



Foreign language in pharmacy

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Tashkent Medical Academy

A manual on

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PREFACE

This English language manual is intended for students of pharmaceutical institutions. The purpose of the manual is to develop and improve language skills like reading, writing, listening, speaking, grammar and vocabulary. Moreover, translating vocabulary related to pharmacy from target language into mother tongue can be used by teacher in practical English lessons.

The texts in the manual are selected from the original English literature and adapted to a certain extent taking the language level, mentality and future specialty of pharmaceutical students into account. When selecting texts, compiling exercises and determining the vocabulary minimum, the vocabulary necessary not only for practical lessons, but also independent work of pharmaceutical students is provided. The lexico-grammatical system of exercises includes a large number of speech and language exercises. Each lesson offers 5 - 10 exercises. Exercises include a lesson dictionary, synonyms, antonyms, derivatives, answers to questions and others.

The total volume of the manual is aimed to have 45-50 hours in practical lessons.

UNIT I. PHARMACEUTICAL EDUCATION

Text: Tashkent Pharmaceutical Institute

Grammar: Personal Pronouns

Grammar: Personal Pronouns

Personal Pronouns (Subject)	Personal pronouns (Object)	Possessive Pronouns	Absolute Possessive Pronouns (Possessive Determiners)
I	me	my	mine
you	you	your	yours
he	him	his	his
she	her	her	hers
it	it	its	its
we	us	our	ours
they	them	their	theirs

Exercise 1. Use the correct personal pronouns. Watch the words in brackets.

1. _____ is dreaming. (George)
2. _____ is green. (The blackboard)
3. _____ are on the wall. (The posters)
4. _____ is running. (The dog)
5. _____ are watching TV. (My mother and I)
6. _____ are on the table. (the text-books)
7. _____ is riding his bike. (Alan)
8. _____ is from Bristol. (Kate)
9. _____ has got a brother. (Diana)
10. Have _____ got a computer, Mary?

Exercise 2. Put in the personal pronoun in brackets in its subject or object form.

1. _____ lives in Liverpool. (he)
2. I met _____ in the University. (he)
3. They sing with _____ in the choir. (I)
4. Lisa likes _____. (it)
5. Excuse _____, is this the way to the University? (I)
6. _____ worked in the garden. (we)
7. Where are the cupcakes? Did you eat _____? (they)
8. Is _____ your sister? (she)
9. Where are _____ from? (you) 17
10. _____ saw Jack in the laboratory. (we)

Exercise 3. Put in the correct personal pronouns or possessive determiners.

I am Robert and live in Bristol. This is Jack. _____ is _____ friend. _____ lives in Bristol, too. Sarah likes _____. _____ likes _____ blue eyes very much. Sarah lives with _____ older sister in a flat in Bristol. Bristol is _____ hometown. _____ is an old city with lots of sights.

Exercise 4. Choose the correct possessive pronouns.

1. Is this (your/ yours) textbook? Is it really (your/ yours)?
2. (Our/ ours) parents live in Hamburg.
3. Is this (her/ hers) guitar? Is it really (her/ hers)?
4. How old is (your/ yours) sister?
5. Where does (their/ theirs) team play?
6. Yesterday she sent (her/ hers) letter to London.
7. Are those (their/ theirs) trainers? Are they (their/ theirs)?
8. Ken has cut (his/him) finger.

9. The children finished (their/ theirs) game.
10. The University has (it/its) own swimming pool.

Vocabulary. Define the following words and expressions: *Academy of Sciences, applicant for higher education, article, associate professor (docent), chemist's shop, compound, correspondent form of study (part-time education), credit test, faculty, hospital, member, pharmaceutical plant, research, science, scientific society, scientist, lecturer, teaching staff, textbook, to carry out, to conduct a seminar, to deliver a lecture, to fail an exam, to found, to investigate, to pass an exam, to take an exam, to treat*

Reading.

Tashkent Pharmaceutical Institute



Tashkent Pharmaceutical Institute was established on 16 July in 1937 and is a famous and classical higher educational institution with more than 85 years. Tashkent Pharmaceutical Institute has gained a significant reputation in pharmaceutical education in the Central Asian and CIS countries thanks to its teaching and research programs. We are proud of our Alumni, they work very successfully and have great career nowadays in occupy high posts in the State

and serve as members of Parliament and local councils, research centers, pharmaceutical companies. Tashkent Pharmaceutical Institute is an active participant in reforms in education and science in Uzbekistan, combining teaching and learning processes, raising the competitiveness of trained personnel, introducing advanced pedagogical technologies, maintaining and prioritizing scientific researches

The number of faculties and departments: At present, there are 3 faculties, 18 departments, 3 bachelors, 5 master's degree programs, 4 doctoral degree (DSc) and 4 Ph.D. degree programs at Tashkent Pharmaceutical Institute. The total number of academic staff working at the university is more than 300, including 35 doctors of sciences (Dsc), and professors, more than 100 candidates of sciences, docents, PhDs, many independent researchers, doctoral students, and Ph.D. students. Furthermore, there is a Laboratory of pharmacotoxicological analysis of coordination compounds and biologically active substances at the Tashkent Pharmaceutical Institute, Research Centre for Standardization of medicinal forms. The institute enrolls more than 3000 students, among them about 2900 are bachelor, 150 are master students. We have 41 foreign students from Russia, Kazakhstan, Turkmenistan, Kirgizstan, Tajikistan. At present, Tashkent Pharmaceutical Institute is the largest center of education and science in Uzbekistan. The institute's staff equals a lot of employees, including scientific and pedagogical workers. Among the teaching staff there are some academicians, many professors, associate professors, senior lecturers. Some of them are members of the Academy of Sciences. The teachers deliver lectures, conduct seminars and practical classes. Also, they publish a lot of scientific articles, monographs and textbooks for applicants for higher education. The scientists of the institute carry out great research work. They investigate and synthesize new compounds, create new drugs for treating people. There are all forms of studying at the institute, such as full-time form of education, corresponding (part-time) education and distance forms.

Exercise 1. Answer the questions.

1. Where do you study?
2. What course are you in now?
3. What specialties does Tashkent Pharmaceutical Institute have?
4. What subjects are there at the institute?
5. What faculties are there at the institute?
6. What is a scientific society?
7. What is the teaching staff of the institute?
8. What forms of studying are there at the institute?
9. What can be found in the structure of the institute?
10. When and where do applicants for higher education have practice?
11. What do the scientists of the institute do?
12. When was the Tashkent Pharmaceutical Institute founded?
13. What do you know about the history of the TPhI?
14. Where can the applicants for higher education continue their study?
15. What is the role of institute among the universities in Uzbekistan?
16. What institutions does the institute have close partnership?

Exercise 2. Find the following statements true or false.

1. Tashkent Pharmaceutical Institute has established recently.
2. Tashkent Pharmaceutical Institute has gained a significant reputation in pharmaceutical education in the world.
3. Tashkent Pharmaceutical Institute takes an active part in reforms in education and science in Uzbekistan.
4. There are three faculties at Tashkent Pharmaceutical Institute.
5. There is a new modern laboratory of pharmaco-toxicological analysis of coordination compounds and biologically active substances at the Tashkent Pharmaceutical Institute.

6. Besides teaching, the teachers publish a lot of scientific articles, monographs and textbooks for applicants for higher education.

7. The scientists of the institute add their huge contribution to create new drugs for treating people.

8. Tashkent Pharmaceutical Institute is cooperating with more than thirty foreign higher educational institutions and scientific research centers.

Exercise 3. Find in the text the words and phrases with the similar meaning of the following words and phrases: *to be founded, well-known, got, important, Commonwealth of Independent States, effectively, country, position, enterprises, educational procedure, rivalry, applying, level, teaching personnel, working personnel, print, candidates to enter the institute, medicine, curing ill people, people dealing with scientific research, students having lessons every day, part-time classes*

Exercise 4. Complete the sentences with the following words: *Institute, scientific research, ranking, received, education, scientific, cooperation*

1. In accordance with the order of the State Inspectorate for Supervision of the quality of _____ under the Cabinet of Ministers of the Republic of Uzbekistan issued on May, 2019, Tashkent Pharmaceutical Institute _____ the State Accreditation Certificate for 5 years for compliance with the higher education institution and postgraduate education.

