Price
Variant 1				Variant 2			
1	Nettle leaves o	10 kg	80 lei/kg	1	Hyperici herbae	10 kg	120 lei/kg
2	Chamomile flowers	5kg	125 lei/kg	2	Linden flowers	5kg	150 lei/kg
Variant 3				Variant 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
Variant 5				Variant 6			
1	Linden flowers	15 kg	125 lei/kg	1	Chamomile flowers	10 kg	125 lei/kg
2	Chamomile flowers	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 lei/kg
Variant 9				Variana 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
Variant 11				Variant 12			
1	Chamomile flowers	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 Nr. ___ 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 collection price	Realization price	Amount in the realization price	The results of the analysis

No. d/o	Vegetable Product name	UM	The amount	Collection price	The amount in the collection price	Realization price	Amount in the realization price	The results of the analysis
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 2) in pharmaceuticals. The documents required for the operation: the positive results of the analysis of the medicinal plant product, carried out " __ " _____ 20 _ with Nr. _ .

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 this act

about the following product transfer medicinal plant

No d/o	Vegetable Product name	UM	The amount	Collection		Achievement		Analysis Number
				Price	Sum	Price	Sum	
Total								

Signatures:

Committee Chair _____ Members of the Committee _____

Managed person _____

Exercise 4. Based on the documents executed during previous laboratory work draw up the "Managing Management Report". Consider that all operations were performed within one month. The missing data for the report are taking arbitrary.

Name of the pharmaceutical unit _____ Tax Code

Section _____

"APPROVED"

(N.S.) signature

"__" _____ 20__

MANAGING MANAGEMENT REPORT

From "__" _____ 20__ to "__" _____ 20__

Managed person _____

(N.S.)

(signature)

No. d/r	Name, No. d/r and date of the document Supplier	Sum						
		Medicines		Package	Auxiliary materials	Other material values		
		Retail price	Wholesale price					
	Stock at 01.							
	Inputs							
	Total inputs							
	Outputs							
	Total outputs							
	Stock at 01.							

Annex: _____ documents

Report and documents received

Corrections accept. Stock of goods in the amount

Verified _____

_____, confirm

Accountant _____ signature _____

Managed person _____ signature

Exercise 5. 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 company _____

Name of the company _____

TRANSMISSION BOOK Nr. _____

RECEIPT
TENDER BET NO. _____

"__" _____ 20__

"__" _____ 20__

The corre- spondence account	Analytical evidence account	The value	Special destina- tion code

Received from _____

Received from _____

Based on _____

Based on _____

(value in letters)

(value in letters)

_____ lei _____ bani _____ lei _____ bani

Annex _____

Chief Accountant _____ Head Accountant _____

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

address

Name of the beneficiary _____ Tax Code

Name, Surname of the beneficiary

Address

No.	Name of goods (works, services)	U. M.	The amount	Value exclud- ing VAT	VAT amount	Income tax	Total pay- ment

Total charged _____

Beneficiary's signature _____

Exercise 6. 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__

The correspond- ence account	Analytical evidence account	The value	Special destination code

(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 7. 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 35760 lei	2. RihPanGalFarma worth 98465-00 lei
3. EsculapFarm worth 46620-20 lei	4. Farmina worth 65250-20 lei
5. RihPanGalFarma worth 52674 lei	6. UniFarm worth 33710-55 lei
7. Sanfarmprim worth 49926-60 lei	8. RihPanGalFarma worth 85480 -00 lei
9. Vinamex worth 72825-80 lei	10. Lismedfarm worth 61340-00 lei
11. Tetis International Co worth 64375-00 lei	12. Becor worth 52450-95 lei

Payment order

No. DATA EMITERII .DOC. TYP. 1

Pay <input type="text"/>		LEI <input type="text"/>	
Payer <input type="text"/> (R)		IBAN Code <input type="text"/>	
		CODUL FISCAL <input type="text"/>	
Paying provider			
Benefit <input type="text"/> (R)		IBAN Code <input type="text"/>	
		Tax code <input type="text"/>	
PRESTATORUL BENEFICIAR			
Payment destination		Transfer Type NORMAL/URGENT	<div style="border: 1px solid black; border-radius: 50%; width: 100px; height: 100px; display: flex; align-items: center; justify-content: center;"> L. S. </div>
<input type="text"/>		<div style="border: 1px solid black; padding: 2px 10px;">N</div>	
<input type="text"/>			
<input type="text"/>			
<input type="text"/>			
Transaction code <input type="text"/>	Date of receipt <input type="text"/>	Date of execution <input type="text"/>	Signatures of the Issuer
		Signature of the provider	L. S.
Reason for refusal			

Conclusions and suggestions of the student:

The teachers signature _____

LABOR AND WAGES RECORDS. CONSUMPTION, EXPENSES AND RESULTS OF THE ECONOMIC ACTIVITY OF PHARMACEUTICAL ENTERPRISES

The purpose of the work: 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.

