

**ГОСУДАРСТВЕННОЕ БЮДЖЕТНОЕ ОБРАЗОВАТЕЛЬНОЕ УЧРЕЖДЕНИЕ
ВЫСШЕГО ПРОФЕССИОНАЛЬНОГО ОБРАЗОВАНИЯ
“ИВАНОВСКАЯ ГОСУДАРСТВЕННАЯ МЕДИЦИНСКАЯ АКАДЕМИЯ
МИНИСТЕРСТВА ЗДРАВООХРАНЕНИЯ РОССИИ”**

КАФЕДРА ИНОСТРАННЫХ ЯЗЫКОВ

АНГЛИЙСКИЙ ЯЗЫК
УЧЕБНОЕ ПОСОБИЕ
ДЛЯ СТУДЕНТОВ 1 КУРСА
ЛЕЧЕБНОГО И ПЕДИАТРИЧЕСКОГО ФАКУЛЬТЕТОВ

**Рекомендовано методическими комиссиями
лечебного и педиатрического факультетов в
качестве учебного пособия по специальностям
060101 «Лечебное дело» и 060103 «Педиатрия»**

ИВАНОВО 2013

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Предлагаемое методическое пособие предназначено для студентов 1 курса лечебного и педиатрического факультетов, ранее изучавших английский язык в средней общеобразовательной школе. Парамедицинское содержание материалов пособия позволяет использовать его на всех факультетах медицинских вузов. Специфика факультетов может быть учтена в дополнительных дидактических материалах преподавателя.

Основная цель пособия – создание прочной языковой подготовки, на основе которой возможно дальнейшее совершенствование навыков и умений чтения и перевода англоязычной литературы, развитие диалогической и монологической речи по вопросам специальности. Пособие состоит из двух частей: текстовые материалы и тренировочные упражнения по основным разделам грамматики и на освоение общенаучной и общемедицинской лексики. Все тексты и работа над ними являются подготовкой студентов к самостоятельному чтению и пониманию оригинальной медицинской литературы и к устному общению на английском языке в пределах изучаемой тематики.

Пособие состоит из 11 уроков, охватывающих программу 1 курса медицинского вуза, и рассчитано на 72 аудиторных часа.

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Lesson 1.

MEDICINE IS MY FUTURE PROFESSION

I. Read and learn the following words:

1. patient [ˈpeɪʃnt] n – пациент, больной
2. medicine [ˈmeds(ə)n, ˈmedɪsən] n – 1. медицина, терапия; 2. лекарство
3. ancient [ˈeɪnf(ə)nt] a – античный, древний
4. treat [tri:t] v – лечить
5. poison [ˈpɔɪz(ə)n] n – яд
6. healing [ˈhi:lɪŋ] n – лечение, излечивание
7. health [helθ] n – здоровье
8. aim [eɪm] n – цель
9. faithful [ˈfeɪθf(ə)l] a – верный, преданный
10. achieve [əˈtʃi:v] v – достигать; добиваться
11. knowledge [ˈnɒlɪdʒ] n – знание; познания
12. feature [ˈfi:tʃə] n – характерная черта (характера)
13. diagnose [ˈdaɪəgnəʊz] v – ставить диагноз, диагностировать
14. to win confidence [ˈkɒnfɪd(ə)ns] – завоевать доверие
15. cure [kjʊə] v – вылечивать, излечивать от болезни
16. disease [dɪˈzi:z] n – болезнь
17. case [keɪs] n – случай
18. pain [peɪn] n – боль
19. physician [fɪˈzɪʃ(ə)n] n – врач

II. Read and translate the text.

"I shall enter any house for the good of the patient, I shall not do my patient any harm."

Hippocrates

There are many professions and trades on earth, but profession of a doctor is the most ancient among them. People tried to treat each other many centuries ago. The development of medicine is associated with the names of Hippocrates [hɪˈpɒkrəti:z], Galen [ˈgɑ:lən] Avicenna [ˌævɪˈsenə].