2. The national _____ of the universities was first announced to the public in 2018. By the end of 2018, Tashkent Pharmaceutical Institute holds the 16th position in the national ranking of universities in Uzbekistan.

3. It ranked 11th position in terms of _____ potential.

4. Tashkent Pharmaceutical _____ ranked 16th place.

5. Tashkent Pharmaceutical Institute is cooperating with higher educational institutions and _____ centers from more than 20 foreign countries. This _____ is expanding day by day.

Speaking. Speak about your favorite educational institution. Use the following expressions to organize your speech.

Introduction:

I would like to tell you about ...

Today I'd like to give you an overview of...

My topic is / will be very important for you because ...

By the end of this talk, you will be familiar with ...

Main part:

To begin with/First of all, I want to tell you about ...

Next, I have to say that ...

Also, you have to know that In my point of view, ...

To my knowledge, ...

As far as I know, ...

Last but not the least, it is important to know that ...

Finally, ...

Conclusion:

To conclude...

In conclusion...

I'd like to finish/end by saying...

Before I finish, I'd finally like to say

Homework. Read the text *Tashkent Pharmaceutical Institute* translate it into Uzbek. Be ready to retell the text.

UNIT II. THE PROFESSION OF PHARMACIST

Text: My Future Profession

Grammar: The auxiliary verb “to be”

Grammar. The auxiliary verb “to be”

Affirmative form	Negative form	Interrogative form
I am	I am not	Am I ...?
You are	You are not (aren't)	Are you...?
He is	He is not (isn't)	Is he...?
She is	She is not (isn't)	Is she...?
It is	It is not (isn't)	Is it...?
We are	We are not (aren't)	Are we...?
You are	You are not (aren't)	Are you...?
They are	They are not (aren't)	Are they...?

Exercise 1. Write negative and interrogative sentences.

1. You are a pharmacy student.
2. His friend is a first-year student.
3. Chemistry is an interesting subject
4. They are students of the pharmaceutical department.
5. We are at the lecture in anatomy now.

Exercise 2. Choose the correct form of to be .

1. It _____ easy to study well.
2. My best friends _____ third- year students.
3. We _____ nearly ready to start the experiment.
4. _____ it possible to know chemistry well?

5. How much _____ it?
6. Who _____ on the phone?
7. Whose _____ those books?
8. Everybody _____ working in the laboratory now.
9. _____ anybody there?
10. _____ Latin an interesting subject?

Exercise 3. Put the verb “to be” in the correct form.

1. Their hostel _____ (to be) near the University.
2. They _____ (to be) second-year students?
3. My friends _____ (not to be) at the lecture in chemistry now.
4. We _____ (to be) members of scientific society.
5. It _____ (to be) a Latin class now.

Exercise 4. Complete the sentences with your personal information and tell about yourself.

1. I would like to introduce myself. My first name is _____.
2. My surname is _____.
3. I am _____ years old.
4. I am from _____, but now I live in _____.
5. I have a\an _____ family. There are _____.
6. My mother is _____. She is _____ years old. Her job is _____.
7. My father is _____. He is _____ years old. His job is _____.
8. I have _____ (sisters\brothers). They are _____.
9. I like _____.
10. I dislike _____.
11. As for me, I want to visit _____, because.
12. I think, I am a good student, because _____.

Vocabulary. Define the following words and expressions: *provisor, pharmacist, analytical chemist, disease, a dispensing pharmacist, head of a department, health, higher educational establishment, knowledge, origin, pharmaceutical education, pharmacy graduate, prepared drugs, prescribed medicines, prescription, mineral, ready-made drugs, recovery, specialty, sphere, chemistry, to achieve, to choose, to define, to devote, to dispense, to explain, to identify, to permit, to recognize, to store, to supply*

My Future Profession

I have chosen pharmacy as my future specialty. Pharmacy is the science which studies medicinal substances used for treating and preventing different diseases. Pharmacy studies recognizing, identifying, collecting, selecting, preparing, storing, testing, compounding and dispensing all medicinal substances. A pharmacist or a provisor is a specialist with higher pharmaceutical education who is permitted by law to prepare drugs at chemist's shops, pharmaceutical plants, to check up the quality of the drugs, to dispense and supply them. A pharmacist together with a doctor devotes his life to protecting people's health. He is often called 'the second doctor'.

To become a pharmacist, one should achieve knowledge of different subjects. Future specialists must know chemistry - the science explaining composition and transformation of matter, different fields of chemistry. Thus, General Chemistry deals with basic principles and inorganic substances, Organic Chemistry is the chemistry of carbon compounds, Analytical Chemistry studies qualitative and quantitative analyses of inorganic substances, Biochemistry studies biochemical processes taking place in the human body and in animals, Toxicological Chemistry deals with toxic substances and their action on the organism. Botany is the science of plants, their structure, functions and classification, Pharmacognosy is the science of drugs of animal, vegetable and mineral origin. Of course, my future specialty is closely connected with drugs,

that is why future pharmacists must know Pharmacology which is defined as the science of drugs and their action and other sciences.

The sphere of action of a pharmacist is broad: at a chemist's he/she may be a manager, or an assistant manager, a head of a department, a dispensing pharmacist, an analytical chemist. A manager is responsible for the work of all departments of a chemist's, it's financial, economic and administrative activity. A dispensing pharmacist takes prescriptions and delivers drugs. An analytical chemist controls the effectiveness of drugs, their technology and time of storing. A specialist with higher pharmaceutical education has the right to be the head of a drug storehouse or his assistant. A pharmacist may also work at a chemical analytical laboratory, which controls the quality of prepared drugs at pharmacies as well as ready-made drugs. Very often leading specialists of pharmaceutical factories are graduates of pharmaceutical academies.

At present the sphere of action of a pharmacist is becoming broader: it's worth to say about the specialists who work at numerous biochemical, clinical laboratories at sanatoria, hospitals, polyclinics. Many specialists have private chemist's shops which supply the population with all kinds of medicines, vitamins and things of medical care many of which are imported. Of course, one can see pharmacy graduates teaching at higher educational establishments, schools of pharmacy, medical schools, secondary schools, etc.

Wherever a provisor works he must always remember that he works with people. There is no a provisor without love for his profession, a profound respect for people. His aim is to help an ill person to use the prescribed medicines in a better way, to strengthen a person's belief in a sooner recovery.

To sum up, we can say that a pharmacist is a specialist with higher pharmaceutical education who is permitted by law to prepare drugs at chemist's shops, pharmaceutical plants, to check the quality of the drugs, to dispense and supply them. To become a pharmacist, one should achieve knowledge in

different subjects (chemistry, pharmacology, pharmacognosy, etc.). A pharmacist must always remember that he works with people.

Exercise 1. Answer the following questions.

1. What is pharmacy?
2. What does Pharmacy study?
3. What are the duties of a pharmacist?
3. What subjects should be studied in order to become a provisor?
4. What subject deals with basic principles and inorganic substances?
5. What is the chemistry of carbon compounds?
6. What studies qualitative and quantitative analyses of inorganic substances?
7. What studies biochemical processes taking place in the human body and in animals?
8. How is Pharmacology defined?
9. Where can pharmaceutical specialist work?
10. What is a manager responsible for? (a dispensing pharmacist, an analytical chemist)
11. Can you describe the work of a chemical analytical laboratory?
12. The sphere of action of a modern specialist is becoming broader, isn't it? Where else can he work?
13. What is the aim of a provisor as a medical worker?
14. What are you going to do after graduating from the academy?

Exercise 2. Say these statements True or False.

1. Pharmacy studies medicinal substances used for treating and preventing different diseases.
2. A provisor is a specialist with higher pharmaceutical education.
3. A pharmacist is often called 'the first doctor'.

