И. Н. КИСЕЛЕВИЧ

ПРАКТИКУМ ПО ФАРМАЦЕВТИЧЕСКОЙ ТЕРМИНОЛОГИИ И РЕЦЕПТУ

Учебно-методическое пособие по латинскому языку для студентов 1 курса факультета по подготовке специалистов для зарубежных стран медицинских вузов

PRACTICAL TRAINING IN PHARMACEUTICAL TERMINOLOGY AND PRESCRIPTION

Practical workbook on the Latin language for first-year students of Faculty on preparation of experts for foreign countries of medical higher educational institutions

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Предназначено для студентов 1 курса факультета по подготовке специалистов для зарубежных стран медицинских вузов.


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LESSON 1.
INTRODUCTION TO THE PHARMACEUTICAL TERMINOLOGY

The main objectives of the lesson are:
1) to learn the basic theoretical information about pharmaceutical terminology;
2) to train in writing the medicine names in Latin;
3) to train in using the capital and small letters in pharmaceutical terminology;
4) to train in writing Latin names of medicinal preparations.

§1. Basic pharmaceutical terms and their definitions

Pharmaceutical terminology is a complex of special terms used in the branch of medicine known as pharmacy (Greek pharmakeia) which deals with getting, processing, producing, storing and handing out medicines.

The basic pharmaceutical terms are the pharmaceutical substance, the medicinal vegetable raw materials, the medicine (drug), the medicinal form and the medicinal preparation.

Pharmaceutical substance is a substance of natural, synthetic or biotechnological origin having pharmacological activity and used for industrial production of medicines and for making them at pharmacies.

Herbal medicinal raw materials are whole medicinal plants or parts of medicinal plants (roots, rhizomes, tubes, herbs, flowers, spores, fruit, seeds, stalks, bark, leaves) used for industrial production of medicines and for making them at pharmacies.

Medicine (drug) is a pharmaceutical substance or a combination of several pharmaceutical substances which have pharmacological activity and are permitted to be used orally or externally for prevention, diagnostics and treatment of diseases. /Law of the Republic of Belarus of the 20th of July of the year 2006 № 161-3 “On medicines”/

A medicine which has undergone special clinical testing and is approved to be used in medical practice must be obligatory registered in the International Non-proprietary Names. INN is a nomenclature system used to identify active ingredients of medicines. Each INN is a unique name that is internationally consistent and globally recognised. The INN system began operating in 1953 and is now administered by the World Health Organisation. The aim of the INN system is to provide healthcare professionals with a unique and universally available designated name to identify each pharmaceutical substance. The existence of such a nomenclature assists in the clear identification, safe prescription and dispensing of medicines to patients; and facilitates communication and exchange of information among healthcare professionals and scientists world-wide.
There are distinguished the original medicine having the brand name and the generic medicine having the generic /scientific name.

Original medicine is a medicine which differs from the previously registered medicines by its pharmaceutical active substance or a combination of such substances.

Generic medicine is a medicine containing the same pharmaceutical substance or a combination of pharmaceutical substances in the same medicinal form as the original medicine. It is equivalent to the original medicine and therapeutically interchangeable with it.

Original medicine is given a brand name by the pharmaceutical company which developed it. This company takes out a patent (exclusive rights) on this medicine to ensure that it regains the money spent on its research and development. Once the patent protection expires, other companies can produce their own version of the medicine (generic medicine). Generic medicines are usually cheaper because there are fewer research and development costs, but they contain the same active ingredient as the branded products.

Medicinal form is a state of a medicine which makes it convenient to use. There are divided into:

- **liquid medicinal forms** (emulsion; extract; infusion; liniment; mixture; solution; suspension; tincture);
- **soft medicinal forms** (ointment; paste; suppository);
- **solid medicinal forms** (tablet; capsule; dragee, powder; species; pill).

Medicinal preparation is some medicine in a certain medicinal form (tablet of analgine; zinc paste).

§2. Medicine names

There are three types of medicine names: non-proprietary names, chemical names and trade names.

Non-proprietary medicine names consist of one word only. They are not translated into other languages, they are transcribed, i. e. are written with the letters of Latin alphabet and get specific Latin endings. As a rule, such medicine names are second declension neuter nouns with the ending –um / -ium.

<table>
<thead>
<tr>
<th>English name</th>
<th>Latin name</th>
</tr>
</thead>
<tbody>
<tr>
<td>corvalole</td>
<td>Colvalolum, i n</td>
</tr>
<tr>
<td>atropine</td>
<td>Atropinum, i n</td>
</tr>
<tr>
<td>chloroform</td>
<td>Chloroformium, i n</td>
</tr>
</tbody>
</table>

But many medicines preserve their chemical names corresponding to their chemical composition. They are:

- names of chemical elements: Zinctum (zinc), Iodum (iodine);
- names of salts: Calciu gluconas (calcium gluconate), Natrii chloridum (sodium chloride);
- names of inorganic acids: Acidum acetylsalicylicum (acetylsalicylic acid);
names of oxides, peroxides and hydroxides: Zinci oxydum (zinc oxide),
Aluminii hydroxydum (aluminium hydroxide).

Medicines containing two or more pharmaceutical substances in their
composition are given trade names. They are written in the Nominative case in
inverted commas after the name of a medicinal form. These names are given in
pharmaceutical reference books.

For example: tablets “Pyrcophen” — tabulettae “Pyrcophenum”,
ointment “Laevomec” — unguentum “Laevomecolum”.

§3. Capital and small letter

CAPITAL letter is always used in the following names:
1. names of medicines: Analgīnum, i n; Platyphyllīnum, i n; Spirĭtus
   aethylĭcus – ethyl alcohol;
2. names of medicinal plants: Valeriāna, ae f; Althaea, ae f;
3. names of chemical elements: Calcium, i n; Kalium, i n;
   BUT: if a chemical element (Natrium, i n, Kalium, i n) is a part of a
   compound name as apposition, it is written with a small letter after a hyphen:
   Oxacillinium-natrium;
4. prescription verbs: Recĭpe (Take); Da (Give); Signa (Mark);
5. the words Aqua, ae f (water), Acidum, i n (acid), Spiritus, us m (alcohol),
   Oleum, i n (oil);
6. the first word of each new prescription line.

Small letter is used in the following cases:
1. names of medicinal forms if they do not begin a prescription line;
2. names of plants parts if they do not begin a prescription line;
3. names of salts anions;
4. all the adjectives and participles as they can never begin a prescription line.

§4. Structure of medicinal preparation

The names of medicines produced by pharmaceutical industry include
names of medicinal forms and other characteristics (solvent, percentage
concentration, type of vegetable raw materials, etc.). The names of medicinal
preparations are presented by word combinations consisting of several
pharmaceutical terms. These words should be in a definite order according to the
rules used in anatomical terminology.

1) medicinal form + medicine name / medicinal plant

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>medicinal form</td>
<td>medicine name or medicinal plant</td>
</tr>
<tr>
<td>in Nominative Sing. / Plur.</td>
<td>in Genitive Sing. with the capital letter</td>
</tr>
<tr>
<td>tablets of analgine – tabulettae Analgīni</td>
<td></td>
</tr>
<tr>
<td>Zinc paste = paste of zinc – pasta Zinci</td>
<td></td>
</tr>
<tr>
<td>tincture of motherwort – tinctura Leonūri</td>
<td></td>
</tr>
</tbody>
</table>
1) medicinal form in Nominative Sing. / Plur.
2) «trade medicine name» in Nominative Sing.

- tablets «Citramon» — tabulettae «Citramonum»
- suppositories «Anusol» — suppositoria «Anusolum»

### 2) adjective + medicinal form + name of medicine / plant

<table>
<thead>
<tr>
<th>Medicinal form in Nominative Sing. / Plur.</th>
<th>Medicine name or medicinal plant in Genitive Sing. with capital letter</th>
<th>Adjective in Nominative (if referring to medicinal form) or in Genitive (if referring to the name of medicine / plant)</th>
</tr>
</thead>
<tbody>
<tr>
<td>coated tablets of ampicilline — tabulettae Ampicillini obductae</td>
<td>ophthalmic ointment of tetracycline — unguentum Tetracyclini ophthalmicum</td>
<td>liquid extract of motherwort — extractum Leonuri fluidum</td>
</tr>
</tbody>
</table>

**REMEMBER!**
- In the names of vaginal and rectal suppositories the adjectives *vaginalis, e* and *rectalis, e* are written right after the noun *suppositorium, i n*:
  - vaginal suppositories «Anaesthesol» — suppositoria vaginalia «Anaesthesolum»
- The same structure is also used in the names of ophthalmic films (*membranŭlae ophthalmĭcae*):
  - membranŭlae ophthalmĭcae cum Pilocarpīni hydrochlorīdo
- In the names of medicinal preparations obtained from stone-fruits, the name of a fruit is written in the Genitive plural:
  - *peach oil = oil of peaches — Oleum Persicŏrum*  
  - *olive oil = oil of olives — Oleum Olivārum*
- If an adjective characterizes a pharmaceutical substance or medicinal plant, it agrees with the name of this substance or plant:
  - *peppermint oil = oil of peppermint — Oleum Menthae piperītae*

**Vocabulary 1**

**Liquid medicinal forms**

| 1. emulsum, i n | *emulsion* | 5. mixtūra, ae f | *mixture* |
| 2. extractum, i n | *extract* | 6. solutio, ōnis f | *solution* |
| 3. infusum, i n | *infusion* | | |
| 4. linimentum, i n | *liniment* | | |

emuls. extr. lin. mixt. sol.
7. suspensio, ōnis f  
8. tinctūra, ae f  

Soft medicinal forms

7. suspensio, ōnis f  
8. tinctūra, ae f  
9. pasta, ae f  
10. unguentum, i n  
11. suppositorium, i n  
12. capsūla, ae f  
13. dragee  
14. granūlum, i n  
15. pulvis, ĕris m  
16. tabuletta, ae f  
17. species, ērum f /plur./  
18. aērosōlum, i n  
19. membranūlae ophthalmīcae

Solid forms

9. pasta, ae f  
10. unguentum, i n  
11. suppositorium, i n  
12. capsūla, ae f  
13. dragee  
14. granūlum, i n  
15. pulvis, ĕris m  
16. tabuletta, ae f  
17. species, ērum f /plur./  
18. aērosōlum, i n  
19. membranūlae ophthalmīcae

Names of plants and medicines

20. Belladonna, ae f  
21. Leonūrūs, i m  
22. Quercus, us f  
23. Valeriāna, ae f  

Parts of medicinal plants

24. cortex, ĭcis m  
25. herba, ae f  
26. radix, ĭcis f  

Adjectives

27. fluĭdus, a, um  
28. obductus, a, um  
29. ophthalmicus, a, um  
30. siccus, a, um  
31. spissus, a, um  
32. rectālis, e  
33. vaginālis, e  

EXTRA information

❖ Atropa Belladonna /Belladonna/ grows in North Africa, Europe, Crimea and Asia. The common name “belladonna” originates from its historic use by women, as "Bella Donna" is Italian for "beautiful lady". Drops prepared from the belladonna plant were used to dilate women's pupils to get an effect considered to be attractive and seductive. In medicine belladonna has been used in herbal medicine for centuries as a pain reliever, muscle relaxer, and anti-inflammatory, and to treat menstrual problems, peptic ulcer disease, histaminic reaction, and motion sickness. Now Atropine sulphate containing Belladonna is used for eye examination.

