МИНИСТЕРСТВО ЗДРАВООХРАНЕНИЯ РЕСПУБЛИКИ БЕЛАРУСЬ

УЧРЕЖДЕНИЕ ОБРАЗОВАНИЯ
«ГОМЕЛЬСКИЙ ГОСУДАРСТВЕННЫЙ МЕДИЦИНСКИЙ УНИВЕРСИТЕТ»

Кафедра иностранных языков

С. А. ЛИН

ФАРМАЦЕВТИЧЕСКАЯ ТЕРМИНОЛОГИЯ И РЕЦЕПТ

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

PHARMACEUTICAL TERMINOLOGY AND PRESCRIPTION

Teaching workbook on the Latin language
for 1st year students
of Faculty on preparation of experts for foreign countries
of medical higher educational institutions

Гомель
ГомГМУ
2014

УДК 807.1+615(072)=111
ББК 81.2Лат+52.829(2Англ)я73
Л 59

Рецензенты:
кандидат филологических наук, доцент кафедры белорусского языка
Гомельского государственного университета имени Ф. Скорины
Е. Н. Воинова;
кандидат филологических наук, доцент,
заведующий кафедрой иностранных языков
Гомельского государственного технического университета имени П. О. Сухого
И. Н. Пузенко

Лин, С. А.

Л 59 Фармацевтическая терминология и рецепт: учеб.-метод. пособие по латинскому языку для студентов 1 курса факультета по подготовке специалистов для зарубежных стран медицинских вузов = Pharmaceutical terminology and prescription: teaching workbook on the Latin language for 1st year students of Faculty on preparation of experts for foreign countries of medical higher educational institutions / С. А. Лин; пер. на англ. яз. О. В. Пачковской. — Гомель: ГомГМУ, 2014. — 44 с.

ISBN 978-985-506-629-4

Настоящее учебно-методическое пособие предназначено для студентов учреждений, обеспечивающих получение высшего медицинского образования на английском языке. Рассматривает закономерности образования фармацевтических терминов и знакомит студентов с методикой их анализа.

Составлено в соответствии с программой по латинскому языку и основам медицинской терминологии.

Утверждено и рекомендовано к изданию научно-методическим советом учреждения образования «Гомельский государственный медицинский университет» 30 декабря 2013 г., протокол № 10.

УДК 807.1+615(072)=111
ББК 81.2Лат+52.829(2Англ)я73

ISBN 978-985-506-629-4

PHARMACEUTICAL TERMINOLOGY AND PRESCRIPTION

Pharmaceutical terminology is a complex consisting of terminologies of independent special disciplines united under the common name *pharmacy* (Greek *pharmakeia*) which deal with getting, processing, making, storing and handing out medicines. Pharmaceutical terms indicate raw materials which pharmaceutical substances are got from as well as products of processing these raw materials.

LESSON 1

§ 1. Principal terms of pharmaceutical terminology and their definitions

Pharmaceutical substance[1] 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.

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

Medicine is a substance or combination of several substances of natural, synthetic or biotechnological origin which have pharmacological activity and are used in a certain medicinal form internally or externally for prophylaxis, diagnostics and treatment of diseases, pregnancy prevention, rehabilitation of patients.

Medicinal form is a state of a medicine which makes it convenient to use.

§ 2. Basic principles of forming medicines names

Most names of ready (produced by pharmaceutical industry) medicines consist of one word. Since nowadays there are approximately 300 000 non-prescription preparations (dispensed without a prescription) and 100 000 prescription ones, one may imagine how many medicines names function all over the world. There is quite a limited list of International unpatented names which has been made according to the rules accepted by World Health Organization to avoid confusion. Names of new medicaments undergo an international examination by the established procedure.

Knowledge of basic rules of medicines names formation is necessary to make a competent decision on using or administering medicines when carrying out treatment-and-prophylactic measures.

---

[1] Wordings of Law of the Republic of Belarus of the 20th of July of the year 2006 № 161-3 “On medicines” are used

Contemporary medicines are made by means of chemical synthesis and initially have **scientific (systematic)** names, which correspond to a molecule composition and structure of a chemical compound. Many medicines preserve names corresponding to their chemical composition. They are names of chemical elements, salts of metals, inorganic acids and alkali: iodine, calcium gluconate, sodium chloride, acetylsalicylic acid and others. However, most systematic names are inconvenient not only for patients but also for doctors and pharmacists in professional communication. In such cases medicines get **trivial** names (Latin *triviālis* «usual, ordinary»). The main purpose of these names is to single this or that preparation out of a series of similar ones. Trivial names must follow the following principles:

1) they must be as short as possible;
2) they must be easily pronounced;
3) they must have clear phonetic-and-graphic distinction.

Each name must noticeably differ from other names. Even a few wrong letters may result in a serious mistake.

Trivial names are formed from roots of names of crude drugs, chemical compounds, from prefixes and suffixes with a stable meaning. Therefore, they cannot be called senseless, although they do not have an integrated meaning and are not translated into national languages.

To memorize names of medicines correctly, word-formative analysis is necessary to see prefixes, roots or suffixes, which we will call **frequency pieces**. In contrast to clinical terminology, where the main motive of memorizing a term-element was its meaning, pharmaceutical terminology requires orthographic accuracy of writing Latin names of medicines.

Word-formative units are prefix, root, and suffix.

Prefixes in pharmaceutical names

Prefix	*Meaning*	*Examples*
anti-	against	Antistrumīnum (*struma* goiter)
contra-	against	Contraceptīnum (*conceptio* conception)
de-, des-	from, removal	Decaris (*ascaris* ascarid)
a-, an-	not, negation	Analgīnum (*algia* pain)
e-, ex-, exo-	from	Exomuc (*mucosa* mucous tunic*)*
super-, supra-	more than, over	Supradyn (*dynamis* strength) – multivitamin complex with trace elements
ultra-	more than, over	Ultracain – strong anesthetic with fast action and good tolerance
eu-	well, in the norm	Euphyllīnum – theophylline derivative
sine-	without	Sinepres (*pressio* pressure)
Greek numerals-prefixes		
mono-	one	Monomycīnum, i n

Prefix	*Meaning*	*Examples*
di-	two	Diazōlum, i n
tri-	three	Trimecaīnum, i n
tetra-	four	Tetracyclīnum, i n
pent(a)-	five	Pentazōlum, i n
hex(a)-	six	Hexamethylentetramīnum, i n
hept(a)-	seven	Mycoheptīnum, i n
oct(a)-	eight	Octathiōnum, i n
deca-	ten	Decamevītum, i n
hende-	eleven	Hendevītum, i n
Latin numerals-prefixes		
bi-	two	Bicromatum, i n
unde-	eleven	Undevītum, i n
octo-	eight	Octoestrōlum, i n

Root frequency pieces contain basic information on composition or action of a drug. Most of them have definite meaning, stable spelling and serve for forming various terms. Root frequency pieces may be combined with other frequency pieces in different ways so that the name of each preparation should be individual. In some cases frequency pieces help to identify pharmaceutical group.

Pharmacologic information	Examples
Raw materials for reeiving a preparation	***Theophyllīnum*** contains tea leaf extract (*thea* – tea; *phyllon* – leaf); ***Apilac*** contains dry substance of bees' royal jelly (*apis* – bee; *lac* – milk); ***Pancreatīnum*** powder from pancreas of livestock (*pancreas* – pancreas); ***Viprosalum B*** contains snake venom (*vipĕra* – snake, viper)
Name of a producer	***Penicillīnum*** from *Penicillium* – name of a certain strain of mold fungi; ***Cephalosporīnum*** from *Cephalosporīnum acremonium* – name of a fungus
Belonging to a certain pharmaceutical group	***Azythromycīnum*** antibiotic of streptomycin group; ***Ampicillīnum*** antibiotic of penicillin group; ***Doxycyclin(um)*** antibiotic of tetracycline group
Therapeutic effect	***Analgīnum*** from *an* (*negation*) + *algos* pain; ***Spasmolytīnum*** from Greek *spasmos* spasm, cramp + l*ysis* destruction;

Pharmacologic information	Examples
	Cardiovalenum from *kardia* heart + *valēre* to be healthy; ***Dormiplant*** somnifacient of vegetable origin from Latin *dormīre* – to sleep, *planta* – plant.
Chemical information	***Synthomycīnum*** synthetic analogue of streptomycin (*synthetĭcus* – formed by means of chemical synthesis)

Names of synthetic medicines may be also composed of letters and syllables taken from their complex systematic name: *Dimexidum* from *dimethyl sulfoxide*.

Sometimes pharmaceutical companies include some other information into names of their products. For example, place of production, name of the company itself and some other indirect associations. Thus, the Latin word *festum* – a festive occasion – is the basis of the drug name "Festal" used for digestion improvement. The antibiotic *Nystatīnum* got its name from New York State where it was produced for the first time. The name *Ciprobay* was formed from *Ciprofloxacin* by the firm *Bayer*.

Suffix frequency piece	*Peculiarities of use*	*Example*
-īn-	1) in names of medicines of vegetable and animal origin; 2) for morphological completion of a medicine name	***Atropīnum*** from *Atropa belladonna* belladonna; ***Adrenalīnum*** from *glandŭlae adrenāles* adrenal glands ***Tetracyclīnum*** tetracycline ***Ampicillīnum*** ampicillin
-āl-	in names of many preparations of sedative and hypnotic action	***Phenobarbitālum*** phenobarbital; ***Bromisoval***
-ōl-	in names of alcohols, phenols, and some other cases	***Oestradiōlum*** estradiol
-yl-	means presence of hydrocarbon and acid radicals	***Methylii salicylas*** methyl salicylate

As a rule, trivial names are second declension neuter nouns with the ending **-um**: *Analgīnum, i n*; *Atropīnum, i n*; *Codeīnum, i n*. Names of imported medicines are spelt according to the standards of a country where the medicines are produced.