4. A pharmacist cannot be a manager, or an assistant manager, but can be a head of a department, a dispensing pharmacist, an analytical chemist.
5. A dispensing pharmacist is responsible for prescriptions.
6. An analytical chemist checks the effectiveness of drugs, their technology and time of storing.
7. A pharmacist cannot work at a chemical analytical laboratory.
8. Biochemical, clinical laboratories at sanatoria, hospitals, polyclinics are best places for pharmacists to work.
9. Graduates of pharmaceutical institutions are not allowed to work as a teacher.
10. A pharmacist must never forget that they are responsible for human life and work with people.

Exercise 3. Fill in the gaps using the following words: *maintain, respects, patients, pharmacist, colleagues, avoids, professional, diagnosis*

Responsibility must be taken for the whole process of _____, prescribing and follow-up, including an awareness of limitations to expertise. A _____ maintains professional competence. He has a duty to _____ knowledge and abilities as new medications, devices and technologies become available and as health information advances. A pharmacist acts with honesty and integrity in _____ relationships. A pharmacist _____ avoids discriminatory practices, behavior or work conditions that impair professional judgment, and actions that compromise dedication to the best interests of _____. A pharmacist respects the values and abilities of _____ and other health professionals. A pharmacist _____ the covenantal relationship between the patient and pharmacist.

Exercise 4. Choose a suitable word given in the brackets to fill in each gap.

To become (an\ a) pharmacist one should achieve knowledge of different subjects. (A\ -) Future specialists must know chemistry - the science explaining composition and transformation of matter, different fields of chemistry. Thus, General Chemistry deals with basic principles (and\ but) inorganic substances. Organic Chemistry (are\ is) the chemistry of carbon compounds. Analytical Chemistry (study\ studies) qualitative and quantitative analyses of inorganic substances. Biochemistry (study\ studies) biochemical processes taking place in the human body and in animals. Toxicological Chemistry deals with toxic substances and their action (of\ on) the organism. Botany (are\ is) the science of plants, their structure, functions and classification. Pharmacognosy (are\ is) the science of drugs of animal, vegetable and mineral origin. Of course, my future specialty (are\ is) closely connected with drugs, that (are\ is) why future pharmacists must know Pharmacology which (are\ is) broadly defined as the science of (a\ -) drugs and their action and other sciences.

Speaking.

Prepare a speech about «My Future Profession», using the following expressions:

My topic is / will be very important for you because ...

By the end of this talk, you will be familiar with ...

I would like to tell you about ...

Today I'd like to give you an overview of...

Firstly, I want to tell you about

Secondly, I have to say that ...

Also, you have to know that ...

In my point of view, ...

To my mind, ...

To my knowledge, ...

I believe, it is important to know that ...

To conclude...

Finally, ...

I'd like to finish/end by saying...

Before I finish, I'd finally like to say...

Homework.

Read the text *My Future Profession* translate it into your language.

Retell the text.

UNIT III. AT PHARMACY

Text: Chemist's Shop

Grammar: The Noun

Grammar: The Noun. Number

The regular plural ending of an English noun is -s. *student - students*

Singular noun ending plural noun ending -s, -ss, -ch, -x, -zz -es focus - focuses; church – churches; box – boxes

-o -s or -es hero – heroes; piano – pianos; potato – potatoes

consonant + y -ies baby – babies; city – cities

vowel + y -s key – keys; boy – boys

-f -s or -ves roof – roofs; hoof - hoofs or hooves; shelf - shelves

-fe -ves knife – knives; life – lives; thief thieves

Irregular plurals

Some nouns have two plural forms: fish - fish or fishes

Some of them have the same form in the singular and plural: a sheep - five sheep; a deer - seven deer

A few change a vowel to form the plural: man – men; woman – women; foot – feet; tooth – teeth; goose – geese; mouse – mice; louse - lice

Some nouns form the plural with -en: child – children; ox - oxen

Exercise 1. Make plurals.

pill- _____ textbook- _____ fish - _____

information- _____ test-tube - _____ watch - _____

dish- _____ lung- _____ shelf- _____ kidney- _____

foot- _____ wolf - _____ person - _____

analysis- _____ yourself- _____ goose - _____

tomato - _____ tissue- _____ fox- _____

thief - _____ wife - _____ bridge - _____
day - _____ hero - _____ shop - _____ nose - _____
baby - _____ deer - _____ tree - _____
man - _____ flask - _____ box - _____
knife - _____ child - _____ family - _____
manager - _____ medication - _____
prescription department - _____

Exercise 2. Choose the correct form of the verb

1. His hair _____ (is\are) beautiful.
2. Genetics _____ (is\are) the science of the 21st century.
3. Such shorts _____ (is\are) in fashion now.
4. The analysis _____ (is\are) very important.
5. The trousers you bought yesterday _____ (is\are) too expensive.
6. New analytical scales _____ (is\are) installed in our laboratory.
7. Their money _____ (is\are) in the bank.
8. Mice _____ (is\are) used in the experiment.
9. No news _____ (is\are) good news.
10. Her teeth _____ (is\are) healthy.
11. The data _____ (is\are) important.

Vocabulary. Define or translate the following words and expressions you're your language: *chemist's department; cold; cough; dispensing pharmacist; flu; headache; immediate; manager; medication; prescription department; replenishing; therapeutic tools; to affect; to compound; to dispense; to store; medicines; ointment; bandages; hot water bottle; cotton wool; mustard plaster; tincture*

Exercise 1. Match the following words and find the synonyms.

- | | |
|------------------------|----------------------|
| 1) drug | a) to produce |
| 2) big | b) consumers |
| 3) to distribute | c) suitable |
| 4) to include | d) at once |
| 5) to affect | e) to write out |
| 6) to prepare | f) as well as |
| 7) to manufacture | g) to demand |
| 8) visitors | h) to apply |
| 9) proper | i) spot |
| 10) immediately | g) medicine |
| 11) to prescribe | k) large |
| 12) also | l) to spread |
| 13) to require | m) to consist of |
| 14) to use | n) to have impact on |
| 15) place | o) to get ready |
| 16) to supply | p) to run |
| 17) source | q) origin |
| 18) to be in charge of | r) to provide |

Exercise 2. Scan the following text and give a title to the text.

The production and sale of drugs is a big business in many countries. Drugs affect and alter health. So, they play a prominent role in society, as well as drug industry as a whole. This role includes discovery of new drugs, their development into useful therapeutic tools and production and distribution of existing medicines.

Nowadays most drugs are prepared by pharmaceutical manufacturers and are distributed to the chemist's shops or hospitals in suitable dosage forms.

A chemist's shop is a specialized shop where drugs are compounded, dispensed, stored and sold. An average chemist's shop has a hall for visitors,

departments for selling drugs and proper working rooms. There are usually two departments in a large chemist's shop. At the chemist's department one can have a medicine immediately, other drugs have to be ordered at the prescription department.

A chemist's shop also has an assistant room, a room for washing, drying and sterilization, an analytical laboratory, a room for dispensing medicines, a room for storing. There are some requirements for the storage of drugs. The drugs for immediate use should be kept in refrigerators. Some drugs should be stored in cool place and protected from light.

At the chemist's medicines are distributed according to the therapeutic effect: drugs for cough, cardiac medicines, drugs for headache, flu and cold, antihypertensive and antihypertensive remedies.

Because of his knowledge the pharmacist should provide information required for the safe and effective use of both prescription and over - the - counter medications when supplying them to patients. The pharmacist serves as an information source of all aspects of drugs to his colleagues in the medical, dental and nursing professions.

The personnel of a chemist's shop consist of a manager, who is the head of it, a dispensing pharmacist, who takes prescription and delivers drugs, a chemist controlling the prescription, a chemist – analyst controlling the effectiveness of the drugs prepared. There is also a pharmacist who is in charge of the supply of the necessary medications and its replenishing.

Exercise 3. Answer the following questions.

1. Why is drug industry a big business in many countries?
2. What kind of role do drugs play in society?
3. Where are most drugs produced nowadays?
4. How are they distributed?
5. What is a chemist's shop?

6. What departments and rooms does an average chemist's shop include?
7. What drugs are sold there?
8. What dosage forms do you know?
9. Where are drugs kept at the chemist's shops?
10. What information can pharmacist provide people with?