❖ Motherwort /Leonurus/ has a long history of use as a herb in traditional medicine in Central Europe, Asia, and North America. It was historically used in China to prevent...
pregnancy and to regulate menstruation. Motherwort has also been used to ease stomach gas and cramping, menopausal problems, and insomnia.

❖ **Oak tree /Quercus/** is a tree in the genus of the beech family. There are approximately 600 species of oaks. Oak bark is the bark from several types of oak trees. It is used to make medicine. It is used as a tea for diarrhea, colds, fever, cough, and bronchitis; for stimulating appetite; and for improving digestion. Some people apply oak bark directly to the skin in a compress or add it to bath water for pain and swelling (inflammation) of the skin, mouth, throat, genitals, and anal region; and for red itchy skin due to cold exposure (chilblains). Oak bark contains tannins, which might help treat diarrhea and inflammation.

❖ **Valerian /Valeriana/**. The name of the herb is derived from the personal name Valeria and the Latin verb valere (to be strong, healthy). Crude extract of valerian root is sold as a dietary supplement in the form of capsules. Valerian root may have sedative and anxiolytic effects.

**EXERCISES**

1. **Latinize the following medicine names:**
   bicilline, boromenthole, amoxicilline, nitroglycerin, glucose, gentamycine, prednisolone, bisoprolole, dibazole.

2. **Write the capital letter where necessary:**
   solutio glucosi; unguentum ditetracyclini ophthalmicum; infusion corticis quercus; suppositoria rectalia “anusolum”; tabulettae prednisoloni obductae; radix valerianae; linimentum “sanitas”; extractum belladonnæ spissum; herba leonuri.

3. **Choose the correct endings and translate into English:**
   tabulettae Nitroglycerīnī (obducta; obductae; obducti); suspensio (Hydrocortisōnum; Hydrocortisōni); (tinctūra; tinctūrae) Valeriānæ; (unguentum; unguentii) Erythromycīnī; herba (Leonūri; Leonūrus); infusion (herba; herbae) Leonūri; extractum Leonūri (fluīdum; fluīdi; fluīdus); extractum Belladonnæ (siccum; siccæ); cortex (Querci; Quercus); decoctum (cortex; cortis; cortīcis) Quercus; suppositoria (vaigailis; vaginale; vaginalia).

4. **Put the following words into the necessary cases:**
   unguentum, i n - ________ (Gen Sing.); tabuletta, ae f - ________ (Nom. Plur.); radix, icis f - ________ (Gen. Sing.); suppositorium, i n - ________ (Nom. Plur.); Quercus, us f - ________ (Gen. Sing.); siccus, a, um - ________ (Nom. Sing., neuter); vaginalis, e - ________ (Nom. Plur., neuter); pulvis, eris m - ________ (Gen. Sing.); Belladonna, ae f - ________ (Gen. Sing.); obductus, a, um - ________ (Nom. Plur., feminine).

5. **Put the necessary case ending instead of dots:**
   unguent... Dimexin...; solut... Nitroglycerin...; suspens... Griseofulvin...; tabulet... Ibuprophen...; tabulet... «Bellasthesin...»; tabulet... «Cholenzym...» obduct...; suppositor... «Pharmatex...»; unguent... Ditetracyclin... ophthalmic...; suppositori... vaginal... cum Synthomycino.

6. **Translate from English into Latin:**
   coated tablet — coated tablets, rectal suppository — rectal suppositories, vaginal suppository — vaginal suppositories, tincture of motherwort, infusion of
LESSON 2.
STANDARD PRESCRIPTION PHRASES

The main objectives of the lesson are:
1) to memorize the basic standard verb phrases and prepositional phrases used in prescription;
2) to train in writing the prescription verbs and prepositional phrases.

§5. Standard prescription verbs denoting orders and instructions

There are several verbs used in the prescription. They denote order, instruction or request as the prescription itself is a written address of a doctor to a pharmacist. These prescription verbs may be used either in Imperative Mood or in Subjunctive Mood. Prescription phrases in Imperative and Subjunctive mood have the same meaning “order, instruction”, therefore they can equally be used in a prescription.

**Imperative mood. Modus imperatīvus**

<table>
<thead>
<tr>
<th>Imperative Singular</th>
<th>Translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Da!</td>
<td>Give!</td>
</tr>
<tr>
<td>Signa!</td>
<td>Mark!</td>
</tr>
<tr>
<td>Sterilīsa!</td>
<td>Sterilize!</td>
</tr>
<tr>
<td>Misce!</td>
<td>Mix!</td>
</tr>
<tr>
<td>Recīpe!</td>
<td>Take!</td>
</tr>
<tr>
<td>Repēte!</td>
<td>Repeat!</td>
</tr>
<tr>
<td>Verte!</td>
<td>Turn over!</td>
</tr>
</tbody>
</table>

**Subjunctive mood. Modus conjunctīvus**

<table>
<thead>
<tr>
<th>Subjunctive Singular</th>
<th>Translation</th>
<th>Subjunctive Plural</th>
<th>Translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Detur</td>
<td>Let it be given.</td>
<td>Dentur</td>
<td>Let them be given.</td>
</tr>
<tr>
<td>Signētur</td>
<td>Let it be marked.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sterilisētur</td>
<td>Let it be sterilized.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Misceātur</td>
<td>Let it be mixed.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Repetātur</td>
<td>Let it be repeated.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
REMEMBER the following prescription phrases!
Da tales doses numĕro ... Give such doses in number ...
Dentur tales doses numĕro ... Let such doses be given in number ...

The verb “fiĕri” in prescription phrases
Usage: While writing out a prescription for a medicine (drug) prepared at a pharmacy in order to indicate the components to prepare the medicine and the medicinal form to make.

Forms: The verb fiĕri (to make) is used in subjunctive mood singular or plural and is followed by the name of a medicinal form to be made:
- singular form — fiat is used when prescribing powders, ointments, liniments, suppositories.
- plural form — fiant is used when prescribing species.
After these verb forms the medicinal form is used in Nominative Singular or Plural.
REMEMBER the prescription phrases with these forms!
Misce fiat unguentum / pulvis / suppositorium. — Mix to make ointment / powder / suppository.
Misce fiant species. — Mix to make species.

§6. Standard prepositional phrases used in prescription

<table>
<thead>
<tr>
<th>Latin Expression</th>
<th>English Translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>ad 100 ml</td>
<td>up to 100 ml</td>
</tr>
<tr>
<td>ad usum internum (externum)</td>
<td>for internal (external) use</td>
</tr>
<tr>
<td>contra tussim</td>
<td>against cough</td>
</tr>
<tr>
<td>cum Glycerino</td>
<td>with glycerine</td>
</tr>
<tr>
<td>cum radicibus</td>
<td>with roots</td>
</tr>
<tr>
<td>ex 0,5 – 180 ml</td>
<td>from 0.5 gram (of dry substance) – 180 ml (of decoction, infusion)</td>
</tr>
<tr>
<td>in ampullis</td>
<td>in ampoules</td>
</tr>
<tr>
<td>in capsũlis gelatinōsis</td>
<td>in gelatinous capsules</td>
</tr>
<tr>
<td>in charta cerāta</td>
<td>in waxed paper</td>
</tr>
<tr>
<td>in tabulettis</td>
<td>in tablets</td>
</tr>
<tr>
<td>in tabulettis obductis</td>
<td>in coated tablets</td>
</tr>
<tr>
<td>in vitro nigro</td>
<td>in a dark phial</td>
</tr>
<tr>
<td>per se</td>
<td>by itself</td>
</tr>
<tr>
<td>pro auctōre (pro me)</td>
<td>for the author (for me)</td>
</tr>
<tr>
<td>pro infantũbus</td>
<td>for children</td>
</tr>
<tr>
<td>pro injectionũbus</td>
<td>for injections</td>
</tr>
<tr>
<td>pro narcōsi</td>
<td>for narcosis</td>
</tr>
<tr>
<td>pro suspensiōne</td>
<td>for suspension</td>
</tr>
</tbody>
</table>
**Vocabulary 2**

**Names of medicines**

1. aqua, ae f  
   *water*  
   *aq.*  

2. Camphora, ae f  
   *camphor*  

3. oleum, i n  
   *oil*  
   *ol.*  

4. Oleum Ricĕni  
   *castor oil*  

5. spirĭtus, us m  
   *alcohol*  
   *spir.*  

6. Spiriĭtus aethylĭcus, spirĭtus aethylīci  
   *ethyl alcohol*  

**Names of medicinal plants**

7. Hyperīcum , i n  
   *St. John’s Wort*  

8. Mentha, ae f  
   *mint*  

9. Mentha piperīta, ae f  
   *peppermint*  

10. Rheum, i n  
    *rhubarb*  

11. Urtīca, ae f  
    *nettle*  

12. Virĭde nitens, Virĭdis nitentis  
    *brilliant green*  

**Parts of medicinal plants**

13. folium, i n  
    *leaf*  
    *fol.*  

14. rhizōma, ātis n  
    *rhizome*  
    *rhiz.*  

**Adjectives**

15. aethylĭcus, a, um  
    *ethyl*  

16. destillātus, a, um  
    *distilled*  
    *destill.*  

17. gelatinōsus, a, um  
    *gelatinous*  
    *gel.*  

18. oleōsus, a, um  
    *oily*  

19. purificātus, a, um  
    *purified*  
    *purif.*  

20. spirituōsus, a, um  
    *spirituous*  

**EXTRA information**

✧ **Mentha /Mint/** All mints grow near pools of water in partial shade all year round. Mint was originally used as a medicinal herb to treat stomach ache and chest pains. There are several uses in traditional medicine and preliminary research for possible use in treating irritable bowel syndrome. Menthol from mint essential oil (40–90 %) is an ingredient of many cosmetics and perfumes. Menthol and mint essential oil are also used in aromatherapy which may have clinical use to alleviate post-surgery nausea.