Form of training: Seminar and laboratory practical work

Duration: 4 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. Commercial payment and economic characteristics. Formation of commercial rebate. His destination. Prime cost.
11. Determination of realized and unrealized added value.
12. Results of financial-economic activity of pharmaceutical companies.
13. General considerations on the taxation of pharmaceutical companies. The structure of the balance sheet.

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 8⁰⁰ and 20⁰⁰, 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

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

Exercise 3. Calculate the amount of the insurance subsidy during the temporary incapacity for work of a pharmacist with ___ years of service. Use the data from the previous problems.

Exercise 5. Calculate the size of the payment for ordinary leave for a worker in pharmacy. Use the data from previous tasks.

Exercise 6. 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 7. Transfer all expenses incurred by the pharmacy (see problems of the previous laboratory work) to the appropriate items according to the form proposed in the table below.

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

Exercise 8. Based on exercise 7 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 turnover of pharmacy

Pharmacy _____

Draft expenditure for the year 20 __.

Turnover in the reporting year 6520750-55 lei.

The project turnover for the year 20 __, _____ lei.

N d/o	Item name	Fulfilling for the reported year		The project for the year 20__	
		Sum	%	Sum	%
1.	Auxiliary materials	3000			
2.	Salary			
3.	Contributions for social insurance and social protection			
4.	Maintenance and repair costs of fixed assets for administrative and general economic purposes	16000			
5.	Expenditure on fuel, gas, electricity, water	62000			
6.	Ensuring enterprise assets	10000			
7.	Amortization of intangible assets	15000			
8.	Wear of inventory items (dishes, special sanitary clothing, underwear)	1000			
9.	Expenditure on packaging operations	5000			
10.	Current expenditure on rent of premises and equipment, unrelated to production	12000 0			
11.	Payments for banking, auditing, legal and other services	60000			
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	5000			
15.	Expenditure on maintenance of security and fire safety assurance	30000			
16.	Judicial and arbitration costs	-			
17.	Office, post, telephone and telegraph charges	20000			
18.	Payments to charity organizations	-			
19.	Expenditure on studies (training of staff)	5000			
20.	Expenses related to development, for research, design and experimentation	-			
21.	Fees, fees, and other mandatory payments except for income tax (profit)	10000			
22.	Expenditure on labor remuneration and security techniques	15000			
23.	Travel expenses	-			
24.	Expenditure on transport employees	-			
25.	Expenditure on environmental protection	10000			
26.	Other administrative and general expenses of the household			

Exercise 9. Calculate the value and amount of the rebate made for the month _____. Please note the data in the table below:

Current situation and circulation of pharmaceuticals	Value (lei)		Current situation and circulation of pharmaceuticals	Value (lei)	
	In the realization prices	In acquisition prices		In the realization prices	In acquisition prices
Variant 1			Variant 2		
Balance Mar 01.03	650141-80	548275-50	Balance Mar 01.03	766080-35	654755-35
March inputs	680162-50	661052-45	March inputs	800270-25	690150-90
Realization	693599-25	-	Realization	770150-57	-
other outputs	1117-75	947	other outputs	783-45	670-20
Balance 01.04 April			Balance 01.04 April		
Variant 3			Variant 4		
Balance Mar 01.03	813352-40	694683-70	Balance Mar 01.03	876342-05	749475-25
March inputs	852090-20	729278-50	March inputs	864200-60	739084-90
Realization	800758-15	-	Realization	621225-16	-
other outputs	2091- 80	1807-50	other outputs	982-80	840-60
Balance 01.04 April			Balance 01.04 April		
Variant 5			Variant 6		
Balance Mar 01.03	989545-65	859789-55	Balance Mar 01.03	1209780-30	1034143-35
March inputs	961250-45	825725-60	March inputs	1399101-95	1196010-50
Realization	800262-63	-	Realization	1138960-25	-
other outputs	2283-05	1958- 65	other outputs	1597-05	1365-30
Balance 01.04 April			Balance 01.04 April		
Variant 7			Variant 8		
Balance Mar 01.03	672712-40	580455-50	Balance Mar 01.03	989854-00	886503-25
March inputs	684053-20	590842-40	March inputs	930520-50	851757-55
Realization	651240-65	-	Realization	919248-25	-
other outputs	952-85	821-65	other outputs	3001-65	2567-05
Balance 01.04 April			Balance 01.04 April		
Variant 9			Variant 10		
Balance Mar 01.03	998998-95	882503-65	Balance Mar 01.03	793934-65	689475-35
March inputs	885220-60	869981-50	March inputs	820759-70	706003-40
Realization	864565-50	-	Realization	791330-05	-
other outputs	3119-65	2689-05	other outputs	1109-90	955-85
Balance 01.04 April			Balance 01.04 April		
Variant 11			Variant 12		
Balance Mar 01.03	954156-15	819385-35	Balance Mar 01.03	1145769-35	992058-45
March inputs	968256-95	832265-85	March inputs	1142695-75	989705-40
Realization	942617-50	-	Realization	999784-50	-
other outputs	2175-95	1875- 85	other outputs	2247-90	1945-30
Balance 01.04 April			Balance 01.04 April		

Exercise 10. Calculate the coefficient and the level of prime cost for the same period.