Nowadays not all the producers follow classical spelling of Greek word-formative elements and this tendency to simplification was officially

acknowledged by World Health Organization. In newly created names producers are allowed to write ***f*** instead of ***ph***; ***t*** instead of ***th***; ***e*** instead of ***ae***, ***oe*** and ***i*** instead of ***y***. In this book classical spelling of Greek frequency pieces is used as a priority. (Practitioners receive lists of recommended preparations where it is indicated how to spell them).

§ 3. Names of complex composition medicines

In our country names of medicines containing two or more pharmaceutical substances (ingredients) are written in the Nominative case in inverted commas after the name of a medicinal form. For example, *tabulettae "Pyrcophenum"*, *tabulettae "Asparkam"*, *unguentum "Laevomecol"*, *suppositoria "Bethiolum"*, etc. These names are given in pharmaceutical reference books.

§ 4. Capital and small letter

In pharmaceutical terms **a capital letter** is written at the beginning of:

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* (if a chemical element is a part of a compound name as apposition, it is written with a small letter after a hyphen: *Oxacillinum-natrium*);

4) prescription verbal wordings: *Recĭpe* (Take); *Da* (Give (Hand out)); *Signa* (Mark);

5) first word of each new prescription line.

A small letter is written at the beginning of:

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 as well as of all the adjectives and participles as they cannot begin a prescription line.

§ 5. Names of plants and their parts in pharmaceutical terminology

Many medicines are made of vegetable raw materials: infusions, tinctures, decoctions, extracts and others. When prescribing them it is necessary to indicate both the name of a plant and the name of its part which a medicine should be made of (root, leaf, flower, etc.). Names of plants are always written with a capital letter while names of plants parts are written with a small one if they do not begin a line in a prescription.

It is necessary to remember that names of medicinal plants may be nouns of the 1st–4th Latin declensions of all the genders: *Mentha, ae f* – mint; *Leonūrus, i m* – motherwort; *Foenicŭlum, in* – fennel; *Adōnis, ĭdis m* – adonis; *Quercus, us f* – oak.

Some plants names of ancient Greek origin remain Greek endings of the Nominative or Genitive cases: *Aloë, ës f* – aloe.

Remember that all the trees names are of feminine gender in Latin, irrespective of grammatical signs of gender: *Quercus, us f* – oak[2].

In a prescription plants names are written in the singular and names of plants parts are written in the singular or in the plural. Such nouns as *herba, ae f* – herb; *cortex, ĭcis m* – bark; *radix, īcis f* – root; *rhizōma, ătis n* – rhizome are written in the singular and *flos, floris m* – flower; *folium, i n* – leaf; *fructus, us m* – fruit; *gemma, ae f* – bud are written in the plural.

§ 6. Brief information on medicinal forms

Liquid medicinal forms

Emulsion (*emulsum, i n*) is a liquid medicinal form in which water-insoluble fluids (fatty oils, balsams) are in an aqueous medium in a suspended state and look like small droplets.

Extract (*extractum, i n*) is obtained from medicinal vegetable raw materials.

Infusion (*infūsum, i n*) and **decoction (*decoctum, i n*)** are liquid medicinal forms which are aqueous extracts from vegetable raw materials.

Liniment (*linimentum, i n*) is a medicinal form for external use. Most liniments are homogeneous mixtures in a state of thick fluids.

Mixture (*mixtūra, ae f*) is a liquid medicinal form which is obtained when dissolving or mixing some solid substances in various liquid bases or when mixing some fluids.

Mucilage (*mucilāgo, ĭnis f*) is obtained by dissolving mucilaginous substances of vegetable origin or by extracting mucilaginous substances from vegetable raw materials by means of drawing as well as from starch processed with hot water.

Solution (*solutio, ōnis f*) is a liquid medicinal form which is obtained by means of dissolution of a solid pharmaceutical substance or a fluid in a solvent. There are aqueous, alcoholic, glyceric and oil solutions. They are used for internal and external use as well as for injections.

Suspension (*suspensio, ōnis f*) is a liquid medicinal form in which solid finely crushed insoluble pharmaceutical substances are in a suspended state in some fluid.

Tincture (*tinctūra, ae f*) is a liquid clear coloured to different degrees spirituous extract from vegetable raw materials.

---

[2] It is connected with a world outlook of ancient Greeks and Romans who thought that trees were inhabited by dryads, beings of feminine gender

Soft medicinal forms

Ointment (*unguentum, i n*) is a viscous medicinal form for external use.

Paste (*pasta, ae f*) is a variety of ointments containing not less than 25 percent of powdery substances.

Suppositories (*suppositorium, i n*) are medicinal forms in doses, solid at room temperature and melting or dissolving at body temperature. There are rectal suppositories (*suppositoria rectalia*) and vaginal suppositories (*suppositoria vaginalia*).

Solid medicinal forms

Capsule (*capsŭla, ae f*) is a cover for powdery, paste-like, granulated or liquid pharmaceutical substances in doses used orally. Medicinal preparations having an unpleasant taste, smell or an irritant effect are produced in capsules.

Dragée (*dragée* indeclinable) is a solid medicinal form in doses for internal use obtained by making multiple layers of pharmaceutical substances and adjuvants over sugary granules.

Granule (*granŭlum, i n*) is a solid medicinal form in a state of homogeneous particles (grains, kernels) of rounded, cylindrical or irregular form.

Pill (*pilŭla, ae f*) is a solid medicinal form in doses for internal use which resembles small balls of 0.1–0.5 grammes. Nowadays pills are prescribed very seldom.

Powder (*pulvis, ĕris m*) is a solid medicinal form for internal and external use having dry property.

Tablet (*tabuletta, ae f*) is a solid medicinal form in doses obtained by pressing pharmaceutical substances or mixtures of pharmaceutical substances and adjuvants.

Species (*species, ērum f*) is a mixture of several sorts of crumbled or more seldom of whole vegetable medicinal raw materials.

Different medicinal forms

Aerosol (*aërosōlum, i n*) is a spray for inhalations or external use.

Ophthalmic films (*membranŭlae ophthalmĭcae*) are sterile polymeric films containing pharmaceutical substances in definite doses and soluble in tear fluid.

§ 7. Structure of medicines trade names

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.). Such names are combinations of many words in a definite order: the name of a medicinal form is in the first place in the Nominative singular or plural, then the name of a

pharmaceutical substance or raw materials is written in the Genitive singular with a capital letter:

Tabulettae Analgīni – tablets of analginum
Tinctūra Valeriānae – valerian tincture (*tincture of valerian*)

In names of medicinal preparations obtained from stone-fruits, the name of a fruit is written in the Genitive plural:

Oleum Persicōrum – persic oil (*oil of peaches*)
Oleum Olivārum – olive oil (*oil of olives*)

If there is an adjective characterizing the medicinal form, it is written in the last place but is concordant with the name of the medicinal form:

Tabulettae Valeriānae obductae – coated tablets of valerian

Remember that in names of vaginal and rectal suppositories the adjectives *vaginalia* and *rectalia* are written right after the noun *suppositoria*:

Suppositoria vaginalia cum Synthomycīno – vaginal suppositories with synthomycin

The same structure is also applicable to names of ophthalmic films:

Membranŭlae ophthalmĭcae cum Pilocarpīni hydrochlorĭdo

If an adjective characterizes a pharmaceutical substance or medicinal plant, it is concordant with the name of this substance or plant:

Oleum Menthae piperītae – peppermint oil (*oil of peppermint*)

Standard medicines of complex composition usually get a conditional, commercial, name – a 2nd declension neuter noun – which may be written in inverted commas:

Tabulettae "Citramonum"
Dragée "Revitum"
Suppositoria "Anaesthesolum"

When prescribing medicines with a conditional name, remember that a noun in inverted commas does not change its case form.

Revise orthography of the following frequency pieces:

Frequency piece	*Pharmacologic information*	*Example*
-aesth-, aesthes- from Greek *aesthesis* – sence, sensitivity	analgetic	Anaesthesōlum, i n
erythr- from Greek *erythros* – red	antimicrobic preparation produced by the fungus *streptomyces erythreus*	Erythromycīnum, i n

Frequency piece	*Pharmacologic information*	*Example*
-gluc-, glyc- from Greek *glykys* – sweet	tonic containing carbohydrates; sweet	Glucōsum, i n; Glycerīnum, i n
haem- from Greek *haima* – blood		Haematogenum, i n *preparation from defibrinated blood of livestock*; Haemophobinum, i n
-hydr(o) from Greek *hydor* – water	presence of hydrogen, water or hydroxyl group	Hydrogenium, i n
-lys-(lyt-) from Greek *lysis, lytis* – destruction, decomposition		Sarcolysīnum, i n Spasmolytīnum
-poly from Greek *poly* – many		Polyamīnum, i n
-phthi- from Greek *phthisis* – tabes, pulmonary tuberculosis	antituberculous preparations	Phthivazīdum, i n
-thyr- from *glandŭla thyroidea* – thyroid gland	preparations for treatment of the thyroid gland	Thyreoidīnum, i n; Methothyrīnum,i n

Minimum vocabulary 1

a) medicinal forms:

aërosōlum, i n *aerosol*
capsŭla, ae f *capsule*
decoctum, i n *decoction*
dragée (indeclinable) *dragée*
emulsum, i n *emulsion*
extractum, i n *extract*
granŭlum, i n *granule*
infūsum, i n *infusion*
linimentum, i n *liniment*
membranŭla ophthalmĭca *ophthalmic film*
(membranŭla, ae f *film*; ophthalmĭcus, a, um *ophthalmic*)
mixtūra, ae f *mixture*
mucilāgo, ĭnis f *mucilage*
pasta, ae f *paste*
pilŭla, ae f *pill*
pulvis, ĕris m *powder*
solutio, ōnis f *solution*
species, ērum f *species*
suppositorium, i n *suppository*
suspensio, ōnis f *suspension*
tabuletta, ae f *tablet*
tinctūra, ae f *tincture*
unguentum, i n *ointment*

b)