✧ **Viride nitens /Brilliant green/** is a synthetic medicine. It has been used to color silk and wool. In Eastern Europe and Russia the dilute alcoholic solution of Brilliant Green is sold as a topical antiseptic. It is effective against gram-positive bacteria. The main advantage of Brilliant Green over the more common antiseptics such as iodine is that it does not irritate mucous membranes as harshly on accidental contact.

**EXERCISES**

1. Translate into Latin:
   water of peppermint; distilled water; spirituous solution of brilliant green; root of rhubarb; leaves of nettle; purified water; infusion of leaves of peppermint;
dry extract of rhubarb; coated tablets of nystatin; oil of peppermint; emulsum of castor oil; oily solution of camphor; spirituous solution of menthol; herb of St. John’s Wort; infusion of rhizome of valerian; powder of root of rhubarb.

2. **Use the necessary prepositions or endings and translate into English:**

- Nystatinum _____ tabulettis obduct____; tabulettae Furacilin___ ad usum extern____; Oleum Ricini _____ capsul____ gelatinosis; rhizoma _____ radicibus Valerian____; pulvis Polysorb____ _____ tussim; solutio Glucos___ in ampull____; suppositoria rectal____ cum Theophyllin____; tabulettae “Allochol____” _____ infantibus; tabulettae Ampicillin___ pro suspension____.

3. **Translate into Latin minding the prepositional phrases:**

- solution of penicillin for injections; collargol in a dark phial; suppositories with ichthyole; oily solution of camphor for external use; tablets of dimedrole for children; water for injections; validole in capsules; dry mixture against cough for children; powder with levorine for suspension; solution of nitroglycerine in ampoules; rhizome with roots of valerian; theophylline by itself; predione for narcosis; amidoprocaine in coated tablets.

4. **Translate into Latin minding the prescription verb forms:**

1) Give such doses in number 10 in tablets. 2) Give in waxed paper. 3) Mix to make a suppository. 4) Give such doses in number 20 in ampoules. 5) Mix to make ointment. 6) Sterilize. 7) Give in a dark phial. 8) Mix to make liniment. 9) Mark. 10) Mix to make species. 11) Give such doses in number 15 in gelatinous capsules. 12) Take ethyl alcohol 70% up to 100 ml. 13) Mix to make powder. 14) Give such doses in number 10 in coated tablets. 15) Mix to make paste.

5. **Read and analyze the underlined endings:**

1. **Reciπe:** Menthōl[ί] 0,2
   Spirĭtus aethylĭc[ɪ] 90% 50,0
   Misce. Da. Signa:

2. **Reciπe:** Aqua Menthae piperitae
   Glycerîni
   Spirĭtus aethylici 70% ana 30 ml
   Misce. Da. Signa:

3. **Reciπe:** Unguentī Xeroformii 3% 10,0
   Da. Signa:

4. **Reciπe:** Solutiōnis Phentanyli 0,005% – 5 ml
   Da tales doses numĕro 10 in ampullis
   Signa:
LESSON 3.
LATIN CHEMICAL TERMINOLOGY

The main objectives of the lesson are:

1) to learn the Latin names of main chemical elements;
2) to learn the Latin names of oxides, peroxides, hydroxides and acids;
3) to train in writing the Latin names of oxides and acids.

§ 7. Latin names of chemical elements

- All the names of chemical elements are always written with the CAPITAL letter.
- Latin names of chemical elements are 2nd declension neuter nouns:
  E.g.: Ferrum, i n – iron; Zinicum, i n – zinc.
  Exceptions: Sulfur, ūris n (3rd declension)
  Phosphŏrus, i m (masculine).
- The chemical elements fluorine and magnesium have two Latin names:
  fluorine: Phthorum and Fluōrum;
  magnesium: Magnium and Magnesium.

<table>
<thead>
<tr>
<th>Names of the most important chemical elements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Latin name</td>
</tr>
<tr>
<td>Aluminium, i n</td>
</tr>
<tr>
<td>Argentum, i n</td>
</tr>
<tr>
<td>Arsenĭcum, i n</td>
</tr>
<tr>
<td>Aurum, i n</td>
</tr>
<tr>
<td>Borum, i n</td>
</tr>
<tr>
<td>Bromum, i n</td>
</tr>
<tr>
<td>Barium, i n</td>
</tr>
<tr>
<td>Bismŭthum, i n</td>
</tr>
<tr>
<td>Carboneum, i n</td>
</tr>
<tr>
<td>Chlorum, i n</td>
</tr>
<tr>
<td>Calcium, i n</td>
</tr>
<tr>
<td>Cuprum, i n</td>
</tr>
<tr>
<td>Fluorum, i n</td>
</tr>
<tr>
<td>Phthorum, i n</td>
</tr>
<tr>
<td>Ferrum, i n</td>
</tr>
<tr>
<td>Hydrogenium, i n</td>
</tr>
</tbody>
</table>
§8. Names of oxides, hydroxides, peroxides

Latin names of oxides, hydroxides and peroxides consist of two words:

<table>
<thead>
<tr>
<th>name of a chemical element</th>
<th>the word “oxide, hydroxide, peroxide”</th>
</tr>
</thead>
<tbody>
<tr>
<td>▪ non-changeable</td>
<td>▪ changeable</td>
</tr>
<tr>
<td>▪ always in Genitive Singular</td>
<td>▪ Nominative or Genitive Singular</td>
</tr>
<tr>
<td>▪ with the capital letter</td>
<td>▪ with the small letter</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>English</th>
<th>1</th>
<th>Nom.</th>
<th>2</th>
<th>Gen.</th>
</tr>
</thead>
<tbody>
<tr>
<td>zinc oxide</td>
<td>Zincī oxīdum</td>
<td>Zincī oxīdī</td>
<td></td>
<td></td>
</tr>
<tr>
<td>aluminium hydroxide</td>
<td>Alumīniī hydroxīdum</td>
<td>Alumīniī hydroxīdī</td>
<td></td>
<td></td>
</tr>
<tr>
<td>hydrogen peroxide</td>
<td>Hydrogenīi peroxīdum</td>
<td>Hydrogenīi peroxīdī</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

§9. Names of acids

Latin names of acids consist of the noun *Acīdum, i n, acid*, which is written with the capital letter, and the adjective denoting the name of the acid of neuter gender. Both words are declined.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acidum (acid)</td>
<td>adjective of neuter gender (- um)</td>
</tr>
<tr>
<td>▪ changeable</td>
<td>▪ changeable</td>
</tr>
<tr>
<td>▪ with the capital letter</td>
<td>▪ with the small letter</td>
</tr>
<tr>
<td>▪ Nom. Sing. – <em>um</em></td>
<td>▪ Nom. Sing. – <em>um</em></td>
</tr>
<tr>
<td>▪ Gen. Sing. – <em>i</em></td>
<td>▪ Gen. Sing. – <em>i</em></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>sulfuric acid</td>
<td>Acīdum sulfurīcum</td>
<td>Acīdī sulfurīcī</td>
</tr>
<tr>
<td>sulfurous acid</td>
<td>Acīdum sulfurōsum</td>
<td>Acīdī sulfurōsī</td>
</tr>
<tr>
<td>hydrochloric acid</td>
<td>Acīdum hydrochlorīcum</td>
<td>Acīdī hydrochlorīcī</td>
</tr>
</tbody>
</table>

**REMEMBER** the following names of acids!!!

<table>
<thead>
<tr>
<th>Latin</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acīdum aceticum, i n</td>
<td>acetic acid</td>
</tr>
<tr>
<td>Acīdum acetylsalicylicum, i n</td>
<td>acetylsalicylic acid</td>
</tr>
<tr>
<td>Acīdum ascorbinicum, i n</td>
<td>ascorbic acid</td>
</tr>
<tr>
<td>Acīdum benzoicum, i n</td>
<td>benzoic acid</td>
</tr>
<tr>
<td>Acīdum borīcum, i n</td>
<td>boric acid</td>
</tr>
<tr>
<td>Acīdum carbolicum, i n</td>
<td>carabolic acid</td>
</tr>
<tr>
<td>Acīdum carbonīcum, i n</td>
<td>carbonic acid</td>
</tr>
<tr>
<td>Acīdum citrīcum, i n</td>
<td>citric acid</td>
</tr>
</tbody>
</table>
Acīdum folīcum, i n  
folic acid  
Acīdum glutaminīcum, i n  
glutaminic acid  
Acīdum hydrochlorīcum, i n  
hydrochloric acid  
Acīdum lactīcum, i n  
lactic acid  
Acīdum lipoīcum, i n  
liptoic acid  
Acīdum nicotinīcum, i n  
nicotinic acid  
Acīdum nitrīcum, i n  
nitric acid  
Acīdum salicylīcum, i n  
salicylic acid  
Acīdum sulfurīcum, i n  
sulphuric acid  
Acīdum sulfurōsum, i n  
sulphurous acid

Vocabulary 3

1. Acīdum, i n  
acīdum  
2. Cuprum, i n  
cuprum  
3. Ferrum, i n  
ferrum  
4. Fluorum, i n  
fluorum  
5. Hydrargyrum, i n  
hydrargyrum  
6. hydroxydum, i n  
hydroxydum  
7. Iōdum, i n  
iodum  
8. Kalium, i n  
kaliuim  
9. Magnium, i n  
magnesium  
10. Natrium, i n  
natrium  
11. oxīdum, i n  
oxīdum  
12. peroxīdum, i n  
peroxīdum  
13. Phosphŏrus, i m  
phosphorus  
14. Sulfur, ūris n  
sulfur  
15. Chamomilla, ae f  
matricaria  
16. Convallaria, ae f  
lilly of the valley  
17. Foeniculum, i n  
fennel  
18. Glycyrrhiza, ae f  
liquorice  
19. flos, floris m  
flower  
20. fructus, us f  
fruit  
21. concentratus, a, um  
concentrated  
22. dilutus, a, um  
diluted  
23. flavus, a, um  
yellow

Names of medicinal plants

Parts of medicinal plants

Adjectives
Extra information

❖ **Fennel /Foeniculum/** Its "relatives" — are well known to us plants like celery, cumin, coriander, carrots, parsnips and parsley. Fennel seeds and fennel oil are sold in pharmacies. Dill water, which is often given to children with colic — is nothing less than the solution of the essential oil of fennel in warm water. Useful properties of fennel allow to include it in the composition of many drugs charges: diuretic, choleretic, laxative, pectoral, sedative. Fennel has an antispasmodic and antiseptic action. It helps when you have cough, insomnia, pain in the stomach.