--

Exercise 11. 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

1. Realizing 925,7 thousand lei N RC=19,3%	2. Realizing 880,127 thousand lei N RC=19,3%	3. Realizing 925,14 thousand lei N RC=18,3%	4. Realizing 1329,3 thousand lei N RC=17,6%
5. Realizing 965,16 thousand lei N RC=18,2%	6. Realizing 795,765 thousand lei N RC=19,2%	7. Realizing 1250,92 thousand lei N RC=16,5%	8. Realizing 896,57 thousand lei N RC=17,3%
9. Realizing 579,58 thousand lei N RC=18,4%	10. Realizing 496,95 thousand lei N RC=16,8%	11. Realizing 968,65 thousand lei N RC=18,2%	12. Realizing 671,59 thousand lei N RC=14,9%

--

Exercise 12. 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.

1. The volume of realization - 6599,6 th. lei, Pharmacy revenue from other activities 28,2 th. lei, N RC= 18,4% Operating expenses of the basic activity. 794,5 th lei Other expenses. 27,525 th lei	2. The volume of realization - 8798,25 th. lei, Pharmacy revenue from other activities.27,2 th lei N RC= 19,6% Operating expenses of the basic activity 849,5 th. lei Other expenses. 32,563th lei	3. The volume of realization - 4350,55 th. lei, Pharmacy revenue from other activities 27,6 th. lei N RC= 19,7% Operating expenses of the basic activity 698,6 th lei Other expenses. 24,563 th lei
4. The volume of realization - 3521,2 th lei, Pharmacy revenue from other activities 19,31 th lei N RC= 18,1% Operating expenses of the basic activity 491,4 th lei Other expenses. 5,795 th lei	5. The volume of realization - 2256,5th lei, Pharmacy revenue from other activities 12,4 th lei N RC= 17,6% Operating expenses of the basic activity. 312,3 th lei Other expenses. 6,234 th lei	6. The volume of realization - 4596,9 th lei, Pharmacy revenue from other activities.17,6 th lei N RC= 18,3% Operating expenses of the basic activity. 683,2 th lei Other expenses. 9,564 th lei
7 The volume of realization - 2351,5 th lei, Pharmacy revenue from other activities 15,74 th lei N RC= 18,4% Operating expenses of the basic activity. 418,97 th lei Other expenses. 14,539 th lei	8. The volume of realization - 3129,58 th lei, Pharmacy revenue from other activities 28,72 th lei N RC= 17,8% Operating expenses of the basic activity. 498,8 th lei Other expenses. 21,275 th lei	9. The volume of realization - 4528,7 th lei, Pharmacy revenue from other activities 12,18 th lei N RC= 18,7% Operating expenses of the basic activity. 793,2 th lei Other expenses. 23,720 th lei
10. The volume of realization - 5986,3 th lei, Pharmacy revenue from other activities 27,2 th lei N	11. The volume of realization - 8906,5 th lei, Pharmacy revenue from other activities 19,25 th lei	12. The volume of realization - 7989,5 th lei, Pharmacy revenue from other activities. 21,272 th lei

RC= 18,9% Operating expenses of the basic activity 997,3 th lei Other expenses. 12,7 th lei	N RC= 20,7% Operating expenses of the basic activity 1498,5 th lei Other expenses. 24,9 th lei	N RC= 19,05% Operating expenses of the basic activity. 1257,9 th lei Other expenses. 24,65 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 _____

MONITORING MANAGEMENT OF PHARMACEUTICAL ACTIVITY. INVENTORY OF MATERIAL ASSETS IN PHARMACEUTICAL COMPANIES

The purpose of the work: 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.

Form of training: Seminar and laboratory practical work

Duration: 4 hours.