Everybody knows that the symbol of medicine is the snake giving its poison into the cup. It means wisdom and healing - the aims of medicine. But there exists one more, less famous symbol which reflects the inner, more intimate essence of this profession. It was left by a famous doctor from Amsterdam Nickolas Van Tulp. This is a burning candle. "Aliis inserviando consumer" – "Giving light to others I burn myself". A great number of doctors were faithful to this symbol to the last.

To achieve this aim medical students must study well and hard at the Academy. Deep knowledge in medicine will be necessary to them in their future work. But professional knowledge is not enough to become a good doctor. "Only a good person may become a good doctor" – words belong to the doctor of philosophy V. Begasky, and they are really true. To be a good doctor means to be honest, unselfish,

responsible, and attentive to other people. Love for men and optimism are the most important features for a doctor.

A doctor is a person who can not only diagnose, but who can read what is in person's heart. A doctor is a man who always has an affectionate word for everybody. He must do his best to win the confidence of a patient. Sometimes it is difficult to cure a disease. In many cases the doctors face pain, hope and mute question "Shall I live?" Naturally, there are various ways of reacting. You can turn away pretending not to notice the eyes asking. You can dismiss the question. But if you are strong and honest you can look into the eyes of another in such a way as to impart to him your faith, willpower and hope. Over 2000 years ago the Hippocratic Oath set the physicians to their path, and it was sacred to each of them.

III. Answer the following questions:

1. What famous ancient doctors do you know?
2. What symbols of medicine do you know?
3. What must you do to become good doctors in the future?
4. What qualities are necessary for every doctor?
5. Do you think your future profession is difficult? Why is it difficult?
6. What thing is the most necessary in relations between a doctor and a patient?

VI. Some medical students are discussing their future profession. Look through the abstracts and try to answer the question: why did they decide to become doctors? Why did you?

A. I dreamed of medicine from my early childhood. Being a little girl I used to play treating my dolls examining them carefully. I used to sit beside my father and listen to him telling about his patients and his work at the hospital. So I made up my mind once and for all: I am going to be a doctor.

B. I am sure that a medical profession is one of the humane [hju'mein] and sacred professions. Health remains the supreme [su'pri:m] goal at all times. It is given to us but once. We can either keep it or lose it. I understand all the responsibility of a doctor and I am ready to devote my life to the protection of people's health.

C. Medicine today consists of many branches ['brɑ:nʃəz], such as cardiology, oncology, surgery, psychotherapy, etc. What spheres of medical science to choose? As for me there is no problem – I want to become an ophthalmologist. Once I witnessed a very short-sighted boy who fell down and broke his glasses. A piece of glass stuck in his eyeball. He was taken to a clinic. The pain ceased in three days, the bandage was removed and it was found that the boy's shortsightedness had completely disappeared. This produced a great impression upon me and I decided to learn the ways of helping people to acquire perfect vision.

V. Render the following sentences in English:

1. Врач лечит больного, а не болезнь.
2. Три помощника есть у врача - слово, растение и нож (Авиценна).
3. Опыт - лучший учитель.

4. Врач есть философ: нет большой разницы между мудростью и медициной (Гиппократ).

VI. Here are some thoughts about medical profession. Correct them if they are not right and agree if you think the same:

1. A good doctor must love people and have a kind heart.
2. Most of the medical students do not understand all the difficulty of their future profession.
3. A good doctor never makes diagnostic mistakes.
4. A doctor must be a good professional.
5. Deep knowledge of medicine is enough to become a good doctor.
6. It is easy to gain patient's confidence.

VII. Individual tasks.

Task № 1.

Prove that Konchalovsky's words are true: "A person may be a poor writer, he may be a bad painter or actor, but a man cannot and must not be a bad doctor".

Key words to be used: kind heart, honest, strong, to be responsible for..., human life (lives), deep knowledge, to give smth. to people.

Task № 2.

Prove that to treat people is a great art.

Key words: deontology, relations between a doctor and his patients, to be responsible for, health, difficulties, valuable remedy, a kind word, to be very attentive to...