❖ **Liquorice /Glycyrrhiza/** The word “liquorice” is derived from the Greek (glukurrhiza), meaning "sweet root". Countries producing liquorice include India, Iran, Italy, Afghanistan, China, Pakistan and others. It has demonstrated antiviral, antimicrobial, anti-inflammatory, hepatoprotective, and blood pressure-increasing effects.

❖ **Matricaria /Chamomilla/** The word "chamomile" derives from Greek (khamaimêlon) meaning "earth apple". Flowers of matricaria are used as herbal medicinal raw material in forms of dried flowers and extract. Matricaria flowers are a part of gastric and sudorific species. Infusion of matricaria flowers has an anti-inflammatory, antiseptic, analgetic and sedative effect.

**EXERCISES**

1. **Make the names of oxides with the following chemical elements (use them in Nominative and Genitive Singular):**

   sulfur – **Sulfuris oxydum** – **Sulfuris oxydi**

   iron; mercury; hydrogen; sodium; zinc; bismuth.

2. **Choose the right variant:**

   Acidum ascorbinic(us; um; i); (Acidum; acidum) nicotinicum; tabulettae Acid(um; i) folic(um; i); solutio (Acidi; acidi) (Nicotonici; nicotinici); Zinc(um; i) oxydum; Acid(um; i) acetylsalicylic(um; i); (Magensii; magnesium) peroxyd(um; i).

3. **Translate into Latin:**

   A. tablets of magnesium oxide; solution of nicotinic acid in ampoules; ointment of yellow mercury oxide; diluted hydrochloric acid; tablets of acetylsalicylic acid; paste of zinc oxide; concentrated solution of hydrogen peroxide; spirituous solution of iodine; tablets of lipoic acid; dragee of ascorbic acid; iodine in tablets.

   B. tincture of the lilly of the valley; root of liquorice; flowers of matricaria for external use; rhizome with roots of liquorice; herb of lilly of the valley; fruits of fennel.

4. **Translate the following prescriptions into Latin. Mind using Genitive form after the prescription verb “Recipe”:**

   1) Take: Salicylic acid 5,0
   Zinc oxide 25,0
   Talc 50,0
   Mix to make powder
   Give. Mark:
2) Take: Solution of nicotinic acid 1 % — 1 ml
Give such doses in number 10 in ampoules
Mark:

3) Take: Concentrated solution of hydrogen peroxide 33 % — 1,0
Distilled water 15 ml
Mix. Give. Mark:

4) Take: Oily solution of boric acid 1 % — 40 ml
Give. Mark:

5) Take: Benzoic acid 0,6
Salicylic acid 0,3
Vaseline 10,0
Mix to make ointment
Give. Mark:

6) Take: Spirituous solution of iodine 5 % — 20 ml
Tannine 3,0
Glycerine 10,0
Mix. Give. Mark:

7) Take: Resorcin 2,0
Salicylic acid 3,0
Ethyl alcohol 70 % up to 100 ml
Mix. Give. Mark:

8) Take: Folic acid 0,0008
Ascorbic acid 0,1
Give such doses in number 30 in tablets
Mark:

9) Take: Aluminium hydroxide 0,5
Give such doses in number 10 in tablets
Mark:

10) Take: Yellow mercury oxide 0,6
Ichthyole 0,8
Zinc oxide 20,0
Mix to make ointment
Give. Mark:

11) Take: Diluted hydrochloric acid 5 ml
Pepsine 2,0
Purified water up to 180 ml
Mix. Give. Mark:

12) Take: Ointment of boric acid 10,0
Give. Mark:
LESSON 4.
LATIN NAMES OF SALTS

The main objectives of the lesson are:
1) to learn the structure of the Latin names of salts;
2) to train in writing Latin names of salts.

§10. Names of salts

Latin names of salts consist of two nouns:
- 1 — the name of cation in Genitive Singular with the capital letter.
- 2 — the name of anion with the small letter. The name of anion may be used in Nominative Singular or Genitive Singular.

<table>
<thead>
<tr>
<th>English</th>
<th>Nom. Sing.</th>
<th>Latin</th>
</tr>
</thead>
<tbody>
<tr>
<td>-ate</td>
<td>sulfate</td>
<td>as</td>
</tr>
<tr>
<td>-ite</td>
<td>nitrite</td>
<td>is</td>
</tr>
<tr>
<td>-ide</td>
<td>hydrochloride</td>
<td>-idum</td>
</tr>
</tbody>
</table>

*** FOR EXAMPLE!!!

English                   | Nom. Sing. | Latin               |
---------------------------|------------|---------------------|
atropine sulfate          | Atropini sulfas | Atropini sulfatis   |
sodium nitrite            | Natrii nitris  | Natrii nitritis     |
hydrocortisone acetate    | Hydrocortisōni acētas | Hydrocortisōni acetātis |
bismuth subcitrate        | Bismūthi subcitras | Bismūthi subcitrātis |
morphin hydrochloride      | Morphīni hydrochlorīdum | Morphīni hydrochlorīdi |

REMEMBER!!!!
✓ Two-component names of potassium and sodium salts are written with the hyphen, both words can change from Nominative into Genitive and the words natrium and kalium are written with the small letter after the hyphen: sulphacyl-sodium: Sulfacylum-natrium - Sulfacylī-natriī
✓ The name of the salt caffeine and sodium benzoate has got a specific equivalent in Latin:
**Vocabulary 4**

1. Aether, eris m  
2. Chinīni sulfas, ātis m  
3. Coffeīnum-natrii benzoas, Coffeīni-natrii benzoātīs  
4. isotonicus, a, um  
5. Saccharum, i n  
6. Solutio Ammonii caustici, Solutionis Ammonii caustici  
7. Sulfacylum-natrium — Sulfacily-natrii

**EXERCISES**

1. Add the necessary endings in the names of salts:  
   - barium sulphate — Bari__ sulf___; iron lactate — Ferr___ lact___;  
   - potassium chloride — Kali___ chlor___; codeine phosphate — Codein___ phosph___; mercury iodide — Hydrargyr___ iod___; copper citrate — Cupr___ citr___; sodium nitrite — Natri___ nitr___.

2. Translate the names of salts into Latin and make them Genitive singular:  
   - testosterone propionate — Testosteronī propionas / Testosteronī propionatis  
   - potassium acetate, potassium chloride, lithium carbonate, magnesium sulphate, morphine hydrochloride, sodium salicylate, sodium thiosulphate, silver nitrate, quinine sulphate, sulphacyle-sodium; ethylmorphine hydrochloride, apomorphine hydrochloride, bismuth subnitrate, caffeine and sodium benzoate, sodium nitrite, zinc sulphate.

3. Translate into Latin:  
   - barbitale-sodium in tablets; solition of aethazole-sodium in ampoules; bismuth subnitrate with extract of belladonna; solution of sodium arsenate for injections; ointment of copper citrate; solution of aethazole-sodium in ampoules; ointment of aethacridine lactate; solution of sodium nitrite in ampoules; tablets of potassium orotate for children; ether for narcosis; isotonic solution of sodium chloride for injections; oily solution of retinole acetate; ointment of sulphacyle-sodium; suspension of hydrocortisone acetate for injections.

4. Translate the prescriptions into Latin:  
   1) Take:   
      - Phenobarbitale 0,05  
      - Bromisosovale 0,2  
      - Caffeine and sodium benzoate 0,015  
      - Calcium gluconate 0,5  
      - Mix to make powder  
   Give such doses in number 24  
   Mark:
2) Take: Sodium hydrocarbonate 1,0  
Glycerine 5,0  
Distilled water 15 ml  
Mix. Give. Mark:

3) Take: Papaverine hydrochloride 0,25  
Atropine sulphate 0,0001  
Distilled water 10 ml  
Mix. Sterilize!  
Give. Mark:

4) Take: Bismuth subnitrate 0,25  
Extract of valerian 0,015  
Mix to make powder  
Give such doses in number 10  
Mark:

5) Take: Atropine sulfate 0,1  
Aethylmorphine hydrochloride 0,3  
Solution of boric acid 2 % 10 ml  
Mix. Give. Mark:

6) Take: Mercury dichloride 0,2  
Carbolic acid 40,0  
Lanoline 50,0  
Vaseline 40,0  
Mix to make ointment  
Give. Mark:

7) Take: Acetylsalicylic acid 0,3  
Phenacetine 0,2  
Phenobarbitale 0,025  
Coffeine 0,025  
Codeine phosphate 0,01  
Give such doses in number 10 in tablets  
Mark:

8) Take: Boric acid 1,0  
Salicylic acid 5,0  
Zinc oxide 25,0  
Talc 50,0  
Mix to make powder  
Give. Mark:
9) Take: Zinc sulfate 0,25  
Lead acetate 0,3  
Distilled water 200 ml  
Mix. Give. Mark:

10) Take: Acetylsalicylic acid 0,25  
Paracetamole 0,1  
Caffeine and sodium benzoate 0,2  
Give such doses in number 10 in tablets  
Mark:

11) Take: Dimedrole 0,01  
Ephedrine hydrochloride 0,1  
Oil of mint 10 ml  
Mix. Give. Mark:

12) Take: Calcium carbonate 0,5  
Sodium hydrocarbonate 0,4  
Bismuth subnitrate 0,5  
Mix to make powder  
Give such doses in number 10  
Mark:

13) Take: Salicylic acid 1,0  
Mercury amidochloride 10,0  
Bismuth subnitrate 9,0  
Vaseline 10,0  
Lanoline 8,0  
Mix to make ointment  
Give. Mark:

12) Take: Riboflavine 0,05  
Ascorbic acid 0,1  
Nicotinic acid 0,03  
Give such doses in number 50 in tablets  
Mark:

14) Take: Powder of root of rhubarb 0,2  
Magnesium oxide 0,3  
Extract of valerian 0,015  
Mix to make powder  
Give such doses in number 10  
Mark:
15) Take: Solution of thiamine bromide 3 % — 2 ml
Give such doses in number 10 in ampoules
Mark:

LESSON 5.
MEDICAL PRESCRIPTION.
PRESCRIBING LIQUID MEDICINAL FORMS

The main objectives of the lesson are:
1) to learn the main requirements to the Latin part of a prescription;
2) to learn the doses of medicinal substances and the types of a prescription;
3) to train in prescribing liquid medicinal forms.