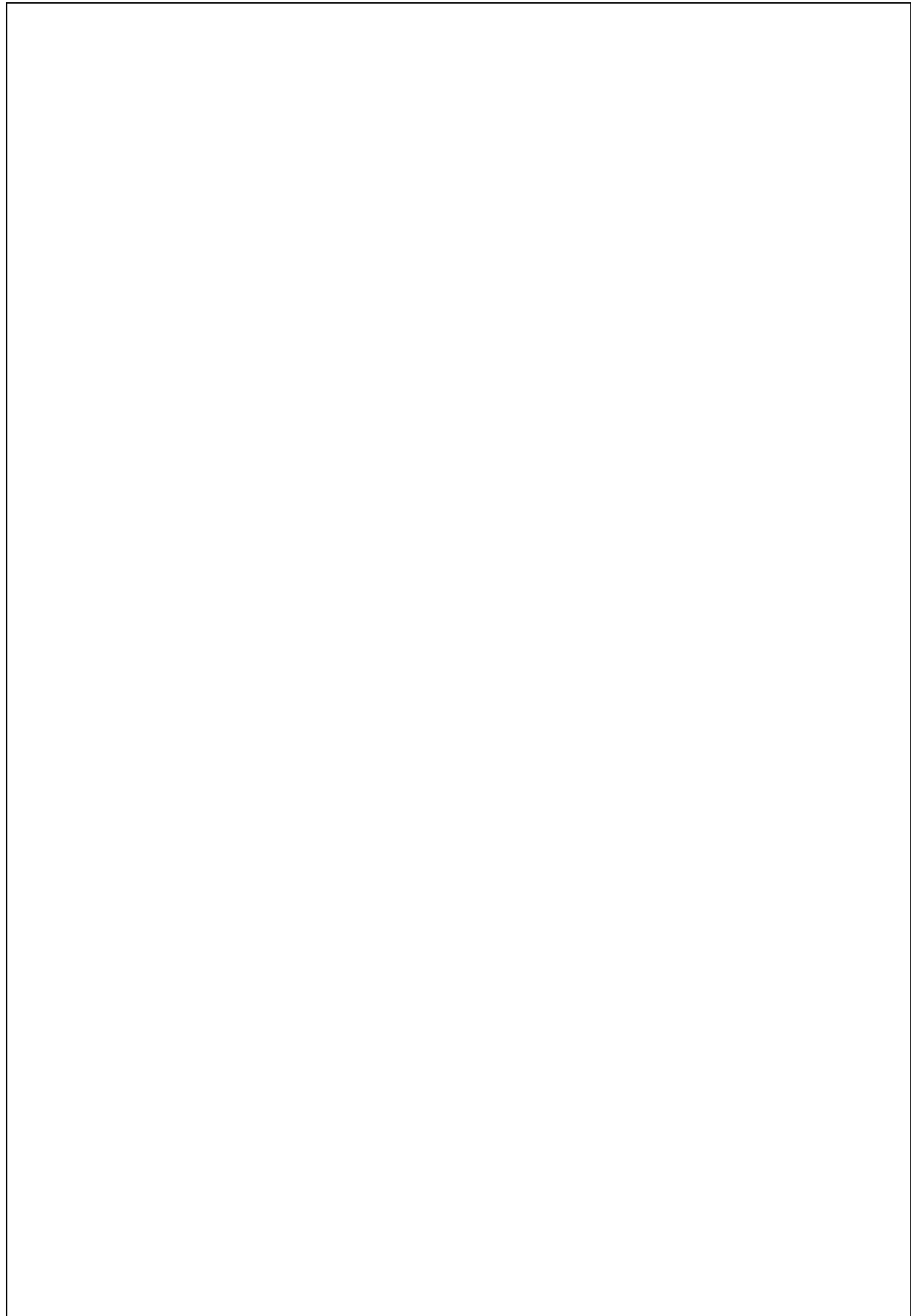
Questions for self-learning:

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

Exercises for self-solving.

Exercise 1. Indicate the content of the control of the following domains in relation to the reference normative acts:

- a) Legality of pharmaceutical activity;
- b) Assortment of medicines, other pharmaceutical and parapharmaceutical products;
- c) Prices of medicines and other pharmaceutical products.



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)

No. _____ from _____ 20__

In order to perform inventory at _____
(the name of the compartment)

inventory committee is established in the following composition:

President (position, name, surname) _____

Commission members (position, name, surname)

1. _____ 2. _____
3. _____ 4. _____

(indicated divisions, goods to be inventoried)

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 by _____
function _____ until the _____

Head pharmacist _____

pharmaceutical company name _____

INVENTORY DECLARATION

The undersigned _____ manager of _____
Name surname _____ the name of the subdivision _____

appointed by decision no. _____ from _____, in the presence of the committee I declare:

1. All goods under the management of the undersigned are located in the warehouses (rooms): _____

2. Posed (not posed) goods belonging to _____

3. I have (I do not have) knowledge of the existence of pluses worth (quantity) of _____

4. I have (I do not have) released goods without legal documents.

Beneficiary _____.