Exercise 4. Choose a suitable word given in the brackets to fill in each gap.

A chemist's shop (are\is) a medical institution in which you can have all the prescriptions made up and buy all the necessary things when you (are\is) ill. There (are\is) three types of chemist's shops in our country at present: municipal, hospital, private. All of them (are\is) licensed. (You\Your) can also buy some medicines at chemist's stalls. The chemist's shop consists of several (departments\ department): chemist's, wholesale, stock-in-trade and prescription department. The prescription department provides medicines only by (the\a) doctor's prescriptions. Ready-made medicines such as tablets, drops as well as injection solutions (are\is) usually given out immediately at a patient's request. If (an\a) patient needs some ointment, a tincture or powders he can order them and will get the prepared medicines in some hours. Sometimes medicines (are\is) prepared in the presence of a patient having a prescription with the word "cito".

Exercise 5. Play the dialogue and make up a similar one.

AT THE PHARMACY

Pharmacist:	Good morning, may I help you?
Customer:	Could you please fill this prescription for me?
Pharmacist:	Have you taken this medicine before?
Customer:	No I haven't.
Pharmacist:	You have to take one pill three times a day for seven

Customer:	days. Are there any side effects?
Pharmacist:	Yes. You may feel dizzy.
Customer:	What about precautions?
Pharmacist:	Don't drive when you take this medicine.
Customer:	When will the prescription be ready?
Pharmacist:	It'll be ready in a few minutes.
Customer:	I've also had a runny nose for a couple of days, can you
Pharmacist:	recommend something?
Customer:	This decongestant is very effective, but be careful using it. It causes drowsiness and you shouldn't drink any alcohol when taking it.
Pharmacist:	OK, I'll try it. I also need some band-aides and sun
Customer:	screen. Where are those?
Pharmacist:	The band-aides are on aisle 3, on the left and the sun
Customer:	screen is on aisle 2, on the top shelf. Thanks. Will that
Pharmacist:	be all?
Customer:	That should do it.
Customer:	That comes to 34.000.
Pharmacist:	That's expensive! Why so much?
	The prescription medication is expensive. It cost 10.000.
	I may be able to get you a generic drug for about half that price, but I would have to consult your doctor first.
	No, that's OK. Don't bother.
	Here's your change. Have a good day.

Exercise 6. Match the words on the left with the correct meaning on the right.

1) drowsy

a) feeling like you have to vomit

2) nauseated

b) a kind of medicine used on skin

3) pregnant

4) precaution

her baby

5) dizzy

6) nursing

7) exceed

8) recommended

9) dosage

10) ointment

doesn't happen

c) be more than

d) a mother giving her milk to

e) suggested

f) sleepy

g) expecting a baby

h) amount of medicine to take

i) feeling like everything is turning

j) taking care so something bad

Speaking. Prepare a speech about «Chemist's Shop», using the useful language used in previous lessons. Your speech must contain the most important information of the given topic and be no less than 10 sentences.

Homework. Read the text and translate it into your own language. Be ready to retell the text.

UNIT IV. WRITING A PRESCRIPTION

Text: Prescription

Grammar: Degrees of Comparison of the Adjective

Adjectives describe or modify, that is, they limit or restrict the meaning of nouns and pronouns. They may name qualities of all kinds: *huge, red, angry, tremendous, unique, rare*, etc.

An adjective usually comes right before a noun: a *red* dress. When an adjective follows a link verb such as *be* or *seem*, it is called a predicate adjective: "That building is *huge*," "The workers seem *happy*." Most adjectives can be used as predicate adjectives, although some are always used before a noun. Similarly, a few adjectives can only be used as predicate adjectives and are never used before a noun.

The Positive Degree of an adjective makes no comparison. *A tall building. This is a beautiful car.*

The Comparative Degree compares two people, things, activities or qualities. *A taller building than this one. This car is more beautiful than yours.*

The Superlative Degree compares a person, thing, activity or quality with the group. *The tallest building in the town. This is the most beautiful car I have ever seen.*

Irregular Comparative and Superlative Forms

Positive	Comparative	Superlative
good	better	the best
bad	worse	the worst
many	more	the most
much	more	the most

far	farther	the farthest/furthest
little	less	the least
old	elder/older	the eldest/oldest

Exercise 1. Make the comparative and superlative degrees.

1. rich, 2. fine, 3. small, 4. high, 5. large, 6. clever, 7. heavy, 8. important, 9. difficult, 10. easy, 11. simple, 12. little, 13. beautiful, 14. interesting, 15. hard, 16. long, 17. clean, 18. dirty, 19. wide, 20. Broad

Exercise 2. Make the positive degree.

1. the earliest _____
2. the best _____
3. the longest _____
4. the worst _____
5. the biggest _____
6. shorter _____
7. the busiest _____
8. less important _____
9. the most difficult _____
10. the least expensive _____
11. the finest _____
12. the cheapest _____

Exercise 3. Put the adjectives in the correct form.

1. Malika is the _____ (good) student in the group.
2. The _____ (long) examination session is in the summer.
3. Our academy is situated in the _____ (beautiful) street.

4. My friend got a _____ (high) mark at the exam in chemistry than I did.
5. Our first-year students study _____ (bad) than the senior students.
6. Pharmacognosy is as _____ (difficult) as botany.
7. Pharmacology isn't so _____ (easy) as you say.

Exercise 4. Choose the most appropriate answer from the words given in brackets.

1. He is a _____ man. (*A handsome B more handsome C the most handsome*)
2. He was _____ than the day before. (*A good B better C the best*)
3. The way was _____ now than last time. (*A long B longer C the longest*)
4. We were _____ to the yard than to the house. (*A close B closer C the closest*)
5. My heart was _____. (*A heavy B heavier C the heaviest*)
6. He is very loud, he should behave _____. (*A more quietly B quieter C more quiet*)
7. His English is _____ than mine. (*A worst B more worse C worse*)
8. I speak English _____ than Tom. (*A fluentlier B fluently C more fluently*)
9. Tom usually answers _____ than his brother. (*A more honest B honestlier C more honestly*)
10. You must get up _____ to do your morning exercises. (*A more early B more earlier C earlier*)

Exercise 5. Fill in the correct form of the words in brackets (comparative or superlative).

1. My house is (big) _____ than yours.
2. This is the (interesting) _____ lecture I have ever heard.
3. Non-smokers usually live (long) _____ than smokers.
4. Which is the (dangerous) _____ substance in the lab?
5. A holiday by the sea is (good) _____ than a holiday in the mountains.
6. It is strange but often a coke is (expensive) _____ than a beer.
7. Who is the (rich) _____ woman on earth?
8. The weather this summer is even (bad) _____ than last summer.
9. He was the (clever) _____ student of all.
10. This is the (difficult) _____ experiment I have ever carried out.

Read the text, give definitions to the words in bold and learn them.

A prescription is written by a doctor to give patients medicine needed to alleviate **symptoms** or stabilize a medical condition that might be chronic in nature. The prescription is written by a **physician** in order to tell the pharmacist which medication is required. These often include a number of **prescription** abbreviations.

Prescriptions are used for medications that a doctor feels is necessary for treatment. These are legal documents that are required in order to receive medicine which is prepared by the pharmacist in a pharmacy. Recommendations, on the other hand, are courses of action that a doctor feels will be helpful for the patient. These could include simple daily tasks such as taking a walk or eating more fruits and vegetables.

Prescriptions include:

Patient identifier: First and last name of the patient, as well as the date of birth (DOB).

Medication (also named "drug"): The medicine that is prescribed.
Strength: How strong the medication prescribed is (50 mg, 100 mg, etc.).

Amount: How often the patient should take the medicine.

How much: Number of pills, tablets, etc. provided.

Frequency: How often the patient should take the medicine.

Route: How the patient should take the medicine (by mouth, topical, sublingual, etc.).

Refills: How often the prescription should be renewed. Signature: Signature of the physician writing the prescription.

Date: The day on which the prescription was written.

Exercise 1. Answer the questions.

1. What is a prescription?
2. Why does a physician write a prescription?
3. What is the difference between a prescription and recommendations?
4. What information does a prescription include?