§11. Medical prescription

The prescription (lat. receptum — received) is the doctor’s written appeal to the pharmacist about producing and selling medicines to the patient with indicating the way of their use. It is the important document. The prescription must be written according to the official rules on preprinted prescription forms.

Traditionally a prescription is composed of four parts: "superscription", "inscription" "subscription" and "signature".

- The “superscription” part contains the information about the date of the prescription, the doctor and the patient information. It is written in the state language of the country.
- The “inscription” begins from Latin word Recipe, /Rp. in reduced/, that means – take. In English prescriptions a special prescription symbol (see below) is used in this part of the prescription. After “Rp.” substances necessary for dispensing or preparing the medicines are accounted. The names of these substances are written in Latin in the Genitive case, each from the capital letter and from the new line. After the medicine name its quantity (dose) is indicated.

\[
\text{Rx}
\]

prescription symbol used in English prescriptions

- The “subscription” part contains the directions to the pharmacist about the medicinal form and the quantity of the medicine. This part is written in Latin. There are used the following prescription phrases: Misce. Misce fiat / fiant ... Da. Da tales doses numero ....
- The “signature” part is appointed for the patient. That’s why it is written in the state language without any reductions. It describes the way of using the prescribed medicine. At the end the prescription there is the doctor’s signature and his (her) personal seal.
The medical prescription abroad

The prescription in foreign countries has the same function as in our country. In English speaking countries and countries with English speaking education system (India, Pakistan and others); prescription is written out in English on special prescription forms according to all structural stages of the prescription.

Superscription

/1/ doctor’s surname;
/2/ license classification or his professional degree;
/3/ address of the medical establishment;
/4/ work telephone number of the doctor;
/5/ the date of writing out the prescription;
/6/ the patient’s surname;
/7/ the patient’s address;
**Inscription**

prescription symbol meaning “Recipe” has already been printed;
/8/ the name of the medicine;
/9/ indication of the medicine dose (in milliliters or milligrams);

**Subscription**

/10/ the quantity of the medicinal preparation determined by the duration of the treatment course;

**Signature** “Sig.” (“S.”)

/11/ the detailed direction for the patient about using this medicine;

---

**Recipe:** Analginī 0,2

Da tales doses numero 10 in tabulettis

Signa: 1 tab. 2 times a day

**Recipe:** Protargolī 0,2

Glycerini 5,0

Aquae destillatæ 15 ml

Misce. Da. Signa: 1 spoon 3 times a day

---

**Special marks**

/12/ doctor’s marks about the necessity of repeating the treatment course;

/13/ doctor’s marks about the necessity of keeping this medicine in the inaccessible for children;

/14/ the information about the necessity to keep some precautionary measures while taking this medicine;

/15/ doctor’s signature;

/16/ doctor’s identification number;

/17/ the state license number.

In some jurisdictions, the preprinted prescription contains two signature lines: one line has "dispense as written" printed underneath; the other line has "substitution permitted" underneath. In other jurisdictions the protocol is for the prescriber to handwrite one of the following phrases: "dispense as written", "DAW", "brand necessary", "do not substitute", "no substitution", "medically necessary", "do not interchange". In some jurisdictions, it may be a legal requirement to include the age of child on the prescription. For pediatric prescriptions some advise to include the age of the child if the patient is less than twelve and the age and months if less than five. Adding the weight of the child is also helpful.

---

**§12. Doses of pharmaceutical substances**

- Quantity of **solid pharmaceutical substances** is indicated in grams. The abbreviation “gr” is not indicated, the quantity is written with decimal points: 10,0 (10 gr.); 0,25 (0,25 gr.).

**Recipe:** Vaselini 5,0
Liquid pharmaceutical substances are written out in \textit{millilitres} using a whole number with the abbreviation “\textit{ml}”:

\begin{itemize}
  \item \textit{Recipe:} \textit{Solutionis Glucosi} 10 \% — 100 ml
  \item Quantity of a \textbf{liquid pharmaceutical substance less than 1 ml} is measured in \textit{drops}. The number of drops is indicated with a \textit{Roman} numeral and the Latin word “drop” (\textit{gutta, ae f}) in the Accusative case before it:
    \begin{itemize}
      \item \textit{1 drop} – \textit{guttam I}
      \item \textit{4 drops} – \textit{guttas IV}
    \end{itemize}
  \item \textit{Recipe:} \textit{Olei Menthae piperītae} guttas IV (guttam I)
  \item If the medicinal substance is dosed in activity unit (OD), in the prescription activity unites quantity is specified (for example: 200 000 OD).
  \item \textit{Recipe:} \textit{Insulini} 25OD
  \item If two or more ingredients are prescribed in the same amount, the dose is written after the last of them with the adverb \textit{ana} (equally, of each):
    \begin{itemize}
      \item \textit{Recîpe:} \textit{Cupri citratis}
      \item \textit{Lanolini}
      \item \textit{Vaselini ana} 5,0
    \end{itemize}
  \item If the name of a pharmaceutical substance is too long to be written in one line, it is allowed to move it to another line but the continuation must be shifted to the right in such a way that the first letter should not fall on the beginning of a prescription line and the amount of pharmaceutical substance should be to the right:
    \begin{itemize}
      \item \textit{Recîpe:} \textit{Solutiōnis Platyphyllīni}
      \item \textit{hydrochlorīdi 1 \% 10 ml}
    \end{itemize}
\end{itemize}

\section*{§13. Types of prescriptions}

There are two ways of prescribing medicines: shortened /simple/ and detailed /complex/ prescribings.

In contemporary practice, doctors most often prescribe medicines of industrial production. Prescribing of such medicines is known as \textit{officinal} and \textit{shortened} /simple/ prescribing is used. The prescription line of such a prescription includes \textit{the medicinal form, the name of pharmaceutical substance, its dose and its quantity for the whole course of treatment}.

\begin{itemize}
  \item \textit{Recîpe:} \textit{Unguenti Xeroformii} 3 \% — 10,0
    \textit{Da. Signa:}
  \item \textit{Recîpe:} \textit{Tincturae Valerianae} 30 ml
    \textit{Da. Signa:}
\end{itemize}

\textit{Complex} prescriptions are written out for medicines made directly at the pharmacy. Such prescribings are called \textbf{magistral prescribings} and written out in a detailed form.
In a complex prescription, all the ingredients of the medicinal preparation and their dosage are enumerated. Each pharmaceutical substance is written on a separate prescription line. Then it is necessary to indicate the medicinal form to be made. This prescribing is presented by the prescription phrase “Misce fiat / fiant ....”. Then an explanation how to use the medicine follows.

Reciē:  Xeroformii 1,0
      Zinci oxydi 5,0
      Lanolini
      Vaselini ana 10,0
      Misce, fiat unguentum
Da. Signa:

§14. Rules of prescribing liquid medicinal forms

Liquid medicinal forms include solutions, tinctures, infuses, decoctions, balsams, liquid extracts, mixtures, elixirs, suspensions, syrups, juices, musses and other medicinal products. These medical forms are dosed in milliliters, some of them – in drops. Liquid forms are better entering into the blood, soaking up in the skin and acting more quickly, than solid medicinal forms. They may be written out in a shortened way (simple prescription) and in a detailed way (complex prescription).

In a simple prescription, the name of a medicinal form, pharmaceutical substance or medicinal vegetable raw materials is written in Genitive Singular with the capital letter after the prescription verb Reciē. The line is finished with the amount of a medicine. Concentration of solutions may be denoted in percentage (5 %), in ratios (1:1000) or in mass-and-volumetric ratios, when the first figure denotes the amount of medicinal vegetable raw materials and the second one denotes the amount of the obtained infusion or decoction (0,6–180 ml).

Reciē:  Tinctūrae Leonūri 25 ml
Da. Signa:

Reciē:  Solutiōnis Camphŏrae oleōsae 10 % — 100 ml
Da. Signa:

Reciē:  Solutiōnis Furacilīni 1: 5000 — 500 ml
Da. Signa:

Reciē:  Solutiōnis Furacilīni 0,1 — 500 ml
Da. Signa:

Preparations which are prepared at the pharmacy according to a doctor’s prescription are written out in a detailed form using a complex prescription:
Recīpe: Olei Ricini 20 ml
Xeroformii 1,
Vinylini 1ml
Misce, fiat linimentum
Da. Signa:

When prescribing mixtures in a detailed way, the direction “Misce, fiat mixtūra” is not written. Misce. Da. Signa. is written:

Recīpe: Mentholi 0,1
Phenylii salicylatis 0,3
Olei Vaselini ad 10 ml
Misce. Da. Signa: nasal drops

§15. Medicinal forms for injections

Aqueous and oily solutions as well as suspensions are often used for injections. In medical practice, such forms of industrial production as ampoules and vials are mostly used. The very form of output testifies that special demands for these medicinal forms are observed, therefore the phrase “pro injectionībus” is not written in a prescription as it goes without saying.

When writing out solutions and suspensions in ampoules, the sequence is the following:
— a medicinal form is indicated first in Genitive Singular (Solutionis / Suspensionis);
— then follows the name of pharmaceutical substance in Genitive Singular, its concentration in percentage and the volume of one ampoule (Glucosi 40 % — 5 ml);
— the number of doses and the form of output are written on the next line: “Give such doses in number ... in ampoules – Da tales doses numero ... in ampullis”;
— the prescription is finished with the prescription verb Signa:

Recīpe: Solutiōnis Thiamini bromidi 3 %— 1 ml
Da tales doses numĕro 10 in ampullis
Signa: 1 ml intramuscular

When writing out medicines in vials a prescription is drawn up according to the same rules as when writing out medicines in ampoules but the word “vial” is not written.

Recīpe: Benzylpenicillini-natrii 500 000 E/D
Da tales doses numĕro 12
Signa:
VOCABULARY 5

Names of medicinal plants
1. Aloë, es f  aloe
2. Althaea, ae f  marshmallow
3. Anisum, i n  anise
4. Eucalyptus, i f  eucalypt
5. Frangula, ae f  buckthorn
6. Oleum Cacao, Olei Cacao  cacao butter
7. sirupus, i m  syrup
8. compositus, a, um  compound
9. diureticus, a, um  diuretic
10. laxans, ntis  laxative
11. pectoralis, e  pectoral
12. sedativus, a, um  sedative

EXERCISES

1. Translate into Latin:
   compound liniment of chloroform; syrup of marshmallow against cough;
   liquid extract of aloe for injections; coated tablets of aloe; infusion of root of
   marshmallow; bark of buckthorn; pectoral species; extract of bark of buckthorn;
   fruits of anise; leaves of eucalypt; oil of anise; diuretic species; liquid extract of
   buckthorn; compound powder.