5. I have (I do not have) goods not accepted or to be dispatched, for which the related documents have been prepared in the amount of _____

6. have (I do not have) receipt / surrender documents that have not been taught in 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 documents:

type _____ no. _____ from _____

type _____ no. _____ from _____

10. The last management report was drawn up on _____ for the period _____.

11. Other mentions _____

Taught in our presence	Signatures	Manager
		Date _____ Hour _____

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 _____
(Name, surname) (function) (Signature)

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
5. _____ lei _____ bani

(Monetary document name)

TOTAL actual:
in national currency _____ lei _____ bani
In foreign currency (_____)

According to the accounting data:
in national currency _____ lei _____ bani
In foreign currency (_____)

Inventory results:
Pluses _____ lei _____ bani _____
Pluses _____
Shortcomings _____ lei _____ bani _____

Last numbers of the provisions:
Collection No. _____ from _____ 20__
Payment No. _____ from _____ 20__



Inventory Commission:

Chairman of the Inventory Commission: _____
(Name, surname) (Signature) (function)

Members of the Inventory Commission: _____
(Name, surname) (Signature) (function)

No. d/o	Name goods inventoried	Code or inventory number	Measure units	Effective quantity	Amount recorded in accounting	Quantitative difference	Unit price recorded in accounting	Balance sheet value	Inventory Value	Depreciation
Total on the page		X	X				X			X
Name and surname		Members of the Inventory Commission				Manager		Manager *	Accountant.	
Signature										

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

Last page of the form INV-1

Total on the list:
ordinary numbers.

_____ *in figures* _____ *in letters*

Total actual units

_____ *in figures* _____ *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*

_____ *function* _____ *name, surname* _____ *signature*

" _____ " _____ 20__

Enterprise					Page
Section					1
LIST OF INVENTORY					
from _____ 20__					
No. cr	Code or name	Characteristic	UM	Effective inventory	Inventory recorded in accounting
A	1	2	3	4	5
Total on the page		x	x		
Name and surname	Inventory Commission	Signature	Manager (i)		Signature
			Accountant		Signature

INV-2 Management related records in quantitative expression

*Last page of the form INV-2*Total on the list:
ordinary numbers.

_____	_____
<i>in figures</i>	<i>in letters</i>

Total actual units

_____	_____
<i>in figures</i>	<i>in letters</i>

Chairman of the commission

_____	_____	_____
<i>function</i>	<i>name, surname</i>	<i>signature</i>

Members of the commission

_____	_____	_____
<i>function</i>	<i>name, surname</i>	<i>signature</i>

_____	_____	_____
<i>function</i>	<i>name, surname</i>	<i>signature</i>

_____	_____	_____
<i>function</i>	<i>name, surname</i>	<i>signature</i>

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):

_____	_____	_____
<i>function</i>	<i>name, surname</i>	<i>signature</i>

_____	_____	_____
<i>function</i>	<i>name, surname</i>	<i>signature</i>

" _____ " _____ 20__

REGISTER
of verification of inventory results

No. d/o	Name of inventoried goods	Code or Inventory number	Unit of measurement	Inventory results: Inventory results									
				Sold		Differences		Unit Price, (lei)	Value registered in General Ledger, (lei)	Actual value, (lei)	Differences, (lei)		
				Registered General Ledger	Actually	Phases	Short-comings				Phases	Short-comings	
A	1	2	3	4	5	6	7	8	9=4x8	10=5x8	11=10-9	12=9-10	
TOTAL:													X

THE INVENTORY COMMITTEE:

Chairman of the Inventory Commission: _____
 Members of the Inventory Commission: _____

 (name, surname) _____ (signature)

 (name, surname) _____ (signature)

THE CONTENT OF THE INDIVIDUAL WORK FOR STUDENTS DURING THE STUDY OF THE DISCIPLINE "MANAGEMENT AND LEGISLATION FARMACEUTICĂ"

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. Thus, during each semester, each student must complete at least two assignments from the recommended fields of activity, or as indicated by the teacher, and from other fields related to the topics of the analytical plan of the discipline. Assignments must be completed in the recommended form and submitted for assessment at least two weeks before the end of the semester. The student's individual activities are assessed with a grade, which is a component of the annual (semester) average grade.

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.

Evaluation criteria: The quality of the systematization of the information material obtained through own activity; Concordance of the information with the proposed theme; The degree of argumentation of the conclusions; Ingenuity of presentation, creativity.

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.

Evaluation criteria: The quality of the systematization of the information material obtained through own activity; The ability to analyze and understand the topic under discussion; The ability to formulate and present one's own position on this topic; Ability to use creativity and acquired knowledge.

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.

Evaluation criteria: The ability to identify topical issues; The ability to think and approach problems and situations; Analysis, synthesis, generalization of data obtained through own investigation; Formation of a knowledge algorithm based on the obtained conclusions.

THE CONTENT OF THE INDIVIDUAL WORK FOR SEMESTER I

Field I. MANAGEMENT AND APPLICATION OF ITS ELEMENTS (COMPONENTS) IN THE PHARMACEUTICAL FIELD.