Task № 3.

Can you answer the following questions?

1. What doctor is your ideal? Why is it so?
2. How did he manage to become such a doctor?
3. What can you say of his patient's attitude to him?

Task № 4.

Imagine such a situation: a person is ill; he is dying from some disease; there is a chance to save him; but a doctor must take the whole responsibility for his life or himself. He may perform an operation and save him and he may not... What would you do in a doctor's place? What qualities must a person have to make such a step?

Task № 5.

Medical wisdom of ancient Iran says: "A doctor has three instruments: a word, a plant and a knife". How do you understand it? Why is "a word" in the first place?

Key expressions: to gain patient's confidence, a kind heart, to be very attentive, not to do any harm, the last chance, to save human life.

VIII. Retell the text according to the plan:

1. Some facts from the history of medicine (famous physicians, symbols of medicine).
2. Features of a doctor.
3. My decision to become a doctor.

Lesson 2.

ANDREAS VESALIUS

I. Read and learn the words:

- | | |
|--|---|
| 1. anatomist [ə' nætəmist] – анатом | 22. function [ˈfʌŋkʃ(ə)n] – функция |
| 2. to get (got-got) – получать | 23. proper description [ˈprɔpə disˈkrɪpʃən] – правильное описание |
| 3. to publish [ˈpʌblɪʃ] – опубликовать | 24. to determine [dɪˈtɜːmɪn] – определять |
| 4. important – важный | 25. opening – отверстие |
| 5. structure [ˈstrʌktʃə] – структура | 26. to connect [kəˈnekt] – соединять |
| 6. human body [ˈhjuːmən ˈbɒdɪ] – человеческое тело | 27. ventricle [ˈventrɪkl] – желудочек |
| 7. to consist of [kənˈsɪst əv] – состоять из | 28. septum [ˈseptəm] – перегородка |
| 8. bone [bəʊn] – кость | 29. chamber [ˈtʃeɪmbə] – камера |
| 9. joint [dʒɔɪnt] – сустав | 30. discovery [dɪsˈkʌvəri] – открытие |
| 10. cartilage [ˈkɑːt(ə)lɪdʒ] – хрящ | 31. to consider [kənˈsɪdə] – считать, полагать |
| 11. to describe – описывать | 32. pulmonary blood circulation [ˈpʌlmənəri ˈblʌd ,səːkjʊˈleɪʃ(ə)n] – малый круг кровообращения |
| 12. muscle [mʌsl] – мышца | 33. systemic blood circulation – большой круг кровообращения |
| 13. vessel [vesl] – сосуд | 34. to establish [ɪsˈtæblɪʃ] – устанавливать |
| 14. nerve [nɜːv] – нерв | 35. exact [ɪgˈzækt] – точный |
| 15. alimentary tract [ˈəliˈmentəri ˈtrækt] – пищеварительный тракт | 36. anatomical term – анатомический термин |
| 16. heart [hɑːt] – сердце | 37. to compose [kəmˈpəʊz] – составлять |
| 17. respiratory system [rɪsˈpaɪərət(ə)rɪ] – дыхательная система | 38. scientific research work [ˌsaɪənˈtɪfɪk rɪˈsɜːtʃ ˈwɜːk] – научно-исследовательская работа |
| 18. brain [breɪn] – мозг | |
| 19. cadaver [kəˈdeɪvə] – труп | |
| 20. inner organ [ˈɪnə ˈɔːgən] – внутренний орган | |
| 21. to take into consideration – принимать во внимание | |

2. Read and translate the text:

Andreas Vesalius

Andreas Vesalius is one of the greatest anatomists. He was born in Brussels [ˈbrʌs(ə)lz] in the family of pharmacists in 1514. He studied medicine in France. In 1537 he got the degree of Doctor of Medicine. In 1538 his first scientific works in Anatomy were published. In 1543 his most important book “On the structure of the human body” was written. It consists of seven books. The bones of the skeleton, the joints and cartilages were described in the first book, the muscles – in the second, the vessels – in the third, the nerves – in the fourth, the alimentary tract – in the fifth, the heart and the respiratory system – in the sixth, the brain in the seventh.