Camphŏra, ae f *camphor*
cortex, ĭcis m *bark*
Erythromycīnum, i n *erythromycin*
fluĭdus, a, um *fluid, liquid*
Glycyrrhīza, ae f *licorice, liquorice*
herba, ae f *herb*
Hydrocortisōnum, i n *hydrocortisone*
Leonūrus, i m *motherwort*
Nitroglycerīnum, i n *nitroglycerin*
obductus, a, um *coated*
oleōsus, a, um *oily*
Quercus, us f *oak*
rectālis, e *rectal*
siccus, a, um *dry*
solutio oleōsa *oil solution*
spissus, a, um *thick*
vaginālis, e *vaginal*
Valeriāna, ae f *valerian*

Exercises

1. Indicate what diseases are treated by means of medicines with the following names and on what grounds you have drawn such a conclusion:

Allocholum; Anaesthesolum; Antigrippin; Antipyrinum; Antistrumin; Betoptic; Bronchocin; Bronchosan; Bronchotylum; Cardiodaron; Cardiovalen; Cignoderm; Dermazin; Enteroseptol(um); Erythromycinum; Glucosum; Glycerinum; Haematogenum; Haemophobinum; Hepatofalc; Hydrogenium; Methothyrinum; Nephrosteril; Pancreatinum; Phthivazidum; Polyaminum; Pyolysin; Pyrobutolum; Pyrogenalum; Rheopyrinum; Sarcolysinum; Skin-cap; Spasmolytinum; Somatotropinum; Thyreocomb; Thyreoidinum; Thyreotan; Traumamine; Trombophob; Trombostop; Troxevasin; Vasocordin; Venengel; Venoplant.

2. Latinize the following:

corglycon, hydrocortisone, phenobarbital, nitroglycerin, glucose, novocain, dihydroergotamine.

3. Analyze underlined endings and translate the following into English:

solutio Nitroglycerīn<u>i</u> oleōs<u>a</u>; suspensio Hydrocortisōn<u>i</u>; tinctūra Valeriān<u>ae</u>; unguentum Erythromycīn<u>i</u>; herba Leonūr<u>i</u>; infusum herb<u>ae</u> Leonūri; extractum Leonūri fluĭd<u>um</u>; extractum Glycyrrhīz<u>ae</u> sicc<u>um</u>; cortex Querc<u>us</u>; decoctum cortĭc<u>is</u> Quercus.

4. Put the necessary case ending instead of dots:

unguent… Nystatin…; solut… Nitrofungin…; suspens… Griseofulvin…; solut… Camphor… oleos…; tabulett… Paracetamol…; tabulett… «Bellasthesin…»; tabulett… «Cholenzym…» obduct…; suppositor… «Anaesthesol…»; unguent… Ditetracyclin… ophthalmic…; suppositor… vaginal… cum Synthomycino.

5. Translate from English into Latin:

coated tablet, rectal suppository, vaginal suppository, tincture of motherwort, valerian infusion (infusion of valerian), ophthalmic films, coated tablets, rectal suppositories, vaginal suppositories, thick extract of liquorice, thick extract of valerian, coated tablets of extract of valerian.

LESSON 2

§ 8. Formation of standard prescription wordings. Standard prescription wordings denoting instructions, directions

In the Latin language, order, instructions, motive to action or request are expressed in imperative and subjunctive mood forms.

Imperative mood. *Modus imperatīvus*

Imperative mood has singular and plural forms of the 2nd person. The singular form of the 2nd person coincides with a stem of the present tense of the 1st, 2nd, 4th conjugation verbs. In the 3rd conjugation, the vowel **-ĕ** is added to a stem (in other words, an infinitive form is written without the ending **-re**). Since the plural form of imperative mood is not used in prescriptions, its formation is not studied here.

Infinitive	*Presen tense stem*	*Conjugation*	*Imperatīvus 2nd person sing*	*Translation*
dā-re	da-	I	**Da!**	*Give! (Hand out!)*
signā-re	signa-	I	**Signa!**	*Mark!*
sterilisā-re	sterilisa-	I	**Sterilĭsa!**	*Sterilize!*
miscē-re	misce-	II	**Misce!**	*Mix!*
recip-ĕre	recipi-	III	**Recĭpe!**	*Take!*
repet-ĕre	repet-	III	**Repĕte!**	*Repeat!*
vert-ĕre	vert-	III	**Verte!**	*Turn over!*
audī-re	audi-	IV	Audi!	*Listen!*
salvē-re	salve!	II	Salve!	*Be in good health! (Hello!)*
valē-re	vale-	II	Vale!	*Be strong! (Goodbye!)*

Subjunctive mood. *Modus conjunctīvus*

Forms of subjunctive mood are used to express order, request, wish, call for action. In prescriptions, singular and plural forms of the 3rd person are used. The last vowel of a stem ***-ā-*** is substituted for the suffix **-ē-** and the personal ending ***-tur*** (singular number) or ***-ntur*** (plural number) is added in the 1st conjugation; the suffix ***-ā-*** and the same personal endings are joined to a stem in the 2nd, 3rd, and 4th conjugations.

Stem	*3rd person sing.*	*Translation*	*3rd person plur.*	*Translation*
dā-	**Detur**	*Let it be given (handed out)*	**Dentur**	*Let them be given (handed out)*
signā-	**Signētur**	*Let it be marked*		
sterilisā-	**Sterilisētur**	*Let it be sterilized*		
miscē-	**Misceātur**	*Let it be mixed*		
repet-	Repetātur	*Let it be repeated*		
audī-	Audiātur	*Let it be listened*		

Remember!

Da tales doses numĕro …	*Give (Hand out) such doses in number …*
Dentur tales doses numĕro …	*Let such doses be given (handed out) in number …*

The verb *fiĕri* in prescription wordings

While writing out a prescription for a complex composition medicinal form which is prepared at a pharmacy, the following standard phrase must be written: *"Mix in order that (ointment, a suppository, emulsion, etc.) should be made"*. In this case, subjunctive mood form of the verb ***fiĕri*** (*to be made*) is used. This verb is considered irregular as it is used with endings of the active voice but is translated by forms of the passive one:

- singular form of the 3rd person – ***fiat*** – *let it be made*;
- plural form of the 3rd person – ***fiant*** – *let them be made*.

The singular form ***fiat*** is used when prescribing powders, ointments, liniments, suppositories, etc.

The plural form ***fiant*** is used when prescribing species as the noun ***species, ērum f*** is used only in the plural in pharmaceutical terminology.

§ 9. Standard prescription wordings with prepositions

Prepositions are used only with two cases in the Latin language: Accusative and Ablative. Some prepositions may be used with both cases.

Prepositional prescription wordings which are mostly used

ad 100 ml	*up to 100 ml*
ad usum internum (externum)	*for internal (external) use*
contra tussim	*for cough*
cum extracto	*with extract*
cum radicĭbus	*with roots*
ex 0,5 – 180 ml	*from 0.5 gram (of dry substance) – 180 ml (of decoction, infusion)*
in ampullis	*in ampoules*
in capsŭlis gelatinōsis	*in gelatinous capsules*
in charta cerāta	*in waxed paper*
in tabulettis	*in tablets*
in tabulettis obductis	*in coated tablets*
in vitro nigro	*in a dark phial*
per se	*by itself*
pro auctōre (pro me)	*for the author (for me)*
pro infantĭbus	*for children*
pro injectionĭbus	*for injections*
pro narcōsi	*for narcosis*
pro suspensiōne	*for suspension*

Memorize orthography of the following frequency pieces:

Frequency piece	Pharmacologic information	Example
-**cillin**- (root *cill* + suffix *-in-)* is a part of the word *penicillinum* – name of the antibiotic synthetized from the fungus *Penicillium*	antibiotics of penicillin group	Ampicillīnum, i n
-**menth**- from Latin *Mentha* – mint	points out mint as a source of raw materials	Menthōlum, i n
-**fur**- from Latin *furfur, ŭris m* – peel, husk	antimicrobial agents related to chemical group of nitrofurans	Furacilīnum, i n Furazolidōnum, i n Furagīnum, i n
-**phyll**- from Greek *phyllon* – leaf	belonging to alkaloids	Platyphyllīnum, i n
-**platy**- from Greek *platys* – flat	Platyphyllīnum, i n	
-**pyr**- from Greek *pyr* – heat, fever	antipyretic	Anapyrīnum, i n

Frequency piece	Pharmacologic information	Example
-the(o)- 1. from Greek *theos* – god – a part of the word *Theobroma* (literally *gods' food*), generic name of cacao. 2. from Chinese *thea* – tea	belonging to alkaloids which possess a wide range of pharmacotherapeutic influence on an organism	Theobromīnum, i n
-yl- from Greek *hyle* – material	presence of hydrocarbon and acid radicals	Vinylīnum, i n Methylii salic□las

Minimum vocabulary 2

Ampicillīnum, i n *ampicillin*
aqua, ae f *water*
destillātus, a, um *distilled*
folium, i n *leaf*
gelatinōsus, a, um *gelatinous*
Hyperīcum , i n *St. John's Wort*
Mentha, ae f *mint*
Mentha piperīta *peppermint*
Nystatīnum, i n *nystatin*
oleum, i n *oil*
oleum Ricĭni *castor oil*
Penicillīnum, i n *penicillin*
purificātus, a, um *purified*
radix, īcis f *root*
Rheum, i n *rhubarb*
spirituōsus, a, um *spirituous*
spirĭtus, us m *spirit*
spirĭtus aethylĭcus, spirĭtus aethylĭci *ethyl alcohol*
Theophyllīnum, i n *theophylline*
Urtīca, ae f *nettle*
Virĭde nitens, Virĭdis nitentis *brilliant green*

Exercises

1. Analyze the structure of medicines names, underline the frequency pieces you know, give their meaning, memorize orthography of the underlined words:

Amidopyrīnum; Nitroglycerīnum; Ampicillīnum; Anapyrīnum; Barbamylum; Boromenthōlum; Diprophyllīnum; Euphyllīnum; Furacilīnum; Furagīnum; Furazolidōnum; Glycerīnum; Menthōlum; Methylii salicylas; Nystatīnum; Oxacillīnum-natrium; Platyphyllīnum; Pyralgin; Pyrogenālum; Pyrōnum; Pyracetāmum; Pyridoxīni hydrochlorĭdum; Theobromīnum; Theophyllīnum; Theoverīnum; Vinylīnum.