The general management features. Functions of management. General characteristic of management 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 individual study: *integration, search and self-assessment;*

Expected product: *individually identified case study and resolved, personal investigations.*

Exercises for self-solving

Exercise 1. Case study

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.

Questions:

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

Control System Matrix

Phases	Material resources	Human resources	Information resources
Preliminary control			
Examination control			
Subsequent control			

Exercise 2. Essay

Topic: The role of control in directing the activity of the organization and for each employee.

Exercise 3. 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

Afirmații	Acord total	Acord parțial	Nu sunt sigur	Dezacord parțial	Dezacord total
1. Most people do not like to work.	5	4	3	2	1
2. When people are given the chance to think for themselves, most of them are brilliant.	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 potential of their employees.	5	4	3	2	1
16. If they were given the chance, some employees would propose innovative solutions 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

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

Questions for Theory X		
Number		Score
1		
4		
5		
7		
8		
11		
12		
14		
17		
18		
Total		

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

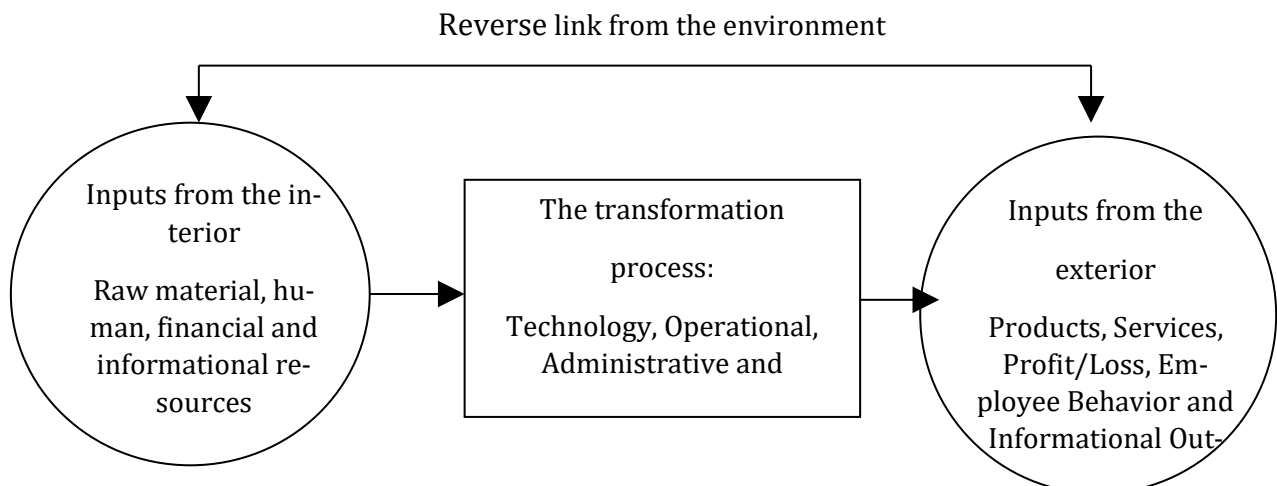
Questions:

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 4. 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.



Systemic organizational model

Organizations	Inputs	The transformation process	Outputs
Pharmaceutical factory			
Pharmaceutical warehouse			
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 5. Report

Topic: Managerial leadership style and its impact on work team activity.

Exercise 6. 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.

Job	Legitimate power	Capacity to reward work	Capacity to be an expert	Capacity of constraint
Pharmacist manager of pharmaceutical warehouse				
Chief of department of industrial pharmaceuticals				
Chief of manufacturing department in the pharmaceutical factory				
Chief of a pharmacy subsidiary				
Pharmacist manager in a community pharmacy				
Pharmacist manager in a hospital pharmacy				
Pharmacist in a community pharmacy				
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 of constraint	
Capacity to be an expert	
Chief of department of industrial pharmaceuticals	
Legitimate power	
Capacity to reward work	
Capacity of constraint	
Capacity to be an expert	
Chief of manufacturing department in the pharmaceutical factory	
Legitimate power	
Capacity to reward work	
Capacity of constraint	

Capacity to be an expert	
Chief of a pharmacy subsidiary	
Legitimate power	
Capacity to reward work	
Capacity of constraint	
Capacity to be an expert	
Pharmacist manager in a community pharmacy	
Legitimate power	
Capacity to reward work	
Capacity of constraint	
Capacity to be an expert	
Pharmacist manager in a hospital pharmacy	
Legitimate power	
Capacity to reward work	
Capacity of constraint	
Capacity to be an expert	
Pharmacist in a community pharmacy	
Legitimate power	
Capacity to reward work	
Capacity of constraint	
Capacity to be an expert	
Pharmacist assistant	
Legitimate power	
Capacity to reward work	
Capacity of constraint	
Capacity to be an expert	

Field II. THE PHARMACEUTICAL SYSTEM - PART OF THE HEALTH SYSTEM.

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, re-evaluation, 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?