2. Translate the following prescriptions into Latin:
   1) Take: Root of marshmallow
          Root of liquorice equally 20,0
          Fruits of fennel 10,0
          Mix to make species
          Give. Mark:

   2) Take: Solution of litonite 10 % — 1 ml
          Give such doses in number 10 in ampoules
          Mark:

   3) Take: Oily solution of camphor 10 % — 100 ml
          Give. Mark:

   4) Take: Decoction of bark of oak 200 ml
          Give. Mark:
5) Take: Tincture of lilly of the valley
tincture of valeriane equally 10 ml
tincture of belladonna 5 ml
Mix. Give. Mark:

6) Take: Dry extract of root of marshmallow 2,0
syrup of sacchar 90 ml
Mix. Give. Mark:

7) Take: Solution of norsulfazole-sodium 10 %
isotonic solution of sodium chloride equally 10 ml
Mix. Give. Mark:

8) Take: Root of marshmallow
root of liquorice equally 10,0
fruits of anise
leaves of eucalypt equally 5,0
Mix to make species
Give. Mark:

9) Take: Solution of aminophylline 24 % — 1 ml
Give such doses in number 6 in ampoules
Mark:

10) Take: Fluid extract of buckthorn 4,0
powder of root of rhubarb 3,0
Dry extract of belladonna 0,7
Mix. Give. Mark:

3. Write Latin part of a simple prescription for the following medicines:
1) 10 ampoules of solution of ascorbic acid 5 % 1 ml;
2) solution of furaciline 0,02 % 10 ml;
3) ointment of oxoline 0,5 % 10,0;
4) liniment of synthomycine 1% with novocaine 0,5 % 25,0;
5) spirituous solution of iodine 5 % 10 ml;
6) oily solution of camphor 10 % 100 ml;
7) suspension of griseofulvine 100 ml;
8) 10 ampoules of solution of nicotinic acid 2 % 1 ml;
9) 10 ampoules of liquid extract of aloe 1 ml;
10) ophthalmic ointment of tetracycline 10,0;
11) 10 ampoules of adrenaline hydrochloride 0,1 % 1 ml;
12) 10 ampoules of solution of caffeine and sodium benzoate 10 % 1 ml.

4. Write Latin part of a complex prescription for the following medicines:
1) mixture consisting of infusion of root of valerian from 15,0–200 ml;
tincture of mint 3 ml; tincture of motherwort 10 ml;
2) ointment consisting of yellow mercury oxide 0.6; ichthyole 0.8; zinc oxide 20.0;
3) ointment consisting of benzoic acid 0.6; salicylic acid 0.3; vaseline 10.0;
4) mixture consisting of magnesium oxide 20.0; distilled water 120 ml;
5) mixture consisting of diluted hydrochloric acid 4.0; pepsine 2.0; purified water up to 200.0;
6) 24 doses of powder consisting of phenobarbitale 0.05; bromisovale 0.2; caffeine and sodium benzoate 0.015; papaverine hydrochloride 0.03; calcium gluconate 0.5;
7) mixture consisting of atropine sulfate 0.1; ethylmorphine hydrochloride 0.3; solution of boric acid 2 % 10ml;
8) mixture consisting of peppermint 3 ml; camphor 7.0; tincture of valerian 10 ml;
9) ointment consisting of sulfacyle-sodium 1.0, lanoline 0.4, vaseline up to 5.0;
10) 20 doses of powder consisting of codeine 0.015; acetylsalicylic acid 0.5; calcium lactate 0.1; ascorbic acid 0.2, rutine 0.02; dimedrole 0.03;
11) mixture consisting of menthole 0.25; tincture of eucalypt 50 ml; ethyl alcohol 90 % up to 100 ml;
12) liniment consisting of castor oil 20 ml; xeroform 1.2; vinyline 1.0;
13) mixture consisting of chloroform, ethyl alcohol 95 % equally 20 ml; ethyl ether 10 ml; ammonia solution X drops.

LESSON 6.
PRESCRIBING SOFT MEDICINAL FORMS

The main objectives of the lesson are:
1) to learn the structure of a simple and a complex prescription for soft medicinal forms;
2) to train in writing out soft medicinal forms.

§16. Rules of writing out soft medicinal forms

Ointments /1/, pastes, and suppositories /2; 3/ are soft medicinal forms. They may be produced by pharmaceutical industry and prepared at the pharmacy according to a magistral prescription. So they may be written out in both shortened and detailed form.
Ointment / paste – Simple prescription
A shortened form of prescribing ointment and paste is the following:
— it starts with the name of a medicinal form in Genitive Singular (Unguenti / Pastae);
— then follows an active pharmaceutical substance in the Genitive Singular form with its percentage concentration (Xeroformii 3 %);
— the line is concluded with the amount of the prescribed remedy (10,0).

Recīpe: Unguenti Xeroformii 3 % — 10,0
Da. Signa: ophthalmic ointment

Recīpe: Pastae Zinci 50,0
Da. Signa:

Ointment / paste — Complex prescription
Using a detailed form of prescribing, all the ingredients and their amount are written on separate prescription lines. Further, the direction “Mix to make ointment / paste – Misce fiat unguentum / pasta” is given.

Recīpe: Argenti nitritis 0,25
Vinylini 1,0
Vaselīni 30,0
Misce, fiat unguentum
Da. Signa:

Recīpe: Iodoformii 10,0
Amīli Tritīci
Zinci oxīdi ana 5,0
Vaselīni ad 50,0
Misce, fiat pasta
Da. Signa:

Suppositories
Suppositories are dosed medicinal forms, solid at room temperature and melting at body temperature. There are rectal and vaginal suppositories (suppositoria rectalia et vaginalia). Rectal suppositories usually have the form of a cone or of a cylinder with a sharpened end. Their mass varies from 1.1 to 4.0 grams; in pediatric practice — from 0.5 to 1.5 grams.

Vaginal suppositories may be spherical (globūli), egg-shaped (ovūla) or look like a flat body with a rounded end (pessaria). Their mass is from 1.5 to 6.0 grams.

Simple prescription. Suppositories of industrial production are prescribed in a shortened way, like other officinal medicinal forms.
— prescribing starts with the name of a medicinal form in the Accusative Singular form which is the same as Nominative Singular form (Suppositorium);
— the name of a pharmaceutical substance is indicated after the preposition *cum* (with) in Ablative Singular form. As most medicine names are II\textsuperscript{nd} declension nouns, their Ablative Singular form is formed by the ending –\textit{o} (*cum Ichthyolo*);
— then the dose of the substance is indicated (0,2);
— the prescribing is finished with the direction “\textit{Da tales doses numĕro...}” and a prescription signature.

\textit{Reci}pe: \quad \textit{Suppositorium cum Ichthyolo} 0,2 \textit{Da tales doses numĕro} 10 \\
\textit{Signa:}

If the name of a medicinal form is used in the Accusative Plural, the same as Nominative Plural (*Suppositoria*), the prescribing is written in one line and finished with the number of doses (*numero* 10).

\textit{Reci}pe: \quad \textit{Suppositoria cum Glycerino} 1,44 \textit{numero} 10 \\
\textit{Da. Signa:}

The adjectives \textit{vaginal} and \textit{rectal} are always written just after the noun “suppository” in the corresponding form (*Acc. Sing — vaginale / rectale; Acc. Plur. – vaginalia / rectalia*).

\textit{Reci}pe: \quad \textit{Suppositorium vaginale cum Synthomycino} 0,25 \textit{Da tales doses numĕro} 5 \\
\textit{Signa:}

\textit{Reci}pe: \quad \textit{Suppositoria vaginalia cum Synthomycino} 0,25 \textit{numero} 5 \textit{Da. Signa:}

When writing out suppositories of complex composition with a \textbf{trade name}, a medicinal form is written in the Accusative Plural; the name of a preparation in inverted commas keeps its initial form; the line is finished with the number of suppositories. Doses of pharmaceutical substances are not given in such prescriptions.

\textit{Reci}pe: \quad \textit{Suppositoria “Anusolum” numero} 10 \\
\textit{Da. Signa:}

\textbf{Complex prescription.} Suppositories may be prepared at a pharmacy according to magistral prescribing. In this case a prescription is written in a detailed form indicating all the ingredients and their doses.

It is possible not to indicate the mass of a base in a prescription. In this case one should write \textit{quantum satis} (as much as necessary).

\textit{Reci}pe: \quad \textit{Promedoli} 0,02 \textit{Olei Cacão} 3,0 \\
\textit{Misce, fiat suppositorium rectâle} \textit{Da tales doses numĕro} 6 \\
\textit{Signa:}
Recipe:  Promedoli 0,02
Olei Cacao quantum satis
Misce, fiat suppositorium rectale
Da tales doses numero 6
Signa:

EXERCISES

1. Translate the following prescriptions into Latin:

1) Take: Ointment of boric acid 10,0
Give such doses in number 2
Mark:

2) Take: Suppositories ”Novurit” in number 10
Give. Mark:

3) Take: Ophthalmic ointment of tetracycline 10,0
Give. Mark:

4) Take: Suppositories with glycerine 1,44 in number 10
Give. Mark:

5) Take: Vaginal suppository with synthomycine 0,25
Give such doses in number 10
Mark:

6) Take: Rectal suppositories with novocaine 0,1 in number 10
Give. Mark:

7) Take: Extract of belladonna 0,02
Xeroform 0,1
Zinc sulphate 0,05
Glycerine 0,12
Cocoa butter 2,0
Mix to make suppository
Give such doses in number 10
Mark:

8) Take: Ointment of bismuth subnitrate 20,0
Give such doses in number 2
Mark:
9) Take: Suppositories with digitoxine 0,00015 in number 10
Give. Mark:

10) Take: Benzoic acid 5,0
     Salicylic acid 0,3
     Vaseline 10,0
     Mix to make ointment
Give. Mark:

2. Write the Latin part of a simple or complex prescription:
1. ointment of neomycine sulfate 1% 50,0;
2. paste of zinc 50,0;
3. ointment consisting of sulfacyle-sodium 1,0; lanoline 0,4; vaseline up to 5,0;
4. paste consisting of iodoform 10,0; zinc oxide 5,0; vaseline up to 50,0;
5. 10 suppositories with ichthyole 0,2;
6. 20 suppositories “Anusol”;
7. 10 suppositories consisting of atropine sulfate 0,0005; cocoa butter as much as necessary;
8. ointment of anaesthesine 5 % 10,0;
9. ointment consisting of menthole 0,02; zinc oxide 10,0; solution of adrenaline hydrochloride 1 % 5 drops; vaseline 10,0;
10. 10 vaginal suppositories consisting of chinosole 0,03; boric acid 0,3; tannine 0,06; cocoa butter as much as necessary.