2. Translate into Latin:

purified water, distilled water, spirituous solution of brilliant green, roots of rhubarb, peppermint water (*water of peppermint*), leaves of peppermint, infusion of leaves of peppermint, dry extract of rhubarb, coated tablets of nystatin, peppermint oil (*oil of peppermint*), solution of penicillin for injections, water for injections, tablets of ampicillin for suspension, rectal suppositories with theophylline.

3. Read and analyze underlined endings:

1. Recĭpe: Menthōl<u>i</u> 0,2
   Spirĭt<u>us</u> aethylĭc<u>i</u> 90% 50,0
   Misce. Da. Signa:

2. Recĭpe: Aqu<u>ae</u> Menth<u>ae</u> piperīt<u>ae</u>
   Glycerīn<u>i</u>
   Spirĭtus aethylĭci 70% ana 30 ml
   Misceātur. Dētur. Signētur:

3. Recĭpe: Unguent<u>i</u> Xeroformii 3% 10,0
   Da. Signa:

4. Recĭpe: Solutiōn<u>is</u> Phentanyli 0,005% – 5 ml
   Da tales doses numĕro 10 in ampullis
   Signa:

5. Recĭpe: Suppositor<u>ia</u> cum Diprophyllīn<u>o</u> 0,5 numĕro 10
   Detur. Signētur:

4. Translate into Latin using imperative and subjunctive mood forms:

1. Give (Hand out) such doses in number 10 in tablets (in ampoules, in capsules, in coated tablets, in gelatinous capsules). 2. Mix in order that a suppository (ointment, liniment, paste, powder) should be made. 3. Mix in order that species should be made. 4. Give (Hand out) in waxed paper (in a dark phial). 5. Take ethyl alcohol 70% up to 100 ml.

LESSON 3

§ 10. Latin chemical terminology. Names of chemical elements

Latin names of chemical elements are 2nd declension neuter nouns: *Ferrum, i n* – iron; *Zincum, i n* – zinc. Remember the following exceptions: *Sulfur, ŭr**is** n*; Phosphŏrus*, i **m***. The elements *fluorine* and *magnesium* have two Latin names: *Phthorum* and *Fluōrum* (for fluorine); *Magnium* and *Magnesium* (for magnesium).

Chemical symbols come from Latin names of chemical elements.

Names of the most important chemical elements

Latin name	***Symbol***	***English name***	***Latin name***	***Symbol***	***English name***
Aluminium, i n	*Al*	*aluminium*	Hydrargўrum, i n	*Hg*	*mercury*
Argentum, i n	*Ag*	*silver*	Iōdum, i n	*I*	*iodine*
Arsenĭcum, i n	*As*	*arsenic*	Kalium, i n	*K*	*potassium*
Aurum, i n	*Au*	*gold*	Lithium, i n	*Li*	*lithium*
Borum, i n	*B*	*boron*	Magnesium, i n	*Mg*	*magnesium*
Bromum, i n	*Br*	*bromine*	Magnium, i n		
Barium, i n	*Ba*	*barium*	Mangănum, i n	*Mn*	*manganese*
Bismŭthum, i n	*Bi*	*bismuth*	Nitrogenium, i n	*N*	*nitrogen*
Carboneum, i n	*C*	*carbon*	Natrium, i n	*Na*	*sodium*
Chlorum, i n	*Cl*	*chlorine*	Oxygenium, i n	*O*	*oxygen*
Calcium, i n	*Ca*	*calcium*	Plumbum, i n	*Pb*	*lead*
Cuprum, i n	*Cu*	*copper*	Phosphŏrus, i m	*P*	*phosphorus*
Fluorum, i n	*F*	*fluorine*	Sulfur, ŭris n	*S*	*sulphur*
Phthorum, i n			Silicium, i n	*Si*	*silicon*
Ferrum, i n	*Fe*	*iron*	Zincum, i n	*Zn*	*zinc*
Hydrogenium, i n	*H*	*hydrogen*			

§ 11. Names of oxides, hydroxides, peroxides

Latin names of oxides, hydroxides, peroxides consist of two words. Name of a chemical element is written in the Genitive case in the first place; the words *oxўdum*, *hydroxўdum, peroxўdum* are written in the second place and they are declined.

Nom. sing.	***Gen. sing.***	***Translation***
Zinci oxўdum	Zinci oxўdi	*zinc oxide*
Hydrogenii peroxўdum	Hydrogenii peroxўdi	*hydrogen peroxide*

§ 12. Names of acids

Latin names of acids consist of the noun *Acĭdum, i n* (acid), which is written with the first capital letter, and adjectives concordant with it in gender, number and case: *Acĭdum acetylsalicylĭcum* acetylsalicylic acid; *Acĭdum hydrochlorĭcum* hydrochloric acid; *Acĭdum nitrōsum* – nitrous acid.

Nom. sing.	***Gen. sing.***
Acĭdum acetylsalicylĭcum	Acĭdi acetylsalicylĭci
Acĭdum hydrochlorĭcum	Acĭdi hydrochlorĭci
Acĭdum nitrōsum	Acĭdi nitrōsi

Memorize orthography of the following frequency pieces:

Frequency piece	Example
-az- from Greek *azotos* – lifeless	Azaleptīnum, i n
-(a)zid-	Saluzīdum, i n
-(a)zin-	Sulfadimezīnum, i n
-(a)zol-	Diazolīnum, i n
-(a)zon-	Penazonum, i n
-as-	Lydāsum, i n
-aeth- from Greek *aether* – ether	Aether, ĕris m Aethazōlum, i n
-cyan- from Greek *kyanos* – dark blue	Acĭdum hydrocyanĭcum
-form- from Latin *formīca* – ant	Xeroformium, i n
-oxy- from Greek *oxys* – sour	peroxўdum, i n
-phen- from Greek *phaino* – I lighten	Phenacetīnum, i n
-phthor- from Greek *phthoros* – destruction	Phthoracizīnum, i n
-sulfa- from Latin *Sulfur* – sulphur	Sulfadimezīnum, i n
-sulf- from Latin *Sulfur* – sulphur	Acĭdum sulfurĭcum

Lexical minimum 3

Acĭdum, i n *acid*
Acĭdum acetĭcum, Acĭdi acetĭci *acetic acid*
Acĭdum acetylsalicylĭcum, Acĭdi acetylsalicylĭci *acetylsalicylic acid*
Acĭdum ascorbinĭcum, Acĭdi ascorbinĭci *ascorbic acid*
Acĭdum arsenicōsum, Acĭdi arsenicōsi *arsenious acid*
Acĭdum benzoĭcum, Acĭdi benzoĭci *benzoic acid*
Acĭdum borĭcum, Acĭdi borĭci *boric acid*
Acĭdum carbolĭcum, Acĭdi carbolĭci *carbolic acid*
Acĭdum carbonĭcum, Acĭdi carbonĭci *carbonic acid*
Acĭdum citrĭcum, Acĭdi citrĭci *citric acid*
Acĭdum folĭcum, Acĭdi folĭci *folic acid*

Acĭdum formicĭcum, Acĭdi formicĭci *formic acid*
Acĭdum hydrochlorĭcum, Acĭdi hydrochlorĭci *hydrochloric acid*
Acĭdum lactĭcum, Acĭdi lactĭci *lactic acid*
Acĭdum lipoĭcum, Acĭdi lipoĭci *lipoic acid*
Acĭdum nicotinĭcum, Acĭdi nicotinĭci *nicotinic acid*
Acĭdum nitrĭcum, Acĭdi nitrĭci *nitric acid*
Acĭdum nitrōsum, Acĭdi nitrōsi *nitrous acid*
concentrātus, a, um *concentrated*
dilūtus, a, um *dilute*, *diluted*
flavus, a, um *yellow*
hydroxўdum, i n *hydroxide*
oxўdum, i n *oxide*
peroxўdum, i n *peroxide*

Exercises

1. Analyze the structure of medicines names, underline the frequency pieces you know, give their meaning, memorize orthography of the underlined words:

Acĭdum acetylsalicylĭcum (benzoĭcum; ursodesoxycholĭcum); Aethaperazīnum; Aethazolum; Aether; Chloroformium; Cocarboxylasum; Desoxyribonucleasum; Dibazolum; Formalinum; Iodoformium; Norsulfazolum; Phenazepamum; Phenolphthaleīnum; Phentanylum; Phthalazōlum; Phthoracizinum; Phthorafurum; Phthorothanum; Sulfapyridazinum; Xeroformium.

2. Form oxides names in the Nominative and Genitive singular with the following chemical elements: mercury, magnesium, copper, zinc, calcium.