Exercise 4. Essay

Topic: The specifics of obtaining the activity license in the pharmaceutical field through the prism of the legislation of the Republic of Moldova.

Field III. MEDICINES, PHARMACEUTICAL MARKET AND ACTIVITIES OF IT ASSURANCE. THE PHARMACOVIGILANCE SYSTEM.

The medicine and other pharmaceuticals as a subject of study of pharmaceutical assistance. Authorization of medicines. Pharmacovigilance activity. Ensuring the quality of medicines.

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

Expected product: *individually identified case study, personal investigations.*

Exercises for self-solving

Exercise 1. Report

Topic:

1. The particularities of the drug authorization procedure in Romania.
2. The particularities of the drug authorization procedure in Germany.
3. The particularities of the drug authorization procedure in France.
4. The particularities of the drug authorization procedure in Italy
5. The particularities of the drug authorization procedure in Great Britain.
6. The particularities of the drug authorization procedure in China.
7. The particularities of the drug authorization procedure in Japan.
8. The particularities of the drug authorization procedure in Ireland
9. The particularities of the drug authorization procedure in the USA.
10. The particularities of the drug authorization procedure in India.
11. The particularities of the drug authorization procedure in Australia.
12. The particularities of the drug authorization procedure in Mexico.

Exercise 2. Essay

Topic: Present the recommended international norms and standards for drug analysis and

control in WHO prequalified drug quality control laboratories.

Source: <https://extranet.who.int/pqweb/medicines/medicines-quality-control-laboratories-list>

Exercise 3. Case study

Use the ADRREPORTS Online Platform User Manual to study reports of suspected adverse reactions to 5 medications proposed by the professor (see <https://www.adrreports.eu/ro/search.html>).

Exercise 4. Case study

Study the VigiAccess online platform and select available statistical data on adverse reactions reported to the WHO Program for International Drug Monitoring (WHO PIDM) for 5 drugs/INNs proposed by the professor (see <https://www.vigiaccess.org/>).

Exercise 5. Case study

Carry out a comparative study between the pharmacovigilance system in the Republic of Moldova and that in Romania through the lens of the following criteria: national and international regulations; the responsible authority and its interaction with marketing authorization holders, specialists in the field and patients; collaboration with the Uppsala monitoring center.

Field IV. THE PRODUCTION AND SUPPLY OF MEDICINES.

Industrial production of medicines. Supply of medicines. Pharmaceutical warehouse, its tasks and functions.

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

Expected product: *individually identified case study, personal investigations.*

Exercises for self-solving

Exercise 1. Case study

On the basis of the licensing register, present a brief analysis of pharmaceutical companies producing drugs and argue for the supply of indigenous drugs to the pharmaceutical market in the Republic of Moldova. See also the State Nomenclature of Medicines.

Exercise 2. Essay.

Topic: Donations of medicines to the Republic of Moldova in the context of exceptional situations: notions, regulations, requirements.

Exercise 3. Report.

Topic: Harmonization of normative acts in the field of GMP implementation with the EC legislative framework.

Exercise 4. 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 criteria 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?

THE CONTENT OF THE INDIVIDUAL WORKS FOR HE II SEMESTER.

Field V. THE OUTPATIENT PHARMACEUTICAL CARE SYSTEM.

Prescribing and dispensing medicines. The community pharmacy.

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

Expected product: *individually identified case study, qualified approach and resolved; personal investigations.*

Exercises for self-solving

Exercise 1. Case study

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.

Exercise 2. Case study

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.

Exercise 3. Report

Topic: WHO recommendations on the rational use of medicines.

Exercise 4. Report

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

Exercise 5. Report

Topic:

1. Specific features of drug dispensing in France
2. Specific features of drug dispensing in Germany
3. Specific features of drug dispensing in Denmark
4. Specific features of drug dispensing in Spain
5. Specific features of drug dispensing in Russia
6. Specific features of drug dispensing in the UK
7. Specific features of drug dispensing in Italy
8. Specific features of drug dispensing in the USA
9. Specific features of drug dispensing in Portugal
10. Specific features of drug dispensing in Romania
11. Specific features of drug dispensing in Bulgaria
12. Specific features of drug dispensing in Australia

Field VI. THE SYSTEM OF THE MEDICINES ASSISTANCE FOR THE STATIONARY PATIENTS.

Tasks of the individual study: *setting business objectives, designing integration, searching and evaluating, re-evaluating, improving, creating.*

Expected product: *Case study; essay*

Exercises for self-solving

Exercise 1. Case study.

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.

Exercise 2. Essay

Topic: Comparative analysis of the National Pharmacotherapeutic Formulary and the Pharmacotherapeutic Formulary of a public medical-sanitary institution (as indicated by the teacher).

Exercise 3. Case study.

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.

Exercise 4. Essay.