LESSON 7. PRESCRIBING SOLID MEDICINAL FORMS

The main objectives of the lesson are:
1) to learn the structure of a prescription for solid medicinal forms;
2) to learn the rules of prescribing ophthalmic films and aerosol

§17. Rules of writing out solid medicinal forms

Tablets /1/, dragée /2/, powders /3/, granules, pills and capsules /4/ are solid medicinal forms. Tablets, dragée and powders are most often used.
**Tablets** are solid medicinal forms obtained by pressing pharmaceutical substances and adjuvants. Nowadays tablets are not prepared at the pharmacy and therefore magistral prescribing isn’t used.

(1) The most widespread prescribing of tablets is the following:
— first goes the name of a pharmaceutical substance in the Genitive Singular form and its single dose \((Analgini 0,5)\);
— then follows the direction about the number of the prescribed tablets \((Da tales doses numero 10)\) which is finished with the prepositional phrase *in tabulettis* \((in tablets)\).

**Recipe:**  \(Analgini 0,5\)
\(Da tales doses numero 10 in tabulettis\)

**Signa:**

(2) Another version of prescribing tablets:
— starts with the name of a medicinal form in the Accusative Singular form \((Tabulettam)\)
— then the name of a pharmaceutical substance and its single dose are indicated \((Analgini 0,5)\)
— the direction for the number of the prescribed tablets is indicated on the next line \((Da tales doses numero 10)\).

**Recipe:**  \(Tabulettam Analgini 0,5\)
\(Da tales doses numero 10\)

**Signa:**

(3) There is one more way of prescribing tablets:
— It starts with the name of a medicinal form in the Accusative Plural form \((Tabulettas)\);
— then the name of a pharmaceutical substance and its single dose are indicated \((Analgini 0,5)\);
— the direction about the number of the prescribed tablets is indicated on the same line \((numero 10)\).

**Recipe:**  \(Tabulettas Analgini 0,5 numero 10\)

**Signa:**

If the adjective *obductus, a, um* is necessary to use in the prescription, this adjective is placed after the dose and takes the same endings as the noun “tablet”.

**Recipe:**  \(Tabulettam Oleandomycini phosphatis 0,125 obductam\)
\(Da tales doses numero 25\)

**Signa:**

**Recipe:**  \(Tabulettas Oleandomycini phosphatis 0,125 obductas numero 25\)

**Signa:**
When prescribing tablets with a special **trade name**, it’s necessary to start the prescription with the name of a medicinal form in the Accusative plural (Tabulettas); then the drug name in the Nominative case in inverted commas follows ("Pentalginum"); the line is finished with the number of doses (numero 10). A single dose of pharmaceutical substances is not indicated as it is standard. Other versions of prescribing for tablets with a commercial name are impossible.

**Reciße:** Tabulettas “Pentalginum” numero 10  
Da. Signa:

**Dragée** is a solid medicinal form in doses for internal use obtained by making multiple layers of pharmaceutical substances and adjuvants over sugary granules and prescribed like tablets. The Latin noun “dragee” has the same form in all versions of prescription:

**Reciße:** Dragée Diazolini 0,05  
Da tales doses numero 20  
Signa:

**Reciße:** Dragée “Hexavitum” numero 50  
Da. Signa:

**Powder** is a solid medicinal form for internal and external use. There are *simple* powders (consisting of one substance), *compound* powders (consisting of two or more ingredients), *dosed* powders which are divided into separate doses and *non-dosed* powders which are not divided into separate doses.

Prescribing **simple non-dosed powder**  Prescribing **simple dosed powder**

Reciše: Pulveris Ampicillini 60,0  
Da. Signa:  
Reciše: Pulveris Theobromini 0,5  
Da tales doses numero 10  
Signa:

Prescribing **compound non-dosed powder**  Prescribing **compound dosed powder**

Reciše: Benzyl/penicillini-natrii 125 000 OD  
Aethazoli 5,0  
Misce, fiat pulvis  
Da. Signa:  
Reciše: Euphyllini 0,01  
Dimedroli 0,0125  
Sacchari 0,2  
Misce fiat pulvis  
Da tales doses numero 10  
Signa:

**Capsules** are covers for powdery, paste-like, granulated or liquid pharmaceutical substances in doses for internal use. When prescribing medicines in capsules, the following form of a prescription is used:
Recīpe: Soluțiōnis Nitroglycerīni 1 % oleōsa 0,5
   Da tales doses numĕro 50 in capsŭlis gelatinōsis
   Signa:

Recīpe: Ampicillīni 0,25
   Da tales doses numĕro 20 in capsŭlis
   Signa:

§18. Other medicinal forms

Ophthalmic films (membranŭlæ ophthalmĭcae) and aerosols (aërosōla) are produced only by pharmaceutical industry and, like other ready medicinal forms, they are prescribed in a shortened way. The name of a medicinal form is used in the Accusative case.

Recīpe: Membranŭlas ophthalmĭcas cum Apilaco 0,2 numĕro 6
   Da. Signa:

Recīpe: Aërosōlum “Ephatinum” numĕro 1
   Da. Signa:

EXERCISES

1. Complete the prescription with the necessary endings

1. Recīpe: Cyclophosphān___ 0,05
   Da tales doses numĕro 50 in tabulett___ obduct___
   Signa:

2. Recīpe: Tabulett___ “Citramon___” numĕro 6
   Da. Signa:

3. Recīpe: Tabulett___ Nitrogranulong___ 0,029 obduct___
   Da tales doses numero 50
   Signa:

4. Recīpe: Aerosōl___ “Amprovisol___” numĕro 1
   Da. Signa:

5. Recīpe: Membranŭl___ ophthalmĭc___ cum Dicaīn___ 0,2 numĕro 6
   Da. Signa:

Recīpe: Pulver___ radic___ Rhe___ 0,5
   Da. Signa.
2. Write the Latin part of a prescription for the following medicines:
1. 20 tablets of acyclovir 0.2;
2. 15 gelatinous capsules of castor oil 1,0;
3. 10 tablets of “Bellaesthesin”;
4. aerosol “Camethon” 30 ml in number 2;
5. 10 tablets of ampicillin 0,25;
6. 20 coated tablets of aloe 0,005;
7. 50 tablets of lipoic acid 0,025;
8. 15 doses of powder consisting of sulphur and powder of liquorice equally 0,25;
9. 50 tablets of potassium orotate 0,5 for children;
10. 3 doses of powder consisting of sodium tetraborate; sodium hydrocarbonate equally 20,0; oil of mint 3 drops;
11. 10 tablets “Thepaphylline”;
12. 30 coated tablets of oleandomycin phosphate 0,125;
13. 10 ophthalmic films with pilocarpine hydrochloride 2,7;
14. 10 doses of powder of theobromine 0,5;
15. 50 dragee “Undevit”.

LESSON 8.
ABBREVIATIONS IN PRESCRIPTIONS

The main objectives of the lesson are:
1) to learn the main abbreviations used in prescription;
2) to train in writing the Latin part of prescription using abbreviations.