3. Translate into Latin and form the Genitive singular:

lactic acid, hydrochloric acid, citric acid, acetic acid, benzoic acid, carbolic acid, nitrous acid, carbonic acid, folic acid, lipoic acid, arsenious acid, nicotinic acid, ascorbic acid, nitric acid, acetylsalicylic acid, formic acid, boric acid.

4. Translate into Latin:

solution of nicotinic acid in ampoules, dilute hydrochloric acid, tablets of acetylsalicylic acid, paste of zinc oxide, concentrated solution of hydrogen peroxide, ointment of yellow mercuric oxide, tablets of magnesium oxide.

5. Read, analyze underlined endings, and translate into English the following prescriptions:

1. Recĭpe: Acĭdi benzoĭci 0,6
   Acĭdi salicylĭci 0,3
   Vaselīni 10,0
   Misce, fiat unguentum
   Da. Signa:

2. Recĭpe: Solutiōnis Acĭdi nicotinĭci 1 % 1 ml
Da tales doses numĕro 10 in ampullis
Signa:

3. Recĭpe: Solutiōnis Acĭdi borĭci spirituōsae 1 % 40 ml
Da. Signa:

4. Recĭpe: Resorcīni
Acĭdi salicylĭci ana 2,0
Spirĭtus aethylĭci 70 % ad 100 ml
Misce. Da. Signa:

5. Recĭpe: Acĭdi folĭci 0,0008
Acĭdi ascorbinĭci 0,1
Da tales doses numĕro 30 in tabulettis
Signa:

6. Recĭpe: Aluminii hydroxўdi 0,5
Da tales doses numĕro 10 in tabulettis
Signa:

LESSON 4

§ 13. Names of salts

Names of salts consist of two parts: the name of the cation, which is the name of a chemical element in the Genitive case written in the first place, and the name of the anion, which is in the second place in the Nominative case.

Anions names are formed from a stem of the Latin name of a corresponding acid with the suffixes ***-as***, ***-is***, ***-ĭd***. The suffix ***-as*** is used in the names of anions of salts of organic acids and in names of anions of salts of oxyacids with higher oxidation number (state): for example, *sulf**as*** (sulfate). The suffix ***-is*** denotes lower oxidation number (state): for example, *sulf**is*** (sulfite). The suffix ***-ĭd*** is used in names of salts of binary acids (hydroacids): for example, *hydrochlor**ĭd**um* (hydrochloride).

Names of anions of basic salts are formed with the prefix **sub-** and names of anions of acid salts are formed with the prefix **hydro-**: for example, ***sub**nitras* (subnitrate); ***hydro**carbōnas* (hydrogen carbonate).

Nom. sing.	***Gen. sing.***
Atropīni sulfas	Atropīni sulfātis
Natrii nitris	Natrii nitrītis
Hydrocortisōni acētas	Hydrocortisōni acetātis
Bismŭthi subcitras	Bismŭthi subcitrātis
Morphīni hydrochlorĭdum	Morphīni hydrochlorĭdi

Some names of sodium salts and potassium salts consist of a pharmaceutical substance name and the name *natrium* or *kalium* in the Nominative case joined to it through a hyphen with the first small letter. In the Genitive case both parts of the name have the ending ***-i***:

Nom. sing.	***Gen. sing.***
Benzylpenicillinum-kalium	Benzylpenicillini-kalii
Sulfacylum-natrium	Sulfacyli-natrii

Memorize orthography of the following frequency pieces:

Frequency piece	Pharmacologic information	Example
-benz- from Arabic "smelling nice" (benzoic acid was educed from aromatic tar)	presence of benzene ring	Benzodixīnum, i n
-meth- from Greek *methyl* – wine	presence of methyl group	Methylēnum, i n
-morph- from Greek *Morpheus* - god of sleep and dreams	analgesics, derivatives of morphine	Aethylmorphīnum, i n
-oestr- from Greek *oistros* – strong inclination, passion	preparations of female sex hormones	Oestradiōlum, i n Aethinyloestradiōlum, i n
-phosph- from Greek *phos* – light + *phoros* – carrying	presence of phosphorus	Acidum phosphorĭcum
-phyt- from Greek *phyton* – plant – part of compound words that means "related to plants"		Phytīnum, i n
-test- from Latin *testis* – testicle	preparations of male sex hormones	Methyltestosterōnum, i n
-thi- from Greek *theion* – sulphur	presence of an atom of sulphur in names of thiosalts and thioacids	Thiamīnum, i n thiosulfas, ātis m

Minimum vocabulary 4

Aethylmorphīni hydrochlorĭdum, ĭdi n *ethylmorphine hydrochloride*
Argenti nitras, ātis m *silver nitrate*
Chinīni sulfas, ātis m *quinine sulphate*
Coffeīnum-natrii benzoas, Coffeīni-natrii benzoātis *caffeine and sodium benzoate*
Kalii permanganas, ātis m *potassium permanganate*
Lithii carbōnas, ātis m *lithium carbonate*
Magnesii sulfas, ātis m *magnesium sulphate*

Methyltestosterōnum, i n *methyltestosterone*
Morphini hydrochlorĭdum, ĭdi n *morphine hydrochloride*
Natrii salicylas, ātis m *sodium salicylate*
Natrii thiosulfas, ātis m *sodium thiosulphate*
Oestradiōlum, i n *estradiol*

Exercises

1. Analyze the structure of medicines names, underline the frequency pieces you know, give their meaning:

Aethinyloestradiolum; Aethaminalum-natrium; Aethacridini lactas; Aethylmorphīni hydrochlorĭdum; Benzohexonium; Benzylpenicillīnum-natrium; Bismuthi subnitras; Chinīni sulfas; Methylenum coeruleum, Methylii salicylas; Methyltestosterōnum; Methyluracīlum; Morphini hydrochlorĭdum; Natrii oxybutyras; Natrii salicylas; Natrii thiosulfas; Oestradiōlum; Phenoxymethylpenicillīnum; Phosphothiamīnum; Platyphyllīni hydrotartras; Thiopentālum-natrium; Thiamīni chlorĭdum; Hydrochlo(r)thiazīd(um); Diaethylstilboestrolum.

2. Translate into Latin and form Genitive singular:

potassium permanganate, potassium chloride, lithium carbonate, magnesium sulphate, morphine hydrochloride, sodium salicylate, sodium thiosulphate, silver nitrate, quinine sulphate, ethylmorphine hydrochloride, apomorphine hydrochloride, bismuth subnitrate, caffeine and sodium benzoate, sodium nitrite, zinc sulphate.

3. Read, analyze underlined endings, and translate into English the following prescriptions:

1. Recĭpe: Phenobarbitāli 0,05
   Bromisovāli 0,2
   Coffeīn<u>i</u>-natrii benzoātis 0,015
   Papaverīni hydrochlorĭdi 0,03
   Calci<u>i</u> gluconāt<u>is</u> 0,5
   Misce, fiat pulv<u>is</u>
   Da tales doses numĕro 24
   Signa:

2. Recĭpe: Acĭd<u>i</u> acetylsalicylĭc<u>i</u> 0,25
   Paracetamōli
   Coffeīni-natrii benzoāt<u>is</u> ana 0,2
   Da tales doses numĕro 10 in tabulettis
   Signa:

LESSON 5

§ 14. Prescription and rules of drawing up the Latin part of a prescription

Prescription is a written address of a doctor to a pharmacy made up according to an official form about dispensing a medicine in a certain medicinal form and dosage to a patient with instructions how to use it. It is written according to official rules on standard forms, clearly and legibly, without blots and corrections. A prescription is a document which the doctor is legally responsible for.

A prescription includes the following parts:

Inscriptio is a heading which is written in an official language. It includes:

— *stamp of a patient care institution, its address, telephone*;
— *datum* (date of writing out a prescription);
— *nomen aegrōti* (a patient's name);
— *aetas aegrōti* (a patient's age)
— *nomen medĭci* (a doctor's name).

Praescriptio is a prescribing which is written in the Latin language and consists of:

— *invocatio* (a doctor's address to a pharmacist);
— *designatio materiārum* (enumeration of substances, which a medicine is prepared of, with their dosage).

Subscriptio is a subscription. It is also written in Latin and contains directions to a pharmacist on a medicinal form, number of doses, sort of packing, etc.

Signatūra always starts with the Latin verb *Signa* (*Signētur*) (mark (let it be marked)) but further instructions to a patient on how to use a medicine are written in an official language.

Nomen et sigillum personāle medĭci is a signature and a personal seal of a doctor who has written out a prescription.

The main part of a prescription is a prescribing. It starts with an address *Récĭpe* (take), then the substances, which a medicine is prepared of, and their dosage are enumerated. A prescription line is written in the following way:

[Take:]	*what?*	⟶	Amount of a pharmaceutical
Recĭpe:	Name of a medicine in the Genetive	⟵ *of what?*	substance in the Accusative

An amount of a solid pharmaceutical substance is written out in grammes as a decimal but without the word "gramme":

Recĭpe: *Dicaini* *0,05*
Phenoli puri *1,0*

Liquid pharmaceutical substances are written out in millilitres as a whole number with "*ml*":

Recĭpe: Tinctūrae Valeriānae 10 ml

An amount of a liquid pharmaceutical substance less than 1 ml is measured out in drops. A quantity of drops is denoted by a Roman numeral with the Latin word "drop" (*gutta, ae f*) in the Accusative case before it:

Recĭpe: Olei Menthae piperītae guttas IV (guttam I)

If a medicine consists of several ingredients, each name is written with the capital letter on a separate prescription line strictly under the first letter of the foregoing one. Nothing is written under the word *Recĭpe*. If two or more ingredients are prescribed in an equal amount, the dose is written after the last of them with the adverb ***ana*** (equally, of each):

Recĭpe: Radīcis Althaeae
Radīcis Glycyrrhīzae ana 5,0

If the name of a pharmaceutical substance is too long to be written in one line, it is allowed to carry 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 an amount of pharmaceutical substance should be to the right:

Recĭpe: Solutiōnis Platyphyllīni
hydrochlorĭdi 1% 10 ml

§ 15. Types of prescriptions

There are simple and complex prescriptions.