In all his works Vesalius studied the anatomy of the human body on cadavers. He studied the structure of the inner organs of the human body taking into consideration their functions. Vesalius was the first scientist to give a proper description of the human skeleton. He also determined that the right and the left ventricles of the heart were not connected. He determined that there were no openings in the septum between the left and the right heart chambers. It was a great discovery. Before Vesalius all the scientists considered that the left and the right heart chambers were connected by the openings in the septum. His discovery opened the way to the discovery of pulmonary and systemic blood circulations in future. Vesalius did much to establish new and exact anatomical terms.

The Great Russian scientist Pavlov said that the works written by Vesalius composed the first anatomy of the human body in which everything was based on scientific research work.

II. Translate into Russian:

joints and cartilages; vessels and nerves; inner organs; a great anatomist; heart chambers; respiratory system; systemic and pulmonary blood circulations; exact anatomical term; proper description; opening in the septum; scientific research work.

III. Find the sentences with the verb in the Passive Voice and translate them:

1. This book is experimental.
2. Many experiments are carried out by our students.
3. Interesting lectures are delivered by this professor.
4. Physiology is taught at the Medical Academy in the second year.
5. The capillaries are connected with the endings of the arteries and veins.
6. The right atrium is smaller than the left one.

IV. Make up sentences with the predicate in the Passive Voice. Translate them:

1. are, with, the oral cavity, connected, the salivary glands
2. the oral cavity, are, the soft and hard palates, located in;
3. of, main, are, the arteries, composed, three, coats (оболочки);
4. the structure, is, by, of the human body, anatomy, described
5. of, the head and face, the main part, is, the skull (череп), called;
6. are, together, firmly, the bones, of, very, connected, the skull.

V. Translate into English using the Passive Voice:

- 1- Первые научные работы А.Везалия по анатомии были опубликованы в 1538 году.
- 2- В его книге были описаны кости скелета, суставы, хрящи, дыхательная система и головной мозг.
- 3- Функции внутренних органов были описаны Везалием.
- 4- Первая анатомия человеческого тела была составлена на основе научно-исследовательской работы.
- 5- Левая и правая камеры сердца разделяются перегородкой.

VI. Translate the questions into English:

1. Где А.Везалий изучал медицину?
2. В каком году он получил степень доктора медицины?
3. Когда была написана его книга «О структуре человеческого тела»?
4. Были ли описаны в этой книге сердце и дыхательная система?
5. А.Везалий первым дал правильное описание скелета человека, не правда ли?
6. Установил ли А.Везалий точные анатомические или математические термины?
7. Кто считал, что левая и правая камеры сердца соединяются отверстием в перегородке?

VII. Read and translate the text:

LIFE AFTER DEATH

It was long ago, in the first half of the 16th century. Andreas Vesalius, the famous Spanish researcher and physician, was asked to dissect the corpse of the man who had just died. It was necessary to find out why he had died.

When the chest was opened all those present were horrified; they saw that the heart was still beating.

Why was the heart of the corpse contracting? How could such a physician as A. Vesalius take the living man for a corpse? Vesalius couldn't answer the question either, as the level of medical knowledge was low at that time.

People were able to answer this question only three centuries later. The fact is that there are some specific neuromuscular [ˌnju(ə)rə(v)ˈmʌskjʊlə] structures in the heart. The stimuli, on which the work of the heart depends, develop in these particular neuromuscular structures. They have a specific feature called automatism [ɔːˈtɒmətɪz(ə)m] due to which the stimuli develop in those structures themselves but do not come from other regions of the nervous system. That is why the heart of a corpse can contract for some moments after death.