Exercise 2. Match the words from column A with synonyms from column B.

Column A	Column B
1) amount	a) medicine
2) chronic	b) illness, sickness, disease
3) drug	c) information that identifies a patient
4) easier said than done	d) how often something is done
5) frequency	e) how much
6) medical condition	f) person who has a license to prepare medications for patients
7) medication	g) recurring, happening again and again

8) patient identifier	h) doctor
9) pharmacist	i) idiomatic term used to refer to medicine
10) pharmacy	j) not easy to do
11) physician	k) to sleep enough to feel rested
12) prescription	l) licensed store which sells medicine that requires a prescription
13) to refill	m) to be relaxed
14) route	n) placed on the skin
15) strength	o) to take medicine by mouth
16) sublingual	p) to provide medicine again based on a prescription
17) to alleviate	q) order from a doctor for medicine
18) to get a good night's sleep	r) how medicine should be taken
19) topical	s) how strong the medicine is
20) to stabilize	t) under the tongue
21) to stay calm	u) to make easier, to relieve
22) to take a pill	v) to make regular

Exercise 3. Read the Latin codes and their equivalents used in English prescriptions. Translate them into your language.

a.c. - before meals

h – hour

i - one or one time

ne.rep. (n.r.) - means to the pharmacist that the prescription is not to be repeated

p.r.n. - as needed

Sig. - signature

i.i.stat. - two tablets at once

i.q. 4h. - one capsule every 4 hours

in - mix

tabs - tablets

t.i.d. - three times a day

i.d. - once a day

Speaking. Write a prescription using contractions in the previous exercise. Use the sample of prescription given below.

Prescription

Tel. ER5- 600 Reg. No. 198

Rupert Black, M.D. 230 Broad Street Philadelphia 1, Philadelphia1 Name:
Mrs. Anna White, age 45 Address: 619 Locust Street, Philadelphia, Philadelphia
Tabs, Thyroid USP 30 ng² Dispense: 60 Sig. Tabs.i.t. i.d.a.c.

Rupert Black, M.D.

ne.rep.

Homework. Work in pairs. Make up a dialogue between a chemist and a patient. Perform it in class.

UNIT V. MEDICATIONS

Text: Paracetamol

Grammar: The Present Simple

The Present Simple Formation

S bare infinitive (the present tense forms the notional verb)

statement	negative	question
I/you/we/the y work	I/you/we/they do not (don't) work	Do I/you/we/they work?
He/she/it works	He/she/it does not (doesn't) work	Does he/she/it work?

The present simple tense is used to express present habits, permanent situations, states and general truths. e.g.

I usually go to gym after classes.

Do you study at a medical college?

I like biology.

A surgeon makes surgery operations.

The present simple is often used with the following adverbs and phrases: always, usually, often, sometimes, rarely, never – adverbs; everyday, every Monday/week/ month, once/twice/three times a week/month/year/etc. – phrases

Exercise 1. Write negative and interrogative sentences.

1. I study at the National University of Pharmacy.
2. I always do my English homework.
3. He studies at the pharmaceutical department.

4. They like organic chemistry very much.
5. My best friend lives in a hostel.

Exercise 2. Open the brackets and write the correct forms of the verbs.

1. Anne _____ (like) studying biology.
2. We _____ (not\ watch) TV every day.
3. Students _____ (carry out) experiments very often.
4. They _____ (have) breakfast before 7 a.m.
5. _____ you _____ (study) at the National University of Pharmacy?
6. Masha _____ (not\ play) computer games.
7. She _____ (have) shower in the mornings.
8. My friend _____ (speak) French.
9. My sister and I _____ (go) to the university by subway.
10. _____ your best friend _____ (live) in a hostel?

Exercise 3. Write questions in the Present Simple Tense.

1. _____ you _____ analytical chemistry? (to study)
2. _____ your teacher _____ the homework? (to check)
3. _____ you _____ photos when you are on holiday? (to take)
4. _____ she _____ to English lessons regularly? (to go)
5. _____ they _____ good marks? (to get)

Exercise 4. Write do\ does\ am\ is\ are in the gaps.

1. _____ you tired?
2. _____ you study chemistry?
3. _____ you a student?
4. _____ you have a brother?

5. _____ she a student?
6. _____ she study chemistry?
7. _____ you have lessons every day?
8. _____ they at home?
9. _____ he at work?
10. _____ she speak English?
11. _____ you speak English?
12. _____ he an English teacher?
13. _____ it cold outside?
14. _____ you study biology?
15. _____ you understand me?

Exercise 5. Write the correct form of the verbs.

Chemistry _____(to be) a branch of physical science that _____(to study) the composition, structure, properties and change of matter. Chemistry _____(to include) topics such as the properties of individual atoms, how atoms _____(to form) chemical bonds to create chemical compounds and the interactions between substances through chemical reactions to form different substances. Chemistry _____(to be) sometimes called the central science because it _____ (to bridge) other natural sciences, including physics, geology and biology.

Exercise 6. Find and correct the mistakes in these sentences.

1. The Browns goes to the seaside every summer.

2. I doesn't understand the word "test-tube". What do this word mean?

3. British people drinks a lot of tea.

4. Do she studies at the National University of Pharmacy?

5. My train leave at 09.30, so I need to be at the station by 9.

6. Does your groupmates arrives on Monday?

7. What time do the first double-period begins?

8. Do it take you 10 minutes to get to the University? – Yes, you are right.

9. We usually plays football but sometimes we plays volleyball or tennis.

10. Water freeze at 0°C (32°F). _____

Vocabulary. Define the following words and expressions. Give their equivalents in your language: *administration, stuffy nose, medical advice, persist, storage, reach, exceed, flu, essential, description, precaution, contraindication, decade, frequent, measuring spoonful, measuring capful, respectively, renal insufficiency*

Exercise 1. Before reading the text discuss about main features of paracetamol.

Exercise 2. Read the text and find the synonyms of the following words and expressions: essential, ten days (years), different, feature, consist of, ache, negative affects, measure, long-time cure, half, new-born children

PARACETAMOL

General: The most frequent and thus most important analgesics applied by the doctor daily have been in use for decades. One of them is Paracetamol. It is distinguished by good analgesic and antipyretic properties and is well tolerated. **Composition:** One tablet contains Paracetamol BP 500 mg; One suppository contains Paracetamol BP 250 mg; One measuring spoonful/measuring capful mixture (5ml) contains 120 mg and 200 mg respectively.

Indications: Any attacks of pain, such as headache, toothache, earache, - muscular pain, arthritis pain, traumatic pain, and post-operative pain, feverish conditions with grippal infections and other infectious diseases.

Contraindications: Severe renal insufficiency; caution with damaged liver.

Side Effects are not to be expected when Paracetamol is administrated in therapeutic doses. Avoid overdose and long-term treatment.

Administration and Dosage: Tablets: children (above 6 years) $\frac{1}{2}$ -1 tablet; adults 1-2 tablets. Suppositories: infants 1-6 years one suppository. Mixture: babies (2nd -12 month) $\frac{1}{2}$ -1 measuring spoonful/measuring capful. The analgesic and antipyretic effect sets in after 30 min and will last for 3 to 4 hours.

Storage Tablets: No special requirements. Suppositories: Storing temperature is not above 25 C. Mixture: Protected from light.

Exercise 3. Make sentences with the following words: *overdosage, therapeutic doses, requirement, damaged liver, infectious diseases*

Exercise 4. Answer the following questions.

1. What is the most frequent used analgesics in medicine?

2. What does paracetamol consist of?
3. In what cases can paracetamol be used?
4. What contraindications can be observed with the of paracetamol?
5. How should the tablets be kept?

Speaking.

Exercise 1. Discuss about positive and negative influence of any painkiller you know.

Exercise 2. Fill in the gaps using the following words: *particularly, temperature, added, contain, keep, lacks*

“Coldrex Tablets” are _____ effective against the symptoms of colds and flu because they are made to the special Coldrex formula. They _____ the full-recommended dose of paracetamol to ease aches and pains and to lower your _____. There’s phenylephrine to clear a stuffy nose. We’ve also 66 _____ caffeine, mild stimulant to _____ you going through your cold, and vitamin C - an essential vitamin your body often _____ during colds and flu. Contains paracetamol.