In contemporary practice, doctors most often prescribe medicines of industrial production. Prescriptions for medicines made by pharmaceutical industry are called ***officinal*** or shortened prescribings and a prescription for such a remedy is called simple.

Complex prescriptions are written out for medicines made directly at pharmacies. Such prescribings are drawn up at a doctor's discretion, termed ***magistral prescribings*** and written out in a detailed form.

In a detailed form of a prescribing, all the ingredients, which a medicinal preparation consists of, and their dosage are enumerated. It is obligatory to indicate what medicinal form must be made. Then an explanation how to use a medicine follows.

Recĭpe: Chlroformii 20 ml
Olei Hyoscyami 40 ml
Misce, fiat linimentum
Da. Signa:

§ 16. Rules of prescribing liquid medicinal forms

Solutions, mucilages, emulsions, suspensions, infusions and decoctions, tinctures, liquid extracts, mixtures, liniments are attributed to liquid medicinal forms. Solutions, emulsions, suspensions, tinctures, liquid extracts, mixtures, liniments may be written out in a shortened and in a detailed way.

When writing out in a shortened way, the name of a medicinal form, pharmaceutical substance or medicinal vegetable raw materials is indicated in the Genitive case with a capital letter after the address *Recĭpe.* The line is concluded with denoting the amount of a medicine. Concentration of solutions may be denoted in percentage, 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).

For example:

Recĭpe: Tinctūrae Leonūri 25 ml
Da. Signa:

Recĭpe: Decocti cortĭcis Quercus 200 ml
Da. Signa:

Recĭpe: Solutiōnis Camphŏrae oleōsae 10% – 100 ml
Da. Signa:

Recĭpe: Solutiōnis Furacilīni 0,02% – 500 ml
Da. Signa:

Recĭpe: Solutiōnis Furacilīni 1: 5000 – 500 ml
Da. Signa:

Recĭpe: Solutiōnis Furacilīni 0,1 – 500 ml
Da. Signa:

Recĭpe: Suspensiōnis Griseofulvīni 100 ml
Da. Signa:

Recĭpe: Extracti Frangŭlae fluĭdi 20 ml
Da. Signa:

Recĭpe: Linimenti Synthomycīni 5% – 25 ml
Da. Signa:

Preparations which are made at pharmacies according to a doctor's prescription are written out in a detailed form:

Recĭpe: *Chlroformii 20 ml*
Olei Hyoscyami 40 ml
Misce, fiat linimentum
Da. Signa:

When prescribing mixtures in a detailed way, the direction "*Misce, fiat mixtūra*" is not written. Suffice it to indicate *Misce. Da. Signa:*

For example:

Recĭpe: *Infūsi herbae Adonĭdis vernālis ex 6,0 – 180 ml*
Natrii bromĭdi 6,0
Codeīni phosphātis 0,12
Misce. Da. Signa:

§ 17. Medicinal forms for injections

For injections, aqueous and oil solutions as well as suspensions are used. In medical practice, forms of industrial production such as ampoules and vials are mostly used. The very form of output testifies that special demands placed upon such medicinal forms are observed, therefore the phrase "*pro injectionĭbus*" is not written in a prescription since it goes without saying.

When writing out solutions and suspensions in ampoules, a medicinal form is indicated first. Then the name of a pharmaceutical substance, its concentration in percentage and the volume of one ampoule are indicated. The number of doses and the form of output are written on the next line: "Give (Hand out) such doses in number … in ampoules":

Recĭpe: *Solutiōnis Glucōsi 40 % – 5 ml*
Da tales doses numĕro 10 in ampullis
Signa:

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.

For example:

Recĭpe: *Benzylpenicillini-natrii 500 000 ЕД*
Da tales doses numĕro 12
Signa:

Solutions for injections may be also prepared at pharmacies. Such solutions are usually dispensed in hermetically sealed vials (phials) of 5 – 1000 ml with the label "sterile". When writing out such medicinal forms it is obligatory to indicate in a prescription the necessity of sterilizing the medicine.

For example:

Recĭpe: Solutiōnis Natrii chlorĭdi isotonĭcae 0,9 % – 500 ml
Sterilisētur!
Detur. Signētur:

Recĭpe: Novocaīni 0,5
Solutiōnis Natrii chlorĭdi 0,6 % – 200 ml
Misceātur. Sterilisētur!
Detur. Signētur:

Memorize orthography of the following frequency pieces:

Frequency piece	Pharmacologic information	Example
-anth- from Greek *anthos* – flower	belonging to alkaloids	Helianthus, i m
-strophanth- from Greek *strophe* – spin (whirling) + *anthos* – flower	contains poisonous glycoside strophanthine using in case of cardiac insufficiency	Strophanthus, i m
anti- Greek prefix "against"		Antipyrīnum, i n
-camph- is obtained from camphor tree	indicates presence of camphor	Camphomēnum, i n
-myc(o)- from Greek *mykes* – fungus	antifungal agents	Mycoseptīnum, i n
-myc(in)- (root *myc* + suffix *-in-*) from Greek *mykes* – fungus	antibiotics of streptomycin group	Streptomycīnum, i n Laevomycetīnum, i n
-naphth- from Greek *naphtha* – petroleum	preparations made of petroleum or its derivatives	Naphthammōnum, i n
syn-, **-synth-** from Greek *synthetikos* – obtained by means of synthesis, joining, constituting	indicates synthetic production of a preparation	Synthomycīnum, i n

Minimum vocabulary 5

Convallaria, ae f *lily of the valley*
Erythromycīnum, i n *erythromycin*
Foenicŭlum, i n *fennel*
fructus, us m *fruit*

Galanthamīni hydrobromĭdum, i n *galantamine hydrobromide*
Streptomycīni sulfas *streptomycin sulphate*

Exercises

1. Analyze the structure of medicines names, underline the frequency pieces you know, give their meaning:

Clarithromycin; Erythromycīnum; Galanthamīni hydrobromĭdum; Laevomycetīnum; Naphthammonum; Naphthyzinum; Neomycīni sulfas; Pentoxyphyllīn; Polymyxīni M sulfas; Streptomycīni sulfas; Strophanthīnum; Sulfacamphocaīnum; Sulfapyridazīnum; Synthomycīnum; Synoestrolum.

2. Read, analyze underlined endings, and translate into English the following prescriptions:

1. Recĭpe: Radīcis Althaeae
   Radīcis Glycyrrhīzae ana 20,0
   Fructuum Foenicŭli 10,0
   Misce, fiant species
   Da. Signa:

2. Recĭpe: Solutiōnis Litoniti 10 % 1ml
   Da tales doses numĕro 10 in ampullis
   Signa:

3. Recĭpe: Solutiōnis Camphŏrae oleōsae 10 % – 100 ml
   Da. Signa:

4. Recĭpe: Decocti cortĭcis Quercus 200 ml
   Da. Signa:

3. Write Latin part of a prescription for the following medicines:

1) 10 ampoules of solution of ascorbic acid 5 % 1 ml; 2) 10 ampoules of solution of galantamine hydrobromide 1 % 1 ml; 3) 10 ampoules of solution of caffeine and sodium benzoate 10 % 1 ml; 4) 10 ampoules of spirituous solution of iodine 5 % 1 ml.

LESSON 6

§ 18. Rules of writing out soft medicinal forms

Ointments, pastes, suppositories are soft medicinal forms. They may be produced by pharmaceutical industry and prepared at a pharmacy according to a magistral prescription. They may be written out correspondingly in both shortened and detailed form.

A shortened form of prescribing for **ointments** and **pastes** starts with naming a medicinal form and an active substance (both in the Genitive case) with its percentage concentration. The line is concluded with an amount of the prescribed remedy.

For example:

Recĭpe: Unguenti Acĭdi borĭci 5 % – 25,0
Da. Signa:

Recĭpe: Pastae Zinci 50,0
Da. Signa:

In a detailed form of prescribing, all the ingredients and their amount are enumerated. Further, the directions "Mix in order that ointment (paste) should be made" certainly follow.

For example:

Recĭpe: Sulfacyli-natrii 1,0
Lanolīni 0,4
Vaselīni ad 5,0
Misce, fiat unguentum
Da. Signa:

Recĭpe: Iodoformii 10,0
Amўli Tritĭci
Zinci oxўdi ana 5,0
Vaselīni ad 50,0
Misce, fiat pasta
Da. Signa:

Suppositories are medicinal forms in doses, 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 fluctuates from 1.1 to 4.0 grammes; in pediatric practice – from 0.5 to 1.5 grammes.

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

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 case. Further, after the preposition ***cum*** (with), the name of a pharmaceutical substance in the Ablative and its dose are indicated. If the name of a medicinal form is used in the Accusative singular, prescribing is concluded with the directions "*Da tales doses numĕro…*" and a prescription signature.

For example:

Recĭpe: Suppositorium cum Ichthyōlo 0,2
Da tales doses numĕro 10
Signa:

If the name of a medicinal form is used in the Accusative plural, the line must be concluded with the number of doses.

For example:

Recĭpe: Suppositoria vaginalia cum Synthomycīno 0,25 numĕro 5
Da. Signa:

When writing out suppositories of complex composition with a commercial name, a medicinal form is designated by the Accusative plural; the name of a preparation in inverted commas keeps its initial form; the line is concluded with the number of suppositories. Doses of pharmaceutical substances are not given in such prescriptions.