Topic: Highlighting drug delivery problems in stationary conditions.

Field VII. RECORDS AND PRIMARY MANAGEMENT IN PHARMACEUTICAL 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 study; essay.*

Exercises for self-solving

Exercise 1. Case study

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:

Economic Indicators	The current year			
	Plan	Factice	Absolute growth	Growth in %
Output according to outpatient recipe (thousands of lei)	4155.00	5029.00		
Prescriptions (thousand units)	18608	17057		
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.

Exercise 2. Case study

A young specialist pharmacist, with 2 years of work experience, receiving the salary was surprised by the calculated amount, the salary was lower than in the previous months. The pharmacist called the accountant for an explanation. The accountant reminded him that he was sick 10 days in the month for which the salary was calculated.

Questions:

1. Indicate which normative acts regulate the calculation method for temporary incapacity for work.
2. According to what criteria is the monthly amount of the allowance for temporary work incapacity calculated.
3. What documents serve as the basis for calculating the allowance for temporary incapacity for work.
4. Indicate the method of calculating the allowance for temporary incapacity for work for the given situation.

Exercise 3. Case study

In the "Arnica Farm" pharmacy, which opened recently, with working hours from 8:00 a.m. to 8:00 p.m., the average cash flow per day in the first month was 5,000 lei. All the expenses of the pharmacy constitute 59 thousand lei per month. The markup applied in the environment is 18.9% and is the only source of profit for the pharmacy.

Questions:

1. Determine what cash flow into the environment needs to be per day for the pharmacy to be profitable.
2. Indicate what factors influence cash flow

3. Indicate what steps could be taken to increase the cash flow.

Exercise 4. Case study

The "Levăntica Farm" pharmacy purchased a computer in the amount of 75000-00 lei, with a 5-year operating term. It was put into operation and registered on 01.06.2022.

Questions:

1. Indicate which normative acts regulate the classification and method of recording fixed assets.
2. Calculate, using the straight-line method, the value of the depreciation of the computer on 04/01/2023.

Exercise 5. Case study

The "Calendula Farm" community pharmacy has 2 sections. The production section and the industrial forms section and 4 branches.

According to the contracts, the pharmacy serves the municipal hospital No.4 with 90 beds, the republican narcological dispensary with 70 beds and the prophylactic of the "Franzeluța" factory.

Questions:

1. Name the types of cash flows in the pharmacy according to the organizational structure and the companies served.
2. Indicate the factors influencing cash flow.
3. Plan the total flow for next year, if it is known that in the current year the pharmacy released products in the amount of 6200 thousand lei, of which 55% to the population and 45% to medical and sanitary institutions. Take into consideration that next year the financing for the purchase of medicines for the municipal hospital No.4 is expected in the amount of 1900 thousand lei, the narcological dispensary 750 thousand lei and the "Franzeluța" factory has allocated an amount of 95 thousand lei. It is planned to increase the retail flow by 3%.

Exercise 6. Case study

An inventory of material values was made in the pharmacy "Valeriana Farm". As a result of the control in the production section, it was found that the balance of Ethyl alcohol 95% is 2.7 kg (the balance of ethyl alcohol according to the data of the previous inventory was 5.3 kg, the inputs in this period - 15 kg, the outputs according to the extemporaneous recipe were 17 kg).

Questions:

1. Indicate according to which document the inventory was spent in the pharmacy.
2. Indicate which accounting method was used to verify the actual balances of material values.
3. Indicate which drug groups are on the quantitative record in the community pharmacy.
4. Indicate when it applies and how to calculate the natural perishability within the limits of the norm.
5. Determine the inventory results of Ethyl Alcohol 95%.
6. Indicate to which expense item the losses within the limits of natural perishability will refer.

Exercise 7. Report

Topic: Drug pricing systems in some countries.

Exercise 8. Report

Topic: The world's experience in drug pricing.

Exercise 9. Report

Topic: Establishing a differentiated mechanism for applying the markup to the formation of prices for medicines in the Republic of Moldova - advantages and problems.

Field VIII. MONITORING MANAGEMENT OF PHARMACEUTICAL ACTIVITY AND THE INTEGRITY OF RESOURCES.

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.*

Exercises for self-solving

Exercise 1. Case study

As a result of the planned control of the "Adonis-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. Three packs of Prednizolon 0.1N 50 tablets were detected as expired.
3. 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).
4. 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 pharmaceutical activity of the pharmacy "Adonis-Farm"
6. Indicate the contraventions that can be applied based on the control performed.

Exercise 2. Report

Topic: Regulation of the Control of the exercise of pharmaceutical activity in different countries.

Exercise 3. Report

Topic: Control of pharmaceutical activity in the Republic of Moldova, problems and solutions.

Exercise 4. Essay

Topic: Controlling the integrity of material, financial and human resources in pharmaceutical enterprises.

BASIC LITERATURE

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