Homework. Write specific features of any drug in detail.

UNIT VI. CHEMICAL LABORATORY

Text: The Chemical Laboratory

Grammar: There is/are

Grammar: There is/are The choice between the phrases *there is* and *there are* at the beginning of a sentence is determined by the noun that follows it. We use *there is* when the noun is singular (“There is a pen on the table”). We use *there are* when the noun is plural (“There are two pens on the table”).

We use *there is* and *there are* when we first refer to the existence or presence of someone or something: There is a letter on your desk. Julia brought it from the mail room. There are three Japanese students in my class.

“There is” is a singular form. There is a new cafe in the center of Tashkent. “There are” is the plural form of “there is”: There are two new buildings next to the University.

Exercise 1. Write negative and interrogative sentences.

1. There is the National University of Uzbekistan in Tashkent.
2. There are new English textbooks.
3. There is the pharmaceutical department.
4. There are a lot of students in the classroom
5. There is a scientific journal on the desk.

Exercise 2. Complete the sentences using “is” or “are”.

1. There _____ thirty students in my group.
2. There _____ some books in my bag.
3. There _____ some computers in the library.
4. There _____ a blackboard in the classroom.
5. There _____ a CD player on our teacher’s desk.
6. There _____ some textbooks.
7. There _____ some dictionaries in the classroom.

Exercise 3. Read this conversation and underline the correct phrase.

Man: Excuse me. I'm new to the neighborhood. My name's Akmal.

Woman: Welcome to our neighborhood, Akmal. My name's Mavluda.

Man: Nice to meet you. Is there \ Are there a drugstore near here?

Woman: Yes, there is\ there are. In fact, there is\ there are two. One's on this street and one's on the corner of the next street.

Man: Thanks, and are there\ is there any banks?

Woman: No, there aren't\ there isn't, but there is\ there are a cashpoint machine at the supermarket next to the drugstore on this street.

Man: Thanks a lot

Vocabulary.

Exercise 1. Define the following words and expressions. *a burette, a burner, a flask, a funnel, a test-tube, a vessel, an acid, an alkali, analytical balance, glassware, impurities, to boil, to increase, to melt, to occupy, to point out, to record all the findings, to write down carefully, to carry out various experiments, glassware for measuring, vapour pressure, melting point, a science room, apparatus, beverage, disposal, equipment, exceptions, goggles, hazard, lab coat, rule, to blow up, to follow, to notify, to observe, to poison, to remove, unsafe, well-ventilated area*

Exercise 2. Match the following

1) blank	a) cylinder
2) graduated	b) point
3) measuring	c) volumetric
4) analytical	d) glass
5) drying	e) weight
6) molecular	f) cabinet
7) boiling	g) balance

Reading.

Exercise 1. Find the synonyms of the following words and expressions in the text below: preparing, place to do experiments, perform, take part, smell, matter, various, application, significance, flowing, improve

The course of training at any pharmaceutical institute is impossible without practical classes in chemistry. They are held in the chemical laboratories. Students of our University carry out various experiments with different chemical substances there.

All members of my group prefer to attend practical classes. That's why we work in the chemical laboratory with great pleasure. We try to improve our knowledge in practice. Our chemical laboratory occupies a large and light room. It is well-ventilated because chemists often work with substances having strong and unpleasant odour. During our practical classes in chemistry, we study chemical and physical properties of inorganic substances. Our students carry out different experiments and carefully record all the findings. They usually point out the title of the experiment and the date, the substances, describe reagents and the results.

The laboratory has its own equipment. It is equipped with special laboratory tables besides the demonstration table which stands between the two rows of tables and in front of them. In our experiments we use laboratory vessels and glassware of different kinds. There are three groups of them in the laboratory: glassware for general use, glassware for special use and glassware for measuring. Students carry out experiments using test-tubes, funnels, flasks, retorts, burettes, graduated cylinders, measuring glasses and pipettes. They also have microscopes, analytical balances, distillators, burners to heat solutions and thermometers at hand. The most widely available reagents at our laboratory are acids (nitric, sulphuric), alkalis (potassium solution, sodium solution), oxides,

organic salts, indicators (phenolphthalein, methylene orange). Among the subjects students study in the laboratory are density, viscosity, vapour pressure and others.

There are a lot of laboratories in our academy. The laboratory of inorganic chemistry is for identifying the properties of elements and inorganic substances. The first-year students have their practical classes there. The qualitative and quantitative analysis of organic and inorganic substances can be obtained in the laboratory of analytical chemistry. The laboratory assistant carries out experiments in the laboratory of organic chemistry. Here we can study the properties of organic substances and ways of their synthesis. There are two more laboratories in our academy: the laboratory of quality control and the laboratory of juridical chemistry. In the latter one students can obtain the toxicological analysis.

The work in the chemical laboratory is of great importance. The findings obtained help people to keep their health and to increase their knowledge. It's well-known that the running water contains various impurities. We learn how to obtain distilled water with distillators. Our students also like to work with special vessels for the determination of molecular weights and for the determination of melting and boiling points.

To sum up, practical classes in chemistry are usually held in the chemical laboratories where students carry out various experiments using different chemical substances. Moreover, the work in the chemical laboratory is of great importance because it helps students to increase their knowledge and to get more practical training.

Exercise 2. Answer the questions.

1. Where are the practical classes in chemistry held?
2. What do students do in the chemical laboratories?
3. What kind of room does our laboratory occupy?

4. What do students study during their practical classes in chemistry?
5. What is the chemical laboratory equipped with?
6. What groups of vessels and glassware do you know?
7. What do students use when they carry out experiments?

Exercise 3. Fill in the gaps with the following words: *equipped, includes, flasks, cleanliness, supplied, measuring, distilled*

1. Every chemistry laboratory is _____ gas and water.
2. The laboratory is _____ benches, shelves, racks, etc.
3. Here you can see glassware for _____ use: test-tubes, flasks, beakers, etc.
4. The glassware for _____: is burettes, pipettes, measuring glasses, etc.

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5. Volumetric _____ are used to measure specific volumes.
6. _____ water is contained in large bottles.
7. The work in the chemistry laboratory requires _____.

Exercise 4. Choose a suitable word given in the brackets to fill in each gap.

The laboratory (have\has) its own equipment. It (are\is) equipped with special laboratory tables besides the demonstration table which stands between the two rows of tables and in front of (they\them). In our experiments (us\we) use laboratory vessels and glassware of different kinds. There (is\are) three groups of them in the laboratory: glassware for general use, glassware for special use and glassware for measuring. Students (carry out\ carry) experiments using test-tubes, funnels, flasks, retorts, burettes, graduated cylinders, measuring glasses and pipettes. They also (have\has) microscopes, analytical balances, distillators, burners to heat solutions and thermometers at hand. The most widely available reagents at our laboratory (are\is) acids, alkalis, oxides, organic salts, indicators.

Speaking. Discuss about safety rules in chemical laboratory using the following expressions: *to do experiments; to avoid poisoning yourself; to understand the below rules; to work alone in the laboratory; not touch any equipment; experiments authorized by your teacher; a well-ventilated area; pranks are dangerous; drink beverages; equipment instructions; chemical waste; after performing all experiments; no sandals; report any accident; to be considered dangerous; if a chemical may splash in your eye(s); check the label; use an insulated pad.*

Homework. *Prepare a speech about «Chemistry Laboratory»*

UNIT VII. PHARMACY AS A SCIENCE

Text: What is Pharmacy?

Grammar: Indefinite pronouns *some, any, no*

Grammar: *some, any, no*

We use *some* and *any* with uncountable nouns and plural nouns. The general rule is that you use "some" in affirmative sentences and "any" in negative sentences and questions.

I have some prescriptions to buy in a chemist's shop.

I don't have any textbooks in Organic chemistry.

Do you have any test-tubes to carry out an experiment?

some can be used in questions when offering or requesting something that is there.