Lesson 3. ANATOMY

I. Read and learn the words:

1. backbone [ˈbækbəʊn] n – позвоночник
2. vertebral column [ˈvɜːtɪbrəlˈkɒləm] n позвоночный столб, спинной хребет
3. spinal column [ˈspaɪnlˈkɒləm] n – позвоночный столб
4. bony framework [ˈbəʊniˈfreɪmwə:k] n – костный остов, каркас
5. trunk [trʌŋk] n – туловище
6. lower limbs [ˈləʊəˈlɪmz] – нижние конечности
7. upper limbs [ˈʌpəˈlɪmz] – верхние конечности
8. skull [skʌl] n – череп

9. to include [ɪn'klu:d] v – включать, содержать в себе
10. lower jaw ['ləʊə 'dʒɔ:] – нижняя челюсть
11. rib n – ребро
12. to join [dʒɔɪn] v – соединять(ся), присоединять(ся), связывать
13. to bend (bent, bent) v – сгибаться
14. breastbone ['brestbəʊn] n – грудина
15. chest [tʃest] n – грудная клетка, грудь
16. thorax ['θɔ:ræks] (pl тж. thoraces) n – грудная клетка
17. arm [ɑ:m] n – рука
18. shoulder ['ʃəʊldə] n – плечевой сустав
19. collar-bone ['kɒləbəʊn] n – ключица
20. shoulder-blade ['ʃəʊldə'bleɪd] n – лопатка
21. elbow [elbəʊ] n – локоть, локтевой сустав
22. wrist [rɪst] n – запястье, запястный сустав
23. to bind [baɪnd] (bound, bound [baʊnd]) v – связывать
24. firmly ['fɜ:mli] adv – плотно, крепко, твердо
25. hand [hænd] n – кисть руки
26. palm [pɑ:m] n – ладонь
27. finger ['fɪŋgə] n – палец руки
28. thumb [θʌm] n – большой палец (руки)
29. abdomen ['æbdə men], [æb'dəʊmən] n – брюшная полость, живот
30. leg n – нога, голень
31. thigh [θaɪ] n – бедро
32. foot [fu:t] (pl feet) n – нога, стопа, ступня
33. toe [təʊ] n – палец на ноге
34. upper arm ['ʌpə 'ɑ:m] n – плечо
35. forearm ['fɔ:rɑ:m] n – предплечье
36. to contain [kən'teɪn] v – содержать в себе, вмещать
37. kidney ['kɪdnɪ] n – почка
38. ureter [ju(ə)'ri:tə] n – мочеточник
39. muscular bag ['mʌskjʊlə 'bæg] – мышечная сумка
40. bladder ['blædə] n – мочевой пузырь
41. liver ['lɪvə] n – печень
42. pancreas ['pæŋkrɪəs] n – поджелудочная железа
43. spleen [spli:n] n – селезенка
44. spinal cord ['spainl'kɔ:d] n – спинной мозг
45. to constitute ['kɒnstɪtju:t] v – составлять, представлять
46. cerebrospinal system ['serɪbrə'spain(ə)l 'sɪstəm] – спинномозговая система
47. mouth [maʊθ] n – рот
48. pharynx ['færɪŋks] n – глотка
49. gullet ['gʌlɪt] n – пищевод
50. esophagus [i:'sɒfəgəs] n – пищевод

II. Read and translate the text.

Text A THE SKELETON

The bones form the skeleton of the body. The most important part of the skeleton is the *backbone*, or *vertebral column*. The bones which form the skeleton or *bony framework* of the body are divided into the bones of the head, the bones of the *trunk*, the bones of the *lower and upper limbs*.

At the upper end of the backbone there is the *skull*. Inside the skull is the brain which is in many ways the most important organ of the body. The bones of the head *include* the bones which make up the box-like structure we call the skull, and also that freely movable bone which forms our *lower jaw*.

There is another box of bones in front of the backbone. The *ribs*, which are joined to the backbone behind and *bend* round towards the *breastbone* in front, form a strong cage – the *chest*, inside of which are placed the heart and the lungs. The bones of the trunk include the *spinal column*, the ribs and the breastbone.