§19. Abbreviations in prescriptions

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Latin form</th>
<th>Translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ac. (Acid.)</td>
<td>acidūm</td>
<td>acid</td>
</tr>
<tr>
<td>aa</td>
<td>ana</td>
<td>equally, of each</td>
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<td>amp.</td>
<td>ampulla</td>
<td>ampoule</td>
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<td>aq.</td>
<td>aqua</td>
<td>water</td>
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<td>Aq. destill.</td>
<td>Aqua destillāta</td>
<td>distilled water</td>
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<tr>
<td>Aq. purif.</td>
<td>Aqua purificāta</td>
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<td>aërosōlum</td>
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<td>capsule</td>
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<td>comp., cps., cp.</td>
<td>composītus, a, um</td>
<td>compound, compounded</td>
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<td>concentr.</td>
<td>concentrātus, a, um</td>
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<tr>
<td>cort.</td>
<td>cortex</td>
<td>bark</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Full Latin form</td>
<td>Translation</td>
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<tr>
<td>D.</td>
<td>Da.</td>
<td>Give.</td>
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<td></td>
<td>Detur.</td>
<td>Let it be given.</td>
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<tr>
<td></td>
<td>Dentur.</td>
<td>Let them be given.</td>
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<tr>
<td>D.S.:</td>
<td>Da. Signa:</td>
<td>Give. Mark:</td>
</tr>
<tr>
<td></td>
<td>Detur. Signetur:</td>
<td>Let it be given. Let it be marked:</td>
</tr>
<tr>
<td>D.t.d. N.</td>
<td>Da tales doses numero</td>
<td>Give such doses in number</td>
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<tr>
<td>dec., dct.</td>
<td>decoctum</td>
<td>decoction</td>
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<td>dep.</td>
<td>depuratus, a, um</td>
<td>purified</td>
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<td>dest., destill.</td>
<td>destillatus, a, um</td>
<td>distilled</td>
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<td>dilatus, a, um</td>
<td>diluted</td>
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<td>plaster</td>
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<td>externus, a, um</td>
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<td>extractum</td>
<td>extract</td>
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<tr>
<td>f.</td>
<td>fiat (fiant)</td>
<td>let it be made</td>
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<td>flos</td>
<td>flower</td>
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<td>fluid.</td>
<td>fluidus, a, um</td>
<td>fluid, liquid</td>
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<td>fr., fruct.</td>
<td>fructus</td>
<td>fruit</td>
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<td>gran.</td>
<td>granulum</td>
<td>granule</td>
</tr>
<tr>
<td>gtt.</td>
<td>guttum</td>
<td>drop</td>
</tr>
<tr>
<td>gtts.</td>
<td>guttas</td>
<td>drops</td>
</tr>
<tr>
<td>h., hb.</td>
<td>herba</td>
<td>herb</td>
</tr>
<tr>
<td>in ampull.</td>
<td>in ampullis</td>
<td>in ampoules</td>
</tr>
<tr>
<td>in caps. (gel.)</td>
<td>in capsulīs (gelatinōsis)</td>
<td>in (gelatinous) capsules</td>
</tr>
<tr>
<td>in tab.</td>
<td>in tabulettis</td>
<td>in tablets</td>
</tr>
<tr>
<td>in vitr. nigr.</td>
<td>in vitro nigro</td>
<td>in a dark phial</td>
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<tr>
<td>inf.</td>
<td>infūsum</td>
<td>infusion</td>
</tr>
<tr>
<td>int.</td>
<td>internus, a, um</td>
<td>internal</td>
</tr>
<tr>
<td>lin.</td>
<td>linimentum</td>
<td>liniment</td>
</tr>
<tr>
<td>liq.</td>
<td>liquor</td>
<td>liquor, solution</td>
</tr>
<tr>
<td>M.</td>
<td>Misce.</td>
<td>Mix.</td>
</tr>
<tr>
<td></td>
<td>Misceātur.</td>
<td>Let it be mixed.</td>
</tr>
<tr>
<td>mixt.</td>
<td>mixtūra</td>
<td>mixture</td>
</tr>
<tr>
<td>mucil.</td>
<td>mucilago</td>
<td>mucilage</td>
</tr>
<tr>
<td>N.</td>
<td>numero</td>
<td>in number</td>
</tr>
<tr>
<td>obd.</td>
<td>obductus, a, um</td>
<td>coated</td>
</tr>
<tr>
<td>past.</td>
<td>pasta</td>
<td>paste</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Full Latin form</td>
<td>Translation</td>
</tr>
<tr>
<td>--------------</td>
<td>-----------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>pil.</td>
<td>pilūla</td>
<td>pill</td>
</tr>
<tr>
<td>praec., ppt.</td>
<td>praecipitātus, a, um</td>
<td>precipitated</td>
</tr>
<tr>
<td>pro inject.</td>
<td>pro injectionibus</td>
<td>for injections</td>
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<tr>
<td>pulv.</td>
<td>pulvis</td>
<td>powder</td>
</tr>
<tr>
<td>purif.</td>
<td>purificātus, a, um</td>
<td>purified</td>
</tr>
<tr>
<td>q.s.</td>
<td>quantum satis</td>
<td>as much as necessary</td>
</tr>
<tr>
<td>rad., r.</td>
<td>radix</td>
<td>root</td>
</tr>
<tr>
<td>rect.</td>
<td>rectālis, e</td>
<td>rectal</td>
</tr>
<tr>
<td>rectif.</td>
<td>rectificātus, a, um</td>
<td>rectified (about liquid substances)</td>
</tr>
<tr>
<td>Rep.</td>
<td>Repēte!</td>
<td>Repeat!</td>
</tr>
<tr>
<td>rhiz.</td>
<td>rhizōma</td>
<td>rhizome</td>
</tr>
<tr>
<td>Rp.:</td>
<td>Recĭpe:</td>
<td>Take:</td>
</tr>
<tr>
<td>S.:</td>
<td>Signa:</td>
<td>Mark:</td>
</tr>
<tr>
<td></td>
<td>Signetur:</td>
<td>Let it be marked:</td>
</tr>
<tr>
<td>sem.</td>
<td>semen</td>
<td>seed</td>
</tr>
<tr>
<td>sicc.</td>
<td>siccus, a, um</td>
<td>dry</td>
</tr>
<tr>
<td>simpl.</td>
<td>simplex, ēcis</td>
<td>simple</td>
</tr>
<tr>
<td>sir.</td>
<td>sirūpus</td>
<td>syrup</td>
</tr>
<tr>
<td>sol.</td>
<td>solutio</td>
<td>solution</td>
</tr>
<tr>
<td>spec.</td>
<td>species</td>
<td>species</td>
</tr>
<tr>
<td>Spir.</td>
<td>Spiritus</td>
<td>spirit</td>
</tr>
<tr>
<td>Steril.</td>
<td>Sterilīsa!</td>
<td>Sterilize!</td>
</tr>
<tr>
<td></td>
<td>Sterilisētur!</td>
<td>Let it be sterilized!</td>
</tr>
<tr>
<td>supp.</td>
<td>suppositorium</td>
<td>suppository</td>
</tr>
<tr>
<td>susp.</td>
<td>suspensio</td>
<td>suspension</td>
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<tr>
<td>tab.</td>
<td>tabuletta</td>
<td>tablet</td>
</tr>
<tr>
<td>tinct., t-ra, tct.</td>
<td>tinctūra</td>
<td>tincture</td>
</tr>
<tr>
<td>ung.</td>
<td>unguentum</td>
<td>ointment</td>
</tr>
<tr>
<td>vagin.</td>
<td>vaginālis, e</td>
<td>vaginal</td>
</tr>
</tbody>
</table>

**EXERCISES**

1. Write the Latin part of the prescription the using abbreviations
2. mixture for intravenous injection consisting of solution of aminazine 2,5 % 2 ml and solution of glucose 5 % 20 ml; 3. 10 ampoules of oily solution of synoestrole 0,1 % 1 ml; 4. 25 coated tablets of tetracycline with nystatine; 5. mixture consisting of menthol 2,5; novocaine and anaesthsine equally 1,0; ethyl alcohol 70 % up to 100 ml;
6. syrup of aloe 300 ml;
7. ointment of hydrocortisone acetate 0,5 % 10,0;
8. 20 doses of powder consisting of dibazole 0,005 and sachar 0,3;
9. 6 ampoules of solution of aethazole-sodium 10 ml;
10. 6 suppositories consisting of extract of belladonna 0,02; xeroform 0,1; zinc sulphate 0,05; glycerine 0,12; cacao butter as much as necessary;
11. 10 doses of powder consisting of phenacetine 0,3; acetylsalicylic acid 0,5 and caffeine and sodium benzoate 0,1;
12. 6 vaginal suppositories with natamycin 1,0;
13. 30 tablets of dixoibenzoic acid 0,5;
14. mixture consisting of concentrated solution of hydrogen peroxide 5,0 and distilled water 15 ml;
15. mixture consisting of morphine hydrochloride 0,015; apomorphine hydrochloride 0,05; diluted hydrochloric acid 1 ml; distilled water up to 200 ml;
16. ointment consisting of benzoic acid 0,6; salicylic acid 0,3 and Vaseline 10,0;
17. 50 tablets of monomycin 0,25;
18. 6 suppositories “Anusole”;  
19. 30 ophthalmic films with florenale;
20. 10 capsules of oily solution of nitroglycerine 1 % — 0,0005.

2. **Translate into Latin:**

thiopentale-sodium in ampoules; dibazole with paverine hydrochloride; oily solution of camphor; liquid extract of aloe; oil of peppermint; vaginal suppositories with novocaine; cordiamine for injections; powder of root of rhubarb; solution of iodine for external use; syrup of marshmallow against cough; coated tablets of dimedrole for children; emulsion of castor oil; infusion of leaves of mint; rhizome itree; ethyl alcohol; leaves of nettle; suppositories with cordigite; ointment of yellow mercury oxide; solution of sodium nitrite in ampoules; codeine phosphate in tablets; bismuth subnitrate with extract of belladonna; spirituous solution of brilliant green; powder of ampicilin for suspension; ammonia solution; castor oil in capsules; tablets of furaciline for external use.

**SAMPLE OF THE FINAL TEST**

**“Pharmaceutical Terminology and the Prescription”**

**I. Translate into Latin**

1) validol in gelatinous capsules; 2) powder of sodium benzoate; 3) tablets of acetylsalicylic acid for children; 4) rectal suppositories with anaesthesine; 5) tablets of potassium orotate for children; 6) powder of root of rhubarb; 7) decoction of bark of oak; 8) purified water; 9) thick extract of valerian; 10) mixture for cough.

**II. Write out the Latin part of a prescription**

1) 10 coated tablets of lipoic acid 0,25 (2 variants);
2) 10 ampoules of solution of caffeine-sodium benzoate 20% 1 ml;  
3) 40 coated tablets “Ferrocal”;  
4) mixture consisting of diluted hydrochloric acid 1 ml; pepsin 2,0; distilled water up to 100 ml;  
5) 10 suppositories with glycerin 0,1;  
6) paste of neomycin sulfate 25,0;  
7) 20 capsules of methacycline hydrochloride 0,25;  
8) ointment of heparin 10,0;  
9) 10 suppositories “Anusol”;  
10) 10 suppositories consisting of phthivaside 0,5; anaesthesine 0,2; cocoa butter as much as necessary.

III. Write out the Latin part of a prescription with abbreviations  
1) 10 ampoules of solution of glucose 5% 10 ml; 2) tincture of motherwort 50 ml; 3) ointment of heparin.

PROFESSIONAL LATIN MEDICAL PHRASES

<table>
<thead>
<tr>
<th>No.</th>
<th>Latin Phrase</th>
<th>English Translation</th>
</tr>
</thead>
</table>
| 1.  | Ante cibum /a.c./ | Before meals /medical instruction/.
| 2.  | A posteriōri. | From the latter, based on observation. / used to denote something known from experience/.
| 3.  | A priōri. | From the former, known or postulated before a proof has been carried out. /In everyday speech, it denotes something occurring or being known before the event/.
| 5.  | Anamnēsis vitae. | Data about the life.
| 6.  | Bis in die. /b.i.d./ | Twice a day.
| 9.  | Cito! | Quickly!
| 11. | Facies Hippocratīca. | Hippocratic face. It is the change in the face by impending death or long illness. “If the patient's facial appearance may be described this: the nose sharp, the eyes sunken, the temples fallen in, the ears cold and drawn in and their lobes distorted, the skin of the face hard, stretched and dry, and the colour of the face pale or dusky...and if there is no improvement within a prescribed period of time, it must be realized that this sign portends death”. The Hippocratic face is so called because it was first described by Hippocrates.
| 12. | In vitro. | Taking place outside a living organism (for example in a test tube).
<table>
<thead>
<tr>
<th>13. In vivo.</th>
<th>In a living organism /An experiment or process performed on a living specimen/.</th>
</tr>
</thead>
</table>
| 14. Oculus dexter. /O.D./  
Oculus sinister. /O.S./ | Right eye. /abbreviations used in Ophthalmology as Left eye. /medical attention for eyes/ |
| 15. Per os. | Through the mouth. |
| 16. Per rectum. | Through the rectum. |
| 17. Per vagīnam. | Through the vagina. |
| 18. Post cibum /p.c./ | After meals /medical instruction/. |
| 19. Post mortem. | Examination of a body after death to learn the cause of death /autopsy/. |
| 23. Rubor, tumor, calor, dolor et functio laesa. | Redness, swelling, fever, pain, and loss of function are the classical signs of inflammation. |
| 24. Statim! | Immediately! |
| 25. Ter in die /t.i.d./ | Three times a day. |
LITERATURE


9. Закон Республики Беларусь от 20 июля 2006 г. № 161-З «О лекарственных средствах».