Would you like some coffee? (offer)

Could I have some water? (request)

When we use *some* in a question, we show what we are offering the other person, but not asking a question. We use "any" in questions and negative sentences.

Do you have any questions about this topic?

Are there any drugstores in this area?

He hasn't got any questions.

We use "no" in positive sentences, but with a negative meaning (without using "not").

The students have no problems with this topic.

Exercise 1. Choose the correct option.

1. Have you got ___ English friends? a) some b) any c) no

2. No, I haven't got ___ English friends. a) no b) some c) any
3. As for me, I have ___ new books in biochemistry. a) some b) any c) no
4. He has ___ time at all. a) some b) any c) no
5. Did you pass ___ tests in analytical chemistry last week? a) some b) any c) no
6. Would you like ___ orange juice? a) some b) any c) no
7. Unfortunately, the professor has ___ time left to answer more questions.
a) some b) any c) no
8. Have you ever written ___ scientific articles? a) some b) any c) no
9. Have you got ___ textbooks in microbiology? a) some b) any c) no
10. Yes, I have ___ textbooks in microbiology. a) some b) any c) no
11. Have you got ___ water? I am really thirsty. a) some b) any c) no
12. No, I do not have ___ water. a) some b) any c) no
13. I want to find ___one who wants to cooperate with me in writing a new article. a) some b) any c) no
14. I will live ___where in London. It does not matter to me. a) some b) any c) no
15. There is ___body in the classroom at the moment. It is empty. a) some b) any c) no
16. Are you looking for ___thing in particular? a) some b) any c) no

Exercise 2. Fill in the blanks below to complete the sentences. Use 'some' or 'any'.

1. I do not need _____ advice from you. I am old enough to use my head.
2. He does not have _____ pens, but I have _____ pens.
3. Our teacher did not give us _____ homework yesterday.
4. I am tired. Do we have _____ time to take a nap?
5. A: Do they have _____ library cards?

B: No, they don't have _____.

6. Fozil wants to buy _____ new books.

7. Excuse me, I need _____ information about the next conference.

8. I need _____ help with my homework.

9. The teacher has _____ questions that he wants to ask you.

10. Unfortunately, I do not have _____ time to discuss it.

11. I am sorry, but we have _____ time. We are in a hurry.

12. Davron read _____ interesting books last month.

Exercise 3. Underline the correct option.

1. There is someone / anyone in the classroom.

2. There is anything / nothing on the shelf.

3. Can I tell you something / nothing?

4. He did not tell me anything / something about this accident.

5. No one / Anyone came to visit her in a hospital.

6. Anybody / Somebody called her yesterday.

7. Did you go anywhere / nowhere last weekend?

Exercise 4. Correct the mistakes if there are any.

1. I am sure, Mr. Karimov did not tell you nothing about the conference.

2. The doctors have never done something to hurt him.

3. Let me explain something to you.

4. Have your read some articles by this outstanding professor?

5. Who told you that he did not write some books?

6. I need something to talk to.

7. I cannot confirm nothing now.

8. Do you have some questions?

9. Would you like any coffee?

10. I did not have nothing to do at the weekends so I was bored.

Vocabulary. Define the following words and expressions: *dosage forms, efficacy, health care, medicines, drugs, medicinal products, medications, outcome, substance, surgery, to be related to, to consider, to dispense, to divide, to include, to sell*

Reading.

Exercise 1. Find the synonyms of the following words and expressions in the text below: matter, connect, specialists, originate, job, contain, function, plant, way

Pharmacy is the science and technique of preparing as well as dispensing drugs and medicines. It is also considered as the art of preparing medicinal products, or a place where such substances are sold. The mortar and pestle are one of the internationally recognized symbols to represent the pharmacy profession. Also, the Green Cross is used in Greece, Spain, Italy, Argentina, France, Poland, the United Kingdom and other countries.

Pharmacy is the health profession that links the health sciences with the chemical sciences. The scope of pharmacy practice includes more traditional roles such as compounding and dispensing medications, and it also includes more modern services related to health care, including clinical services, reviewing medications for safety and efficacy, and providing drug information. Pharmacists, therefore, are the experts on drug therapy and are the primary health professionals who optimize medication use to provide patients with positive health outcomes.

The word pharmacy is derived from its root word *pharma* which was a term used since the 15th–17th centuries. However, the original Greek roots from "Pharmakos" imply sorcery or even poison. In addition to *pharma* responsibilities, the *pharma* offered general medical advice and a range of

services that are now performed solely by other specialist practitioners, such as surgery and midwifery. The pharma often operated through a retail shop which, in addition to ingredients for medicines, sold tobacco and patent medicines. The pharmas also used many other herbs not listed. The Greek word Pharmakeia derives from Greek: φάρμακον (pharmakon), meaning "drug" or "medicine".

In its investigation of herbal and chemical ingredients, the work of the pharma may be regarded as a precursor of the modern sciences of chemistry and pharmacology, prior to the formulation of the scientific method.

The field of pharmacy can generally be divided into three main disciplines: Pharmaceutics that concerns on how to convert medication and drugs to suitable drug dosage forms; Pharmaceutical Sciences including pharmaceutical and medicinal chemistry, pharmacognosy, pharmacy technology, pharmacy management and economics and pharmacology; Pharmacy practice that concerns dispensing medication correctly. In the late 20th century, this field has developed into hospital pharmacy and clinical pharmacy. All of these fields are concentrated on optimizing patient care.

Exercise 2. Answer the following questions.

1. What is pharmacy?
2. What are the internationally recognized symbols to represent the pharmacy profession?
3. What does the scope of pharmacy practice include?
4. What is the word pharmacy derived from?
5. How can the field of pharmacy be divided?
6. What is pharmaceutics?
7. What pharmaceutical sciences can you name?

Exercise 3. Complete the sentences with the following words and expressions: *pharmacy, science, dosage forms, drug*

1. Pharmacy is the _____ and technique of preparing as well as dispensing drugs and medicines.

2. Pharmacists are the experts on _____therapy.

3. The word _____is derived from its root word pharma.

4. Pharmaceutics concerns on how to convert medication and drugs to suitable drug.

UNIT VIII. HISTORY OF PHARMACY

Text: History of Pharmacy

Grammar: The Past Simple Tense

Grammar.

The Past Simple: Formation

statement	negative	question
I/he/she/it/you/we/they treated left	I/he/she/it/you/we/they did not (didn't) treat leave	Did I/he/she/it/you/we/they work? leave?

Use: The past simple is used to express completed actions, repeated actions in the past, general truths about the past, main events in the story. e.g.

Alisher called in a physician from the polyclinic yesterday.

Nigora went to see a doctor several times last month.

People died of many illnesses in old times.

The doctor listened to the heart and lungs, then measured the patient's blood pressure.

The past simple is often used with the following adverbs and phrases: yesterday, last week/summer/year, in January/2012, an hour/ a week/ a year ago etc.

Exercise 1. Make up sentences using the prompts.

1. Doctor / examine / patients / 7 o'clock/ yesterday.
2. They / find / shortcut / to / full / recovery / last night.
3. He / avoid / alcohol / last year.

4. The degree / lung / impairment / measure / pulmonary / function / test /yesterday.

5. An hour / ago / doctor / say / brain / damage / from / lack / oxygen.

6. Jane's/ milk / teeth / not discard / completely / until / she / 10 years old.

7. The government / introduce/ tough / laws / deal / illegal / drugs / last year.

8. I / feel / down / whole / evening / so / I / take / energizer.

9. In / his / recent / report / Dr Moor / say / vaccination / boost / your / immune / system.

Exercise 2. Fill in the gaps with the following verbs in the appropriate form: become; to be ready; call; try; grow; bring; look; do; stop; to be born; receive; understand; find

Alexander Fleming

Alexander Fleming **1**..... in 1881. He **2**..... research work at one of the hospitals in London, and **3**..... interested in bacterial action and antibacterial drugs.

One day Fleming's assistant **4**..... him a plate on which a colony of dangerous bacteria were being grown. "This plate cannot be used for the experiment, said the assistant." Some mold has formed on it and I'll have to take another plate. Fleming **5**..... to allow his assistant to do so. Then he **6**..... at the plate and saw that the bacteria around the mold had disappeared. Fleming **7** the importance of what had happened and immediately began to study the phenomenon.