For example:

Recĭpe: Suppositoria "Anusolum" numĕro 10
Da. Signa:

Suppositories may be prepared at pharmacies according to magistral prescribing. In that case a prescription is drawn up in a detailed form with enumeration of all the ingredients and their doses.

It is possible not to indicate the mass of a base in a prescription. In that case one should write ***quantum satis*** (*as much as necessary*).

For example:

Recĭpe: Promedoli 0,02
Olei Cacāo 3,0
Misce, fiat suppositorium rectāle
Da tales doses numĕro 6
Signa:

or

Recĭpe: Promedoli 0,02
Olei Cacāo quantum satis
Misce, fiat suppositorium rectāle
Da tales doses numĕro 6
Signa:

or

Recĭpe: Promedoli 0,02
Olei Cacāo quantum satis, fiat suppositorium rectāle
Da tales doses numĕro 6
Signa:

§ 19. Rules of writing out solid medicinal forms

Tablets, dragée, powders, granules, pills are solid medicinal forms. Tablets, dragée and powders are used most often.

Tablets are solid medicinal forms in doses obtained by pressing pharmaceutical substances and adjuvants. Nowadays tablets are not prepared at pharmacies and therefore magistral prescribing for them does not exist.

The most widespread prescribing is the one in which the name of a pharmaceutical substance and its single dose are indicated first, and then the directions concerning the number of prescribed tablets are given.

For example:

Recĭpe: Analgīni 0,5
Da tales doses numĕro 10 in tabulettis
Signa:

Next version of prescribing for tablets starts with the name of a medicinal form, and then the name of a pharmaceutical substance and its single dose are indicated. The word “tablet” is used in the Accusative singular or plural.

If the singular is used, it is necessary to indicate the number of prescribed tablets in a subscription.

For example:

Recĭpe: Tabulettam Analgīni 0,5
Da tales doses numĕro 10
Signa:

If the name of a medicinal form is in the plural, the number of prescribed tablets is written down on the first line after the name of a pharmaceutical substance.

For example:

Recĭpe: Tabulettas Analgīni 0,5 numĕro 10
Da. Signa:

Tablets having two or more pharmaceutical substances in their composition are prescribed in the following way:

Recĭpe: Paracetamōli 0,3
Coffeīni 0,03
Codeīni 0,08
Da tales doses numĕro 6 in tabulettis
Signa:

or

Recĭpe: Tabulettam Paracetamōli 0,3
et Coffeīni 0,03
cum Codeīno 0,08
Da tales doses numĕro 6
Signa:

When prescribing tablets with a special commercial name, one start with the name of a medicinal form in the Accusative plural; then the name in the Nominative case in inverted commas follows; the line is concluded with the number of doses. 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.

For example:

Recĭpe: Tabulettas "Pentalginum" numĕro 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.

For example:

Recĭpe: Dragée Diazolīni 0,05
Da tales doses numĕro 20
Signa:

or

Recĭpe: Dragée "Hexavitum" numĕro 50
Da. Signa:

Powders are 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), powders which are divided into separate doses and powders which are not divided into separate doses.

Prescribing for a powder which is not divided into separate doses

Recĭpe: Benzylpenicillini-natrii 125 000 ЕД
Aethazōli 5,0
Misce, fiat pulvis subtilissĭmus
Da. Signa:

Prescribing for a powder which is divided into separate doses

Recĭpe: Papaverīni hydrochlorĭdi 0,02
Phenobarbitāli 0,01
Sacchări 0,3
Misce, fiat pulvis
Da tales doses numĕro 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:

Recĭpe: Solutiōnis Nitroglycerīni 1% oleōsae 0,5
Da tales doses numĕro 50 in capsŭlis gelatinōsis
Signa:

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

§ 20. Other medicinal forms

Ophthalmic films (*membranŭlae 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.

For example:

Recĭpe: Membranŭlas ophthalmĭcas cum Dicaīno 0,2 numĕro 6
Da. Signa:

Recĭpe: Aërosōlum "Ephatinum" numĕro 1
Da. Signa:

Memorize orthography of the following frequency pieces:

Frequency piece	Pharmacologic information	Example
-ichthy- from Greek *ichthys* – fish	preparations obtained from shale containing remains of fossil fish and other sea animals	Ichthyōlum, i n
-phtha(l)- from the name of the substance *Naphthalanum*, which phthalic acid is obtained from	preparations containing derivatives of phthalic acid	Phthazīnum, i n
ephedr- from Greek *Ephedra*	contains alkaloid ephedrine	Ephedrīnum, i n
-cyclin- (root *cycl* + suffix *-in*) from Greek *kyklos* – circle	antibiotics of tetracycline group	Acidocyclīnum, i n
-cycl- from Greek *kyklos* – circle – constituent part of compound words which means "circle", "ring", "cycle"		Cyclobarbitālum, i n
-zepam-	somnifacient agents	Nitrazepamum, i n

Minimum vocabulary 6

Diprophyllīnum, i n *diprophylline*
Neomycīni sulfas *neomycin sulphate*
Oleum Cacao *cocoa butter*
Nitrazepamum, i n *nitrazepam*
Tetracyclinum, i n *tetracycline*

Exercises

1. Analyze the structure of medicines names, underline the frequency pieces you know, give their meaning:

Acyclovir(um); Amoxyclav; Ampicillinum; Azithromycinum; Benzohexonium; Cyclophosphanum; Diazepamum; Doxycyclini hydrochloridum; Ichthyolum; Methacyclini hydrochloridum; Methacin; Nitrazepamum; Pentoxylum; Phenazepamum; Sulfadimethoxinum; Tetracyclinum; Clonazepamum; Ephedrini hydrochlorĭdum, Bethiolum, Naphthalanum, Benzonaphtholum, Theophedrinum, Ichthyolum.

2. Read, analyze underlined endings, and translate into English the following prescriptions:

1. Recĭpe: Unguenti Ditetracyclini ophthalmĭci 3,0
   Da. Signa:

2. Recĭpe: Unguenti “Hyoxysonum” 10,0
Da. Signa:

3. Recĭpe: Suppositoria “Bethiolum” numĕro 10
Da. Signa:

4. Recĭpe: Promedoli 0,02
Olei Cacāo quantum satis
Misce, fiat suppositorium rectāle
Da tales doses numĕro 6
Signa:

5. Recĭpe: Cyclophosphāni 0,05
Da tales doses numĕro 50 in tabulettis obductis
Signa:

6. Recĭpe: Tabulettas “Citramonum” numĕro 6
Da. Signa:

7. Recĭpe: Tabulettas Nitrogranulongi 0,0029 obductas numĕro 50
Da. Signa:

8. Recĭpe: Aerosōlum “Amprovisolum” numĕro 1
Da. Signa:

3. Write Latin part of a prescription for the following medicines:

1) ointment of bismuth subnitrate 10 % 25.0; 2) 20 tablets of acyclovir 0.2; 3) ointment of acyclovir 3 % 5.0; 4) 10 suppositories with theophylline 0.2; 5) 10 tablets of ampicillin 0.25; 6) 10 tablets of nitrazepam 0.005; 7) ophthalmic ointment of tetracycline 3.0; 8) ointment of neomycin sulphate 0.5 % 15.0.

LESSON 7

§ 21. Abbreviations in prescriptions

Use of Latin abbreviations is regulated by orders of Ministry of Health of the Republic of Belarus. Abbreviations are traditionally permitted according to the following norms: it is allowed to shorten only names of medicinal forms, names of plants parts, standard prescription wordings.

To exclude any confusion, **it is not permitted** to shorten names of pharmaceutical substances, medicinal preparations, medicinal plants.

Verbal wordings most often are shortened to one letter (the first one). The size of a letter (capital or small) depends on its size in a full version:

Rp.: – Recĭpe:
M. – Misce. Misceātur.
D. – Da. Detur. Dentur.
S.: – Signa: Signētur:
f. – fiat (fiant)

The standard prescription wording "*Give (Hand out) such doses in number*" is also shortened to the first letter of each word; the first letter of the word *numĕro* is traditionally capital:

D.t.d.N. – Da tales doses numĕro...

To avoid variant reading, seldom used forms are shortened to a few letters or two syllables:

Steril. – Sterilĭsa! Sterilisētur!
Rep. – Repĕte! Repetātur!
a̅a̅ – ana
q.s. – quantum satis

In most cases names of medicinal forms are shortened to the last consonant of the first syllable:

amp. – ampulla
caps. – capsŭla
extr. – extractum
gtt. – guttam
in ampull. – in ampullis
in caps. (gel.) – in capsŭlis (gelatinōsis)
in tab. **–** in tabulettis
lin. – linimentum
pulv. – pulvis
sol. – solutio
spec. – species
supp. – suppositorium
tab. – tabuletta
tinct., t-ra, tct. – tinctūra
ung. – unguentum

Seldom used medicinal forms may be shortened to two syllables:

mucil. – mucilāgo
emuls. – emulsum

In most cases names of plants parts are shortened to the first syllable:

cort. **–** cortex

fol. – folium
rad., r. – radix
rhiz. – rhizōma
sem. – semen

Some words – names of plants parts – are represented by the first consonants only:
fl. – flos
fr., fruct. – fructus
h., hb. – herba

Adjectives are shortened to one or two syllables. It depends on how often they are used:
dest., destill. – destillātus
dep. – depurātus
dil. – dilūtus
purif. – purificātus
rect. – rectālis
rectif. – rectificātus
vagin. – vaginālis

It is possible to shorten the first word of some names of pharmaceutical substances consisting of two words the first one of which is generally known:
Ac. (Acid.) – Acĭdum
Aq. – Aqua
Spir. – Spirĭtus
Ol. – Oleum

§ 22. Supplementary inscriptions

When it is necessary to dispense medicines to a patient urgently, "*Cito!*" (quickly), "*Citissĭme!*" (very quickly) or "*Statim!*" (immediately) is written down in the upper part of a prescription form.