He placed some mould on other plates and **8**..... more colonies. By means of numerous experiments on animals he determined that this new substance was not toxic to the tissues and **9**..... the growth of the most common pathogenic bacteria.

Fleming **10**..... this substance penicillin. It is of the same family of moulds that often appear on dry bread.

But many investigations had been carried out before a method of extracting pure penicillin was found. It was also very difficult for Fleming to interest biologists and mould experts in penicillin and to decide the problem of its production.

In 1942 Fleming **11**..... his own first experiment. A friend of his was very ill, dying. After several injections of penicillin the man was cured. It marked the beginning of penicillin treatment.

Fleming **12** the Nobel Prize for his great discovery. But he said: "Everywhere I go people thank me for saving their lives. I do not know why they do it. I didn't do anything. Nature makes penicillin. I only **13**..... it."

Exercise 3. Open the brackets and write the correct forms of the verbs.

1. Last June Irina _____ (go) to the USA for three weeks.
2. _____ you _____ (study) English last year?
3. He _____ (stay) at the hotel last year.
4. I _____(not have) much time for talking.
5. Last month my groupmates _____ (go) to a conference.
6. _____ they _____ (obtain) a new substance last week?
7. He _____(not\ visit) Scotland with his friends last holiday.
8. My best friend _____ (want) to be a pharmacist when he _____(to be) 10 years old.
9. When we _____(to be) at college, my teacher always _____(tell) us to eat healthy food.
10. I _____(not\ carry out) experiment last lesson.

Exercise 4. Write the correct forms of the verbs using Past Simple.

1. Marie Curie _____ (to be) born in 1867 and _____ (die) in 1934. Marie Curie _____ (receive) the Nobel Prize in Chemistry in 1911 for her discovery of radium and polonium. She _____ (to be) able to isolate and study the compounds and nature of radium.

2. Alessandro Volta _____ (to be) the first person to isolate methane gas. He _____ (discover) that methane mixed with air _____ (can) be exploded using an electric spark. He also _____ (find out) that electric potential in a capacitor is directly proportional to electric charge.

3. Louis Pasteur _____ (to be) born in 1822 and _____ (die) in 1895. In addition to developing the process of Pasteurization, Louis Pasteur _____ (discover) the asymmetrical molecular structure on certain. He _____ (make) some of the earliest vaccines for rabies and anthrax, and the reduction of a bacterial infection in what _____ (to be) known as puerperal fever.

4. Alfred Nobel (1833–1896) _____ (to be) famous for inventing the dynamite. Alfred Nobel _____ (to be) a chemist, innovator, engineer, and arms manufacturer. One of his earliest inventions _____ (include) the gas meter. At one time, he _____ (have) nearly 350 patents on various items.

5. Mario Molina (1943) _____ (discover) the ozone hole in the Antarctic. He _____ (get) the Nobel Prize in Chemistry in 1995. Molina also _____ (co-discover) the harm that chlorofluorocarbons _____ (have) on the ozone layer.

Vocabulary.

Exercise 1. Define the following words and expressions: *AD (Anno Domini), ancient, BC (Before Christ), chemical compound, compilation, drugstore, eventually, for instance, key discovery, medicinal substance, mode of action, origin, papyrus (pl. papuri), pharmaceutical company, prescription book, representative, substantially, to appear, to distribute, to issue a decree, treatise, valuable*

Exercise 2. Match these words and phrases with their definitions

- | | |
|--------------------|---|
| 1) herbal medicine | A) a medicine; a medicament; the act or process of treating with medicine; administration of medicine |
| 2) acupuncture | B) the process of accepting personal responsibility to keep ourselves healthy, and well physically, emotionally, mentally and spiritually |
| 3) self-healing | C) restoring and maintaining health through the stimulation of specific points on the body |
| 4) folk medicine | D) the study and use of medicinal properties of plants |
| 5) medication | G) longstanding remedies passed on and practiced by lay people |

Reading.

Exercise 1. Find the synonyms of the following words in the following text: not dependent, collection, initial, stored, treatment, written, member, Middle Ages, mixture, order, ancient, chemist's, established

History of Pharmacy

The history of pharmacy as an independent science is relatively young. The origin of pharmacy dates back to the first third of the nineteenth century. The earliest known compilation of medicinal substances was an Indian Ayurvedic treatise (6th century BC). However, the earliest text as preserved dates to the 3rd or 4th century AD. India has a great history of medicine and patient care.

Ancient Egyptian pharmacological knowledge was recorded in various papyri such as the Ebers Papyrus of 1550 BC, and the Edwin Smith Papyrus of the 16th century BC. In Ancient Greece there was a group of experts in medicinal plants. Probably the most important representative was Diocles of Carystus (4th century BC). He is considered to be the source for all Greek pharmacotherapeutic treatises between the time of Theophrastus and Dioscorides. The Latin translation *De Materia Medica* (Concerning medical substances) was used as a basis for many medieval texts, and was built upon by many Middle Eastern scientists during the Islamic Golden Age.

The advances made in the Middle East in botany and chemistry led medicine in medieval Islam substantially to develop pharmacology. Muhammad ibn Zakariya Razi (Rhazes) (865-915), for instance, acted to promote the medical uses of chemical compounds. Our great thinker Abu Raykhon Al-Biruni (973-1050) wrote one of the most valuable Islamic works on pharmacology entitled *Kitab al-Saydalah* (The Book of Drugs), where he gave detailed knowledge of the properties of drugs and wrote about the role of pharmacy and the functions and duties of the pharmacist. Our great ancestor Abu Ibn Sina (well-known as Avicenna in Europe), too, described no less than 700 preparations, their properties, mode of action and their indications. In Europe pharmacy-like shops began to appear during the 12th century. In 1240 emperor Frederic II issued a decree by which the physician's and the apothecary's professions were separated.

The first pharmacy in Europe (still working) was opened in 1241 in Trier, Germany. In Europe there are old pharmacies (opened in 1317) still operating in Dubrovnik, Croatia and one in the Town Hall Square of Tallinn, Estonia dating from at least 1422. The oldest is claimed to be set up in 1221 in the Church of Santa Maria Novella in Florence, Italy, which now houses a perfume museum. The medieval Esteve Pharmacy, located in Llivia, is also now a museum dating back to the 15th century, keeping old prescription books and antique drugs.

The earliest drugstores date to the Middle Ages. The first known drugstore was opened by Arabian pharmacists in Baghdad in 754, and many more soon began operating throughout the medieval Islamic world and eventually medieval Europe. By the 19th century, many of the drugstores in Europe and North America had eventually developed into larger pharmaceutical companies.

Most of today's major pharmaceutical companies were founded in the late 19th and early 20th centuries. Key discoveries of the 1920s and 1930s, such as insulin and penicillin, became mass-manufactured and distributed. Switzerland, Germany and Italy had particularly strong industries, with the UK, US, Belgium and the Netherlands.

Exercise 2. Answer the questions.

1. When does the origins of pharmacy date back to?
2. Where was the earliest known compilation of medicinal substances found?
3. Where was a group of experts in medicinal plants found?
4. What was Muhammad ibn Zakariya Razi famous for?
5. What was the name of the book about pharmacy written by Abu Raykhon Al-Biruni?
6. When and where was the first pharmacy opened in Europe?
7. When were most of today's major pharmaceutical companies founded?
8. Is the history of pharmacy young or old?
9. Is pharmacy connected to the medicine?
10. What countries have a great history of medicine and patient care?
11. What country was pharmacology developed in?

12. When pharmacy-like shop began to appear?

13. When the earliest drugstores appeared?

14. When did insulin and penicillin become mass-manufactured?

Speaking. Discuss about the contribution of our great scientists to the development of the world pharmacy.

Homework. Prepare a written report on the history of pharmacy.

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(to'g'ri yoki boshqa (avtorlar ismi/ismi))

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Foreign language in pharmacy

(o'qir adabiyotining nomi, m m suri, darslik, o'qir-qa'lamasi)

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