List of abbreviations permitted in a prescription

Accepted abbreviation	Initial version	Translation
Ac. (Acid.)	acĭdum	acid
$\overline{aa}$	ana	equally, of each
amp.	ampulla	ampoule
aq.	aqua	water
Aq. destill.	Aqua destillāta	distilled water
Aq. purif.	Aqua purificāta	purified water

Accepted abbreviation	Initial version	Translation
aëros.	aërosōlum	aerosol
but.	butyrum	butter
caps.	capsŭla	capsule
comp., cps., cp.	composĭtus, a, um	compound, compounded
concentr.	concentrātus, a, um	concentrated
cort.	cortex	bark
D.	Da.	Give (Hand out).
	Detur.	Let it be given (handed out).
	Dentur.	Let them be given (handed out).
D.S.:	Da. Signa:	Give (Hand out). Mark:
	Detur. Signetur:	Let it be given (handed out). Let it be marked:
D.t.d. N.	Da tales doses numĕro	Give (Hand out) such doses in number
dec., dct.	decoctum	decoction
dep.	depurātus, a, um	purified
dest., destill.	destillātus, a, um	distilled
dil.	dilūtus, a, um	diluted
empl.	emplastrum	plaster
emuls.	emulsum	emulsion
ext.	externus, a, um	external
extr.	extractum	extract
f.	fiat (fiant)	let it be made (let them be made)
fl.	flos	flower
fluid.	fluĭdus, a, um	fluid, liquid
fol.	folium	leaf
fr., fruct.	fructus	fruit
gran.	granŭlum	granule
gtt.	guttam	drop
gtts.	guttas	drops
h., hb.	herba	herb
in ampull.	in ampullis	in ampoules
in caps. (gel.)	in capsŭlis (gelatinōsis)	in (gelatinous) capsules
in tab.	in tabulettis	in tablets
in vitr. nigr.	in vitro nigro	in a dark phial
inf.	infūsum	infusion
int.	internus, a, um	internal
lin.	linimentum	liniment

Accepted abbreviation	Initial version	Translation
liq.	liquor	liquor, solution
M.	Misce.	Mix.
	Misceātur.	Let it be mixed.
M.D.S.:	Misce. Da. Signa:	Mix. Give (Hand out). Mark:
mixt.	mixtūra	mixture
mucil.	mucilāgo	mucilage
N.	numĕro	in number
obd.	obductus, a, um	coated
past.	pasta	paste
pil.	pilŭla	pill
praec., ppt.	praecipitātus, a, um	precipitated
pro inject.	pro injectionĭbus	for injections
pulv.	pulvis	powder
purif.	purificātus, a, um	purified
q.s.	quantum satis	as much as necessary
rad., r.	radix	root
rect.	rectālis, e	rectal
rectif.	rectificātus, a, um	rectified (about liquid substances)
Rep.	Repĕte!	Repeat!
	Repetātur!	Let it be repeated!
rhiz.	rhizōma	rhizome
Rp.:	Recĭpe:	Take:
S.:	Signa:	Mark:
	Signetur:	Let it be marked:
sem.	semen	seed
sicc.	siccus, a, um	dry
simpl.	simplex, ĭcis	simple
sir.	sirŭpus	syrup
sol.	solutio	solution
spec.	species	species
Spir.	Spirĭtus	spirit
Steril.	Sterilĭsa!	Sterilize!
	Sterilisētur!	Let it be sterilized!
supp.	suppositorium	suppository
susp.	suspensio	suspension
tab.	tabuletta	tablet
tinct., t-ra, tct.	tinctūra	tincture
ung.	unguentum	ointment
vagin.	vaginālis, e	vaginal

Exercise

Write the shorthened words in full:

1. Rp.: Inf. rad. Rhei ex 5,0 – 150 ml
   Natrii sulfātis 30,0
   Sir. simpl. ad 200 ml
   M.D.S.:

2. Rp.: Picis liquĭdae 5,0
   Xeroformii 3,0
   Ol. Ricĭni 100,0
   M.f. ung.
   D. S.:

3. Rp.: Phenacetīni 0,3
   Ac. acetylsalicylĭci 0,5
   Coffeini-natrii benzoātis 0,1
   M.f. pulv.
   D.t.d. N. 10
   S.:

4. Rp.: Pulv. fol. Digitālis 0,05
   Diuretīni 0,5
   M.f. pulv.
   D.t.d. N. 10 in caps. gel.
   S.:

5. Rp.: Tab. “Mezym-forte” N. 20
   D.S.:

6. Rp.: Lin. Synthomycīni 10% 25,0
   D.S.:

7. Rp.: R. Valeriānae
   Fr. Junipĕri āā 5,0
   Fr. Coriandri
   Hb. Centaureae cyani
   Fol. Farfărae
   R. Glycyrrhīzae āā 7,0
   Fol. Menthae piperītae 10,0
   M.f. spec.
   D. S.:

8. Rp.: Sol. Aethazoli-natrii 10% 10ml
D.t.d. N. 6 in amp.
S.:

9. Rp.: Supp. cum Theophyllīno 0,2 N. 10
D. S.:

10. Rp.: Oleandomycīni 0,1
D.t.d. N. 10 in tab. obd.
S.:

11. Rp.: Tab. Tetracyclīni obd. 0,1
D.t.d. N. 10
S.:

ЛИТЕРАТУРА

1. Martindale. The Extra Pharmacopoeia. Twenty-eighth Edition; edited by James E.F. Reynolds. Assistant Editor Anne B. Prasad. — London. The Pharmaceutical Press, 1982.
2. Martindale. The Extra Pharmacopoeia. Twenty-ninth Edition. Edited by James E.F. Reynolds. Deputy Editor Kathleen Parfitt. Assistant Editors Anne V. Parsons, Sean C. Sweetman. — London. The Pharmaceutical Press, 1989.
3. Martindale. The Extra Pharmacopoeia. Thirtieth Edition. Edited by James E.F. Reynolds. Deputy Editor Kathleen Parfitt. Assistant Editors Anne V. Parsons, Sean C. Sweetman. — London. The Pharmaceutical Press, 1993.
4. Stone, Jon R. More Latin for the illiterati: a guide to everyday medical, legal, and religious Latin. Routledge. — New York and London, 1999.
5. The Bantam New College Latin & English Dictionary. Revised and Enlarged by John C. Traupman, Ph. D. Bantam Books. 1995.
6. Англо-русский медицинский словарь. Около 70 000 терминов. Таллин: LINGVA, 1992. — 600 с.
7. *Акжигитов, Г. Н.* Англо-русский медицинский словарь. Ок. 70 000 терминов / Г. Н. Акжигитов, М. С. Бенюмович, А. К. Чикорин. — М.: Рус. яз., 1989. — 608 с.
8. Англо-русский медицинский словарь. Сост.: М. П. Мультановский, А.Я. Иванова. — 2-е изд, доп. и испр. — М.: изд-во «Медицина», 1969. — 687 с.
9. Большой русско-английский медицинский словарь. Ок. 70 000 терминов. — М: РУССО, 2005. — 704 с.
10. Елинов, Н. П. Справочник по лекарственным препаратам с рецептурой / Н. П. Елинов, Э. Г. Громова, Д. Н. Синев. — СПб: Гиппократ, 1994. — 768 с.
11. Закон Республики Беларусь от 20 июля 2006 г. № 161-З «О лекарственных средствах».
12. Казаченок, Т. Г. Фармацевтический словарь: лат.-рус., рус.-лат / Т. Г. Казаченок. — 2-е изд., доп. — Минск: Выш. шк., 1991. — 624 с.
13. Машковский, М. Д. Лекарственные средства: в 2-х т. / М. Д. Машковский. — Изд. 13-е, новое. — Т. 1. — Харьков: Торсинг, 1998. — 560 с.
14. Машковский, М. Д. Лекарственные средства: в 2-х т. / М. Д. Машковский. — Изд. 13-е, новое. — Т. 2. — Харьков: Торсинг, 1998. — 592 с.
15. Русско-английский медицинский словарь. Около 50 000 терминов. М., «Русский язык», 1975. — 648 с.
16. Харкевич, Д. А. Фармакология: учеб. / Д. А. Харкевич. — 8-е изд., перераб., доп. и испр. — М.: ГЭОТАР-МЕД, 2004.
17. Цисык, А. З. Латинский язык / А. З. Цисык. — Минск: ТетраСистемс, 2006. — 448 с.
18. Цисык, А. З. Латинский язык = The Latin Language / А. З. Цисык. — Минск: БГМУ, 2010. — 212 с.

CONTENTS

Учебное издание

Лин Светлана Антоновна

ФАРМАЦЕВТИЧЕСКАЯ ТЕРМИНОЛОГИЯ И РЕЦЕПТ
(на английском языке)

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

Редактор *Т. М. Кожемякина*
Компьютерная верстка *А. М. Терехова*

Подписано в печать 17.03.2014.
Формат $60\times84^{1}/_{16}$. Бумага офсетная 70 г/м^2. Гарнитура «Таймс».
Усл. печ. л. 2,56. Уч.-изд. л. 2,80. Тираж 85 экз. Заказ № 92.

Издатель и полиграфическое исполнение:
учреждение образования «Гомельский государственный медицинский университет».
Свидетельство о государственной регистрации издателя,
изготовителя, распространителя печатных изданий № 1/46 от 03.10.2013.
Ул. Ланге, 5, 246000, Гомель.