The *arms* join the body at the *shoulder*, and the shoulder itself is formed of two bones – the *collar-bone* in front, and the *shoulder-blade* behind. Between the shoulder and the *elbow* there is only one bone in the arm, but between the elbow and the *wrist* there are two. In the wrist there are eight small bones. They are very *firmly bound* together, but their large number allows the wrist to bend much more freely than if there were only one or two. Next come the bones of the *hand* itself. In the body or *palm* of the hand there are five long bones – one for each *finger* and one for the *thumb*. Each of the fingers has three bones, and the thumb has two. Thus we have twenty-seven bones in the framework of the hand and wrist alone.

The trunk is divided into the *chest or thorax*, and the *abdomen*. Of the limbs there are two pairs – the upper, or arms, and the lower, or *legs*; and the legs and arms again are subdivided into several parts – the *thigh*, the leg, the *foot* and the *toes* in the lower limb and the upper arm, the *forearm*, the wrist and the fingers in the upper limb.

The abdominal cavity *contains* two *kidneys*, connected by a tube, the *ureter*, to a *muscular bag*, the *bladder*; the *liver*, the *pancreas* and the *spleen*. The thorax encloses the heart and two lungs.

Cavity of the skull opens into the spinal canal. It contains the brain, which is continuous with the *spinal cord*. The brain and the spinal cord together *constitute* the *cerebrospinal system*. And cavity of the face is occupied by *mouth* and *pharynx*, into which the upper end of the alimentary canal (called *gullet* or esophagus) opens.

III. Find in the text the following word combinations:

Образовывать (составлять) скелет; наиболее важная часть скелета; костный остов; кости головы; кости туловища; кости нижних и верхних конечностей; важный орган человека; включают кости; свободно двигающаяся кость; нижняя челюсть; присоединяются к позвоночнику; внутри которой размещены сердце и легкие; включают позвоночник, ребра и грудину; в плече; ключица и лопатка; между плечом и локтем; между локтем и запястьем; крепко связаны вместе;

позволяет запястью сгибаться; гораздо свободней; для каждого пальца; большой палец руки, руки и ноги, стопа и пальцы, брюшная полость, вместе составляют спинномозговую систему.

IV. Make up the word combinations and translate them:

a) to form to join to allow to make up to include	the wrist to bend the spinal column, the ribs, the breastbone the skeleton the body the box-like structure
b) upper lower important spinal bony movable	bone column jaw limbs framework organ

V. Fill in the missing parts:

1. At the upper end of the backbone there is
2. The bones which form the skeleton are divided into the bones of the head, the bones of ... , the bones of ... and
3. The most important part of the skeleton is
4. ... form the skeleton of the body.
5. The bones of the trunk include ..., ... and
6. The ribs form a strong cage - ..., inside of which are placed ... and
7. The arms ... the body at the shoulder.
8. Between the shoulder and ... there is only one bone in the arm.
9. In ... there are eight small bones.
10. In the palm of the hand there are five long bones – one for each ... and one for
11. ... has three bones, and ... has two.
12. The trunk is divided into ... and
13. ... contains two kidneys, the ureter, the bladder, the liver, ... and
14. ... and ... together constitute the cerebrospinal system.

VI. Translate into English:

1. Плечо состоит из двух костей: ключицы спереди и лопатки сзади.
2. Кости туловища включают позвоночник, ребра и грудину.
3. Позвоночник является наиболее важной частью скелета.
4. Кости, которые составляют скелет, делятся на кости туловища, головы и кости нижних и верхних конечностей.
5. Внутри грудной клетки расположены сердце и легкие.
6. Между плечом и локтем есть только одна кость в руке, но между локтем запястьем – их две.
7. У каждого пальца есть 3 кости, а у большого пальца руки их – две.

8. Кости запястья крепко соединены вместе.
9. Бедро, голень, стопа и пальцы – части нижней конечности.
10. Почки, мочеточник, печень, поджелудочная железа, селезенка, мочевой пузырь находятся в брюшной полости.

VII. Say what you know about:

- | | |
|---------------------------|----------------------------------|
| a. the backbone | f. the wrist and the hand |
| b. the skull | g. the upper and the lower limbs |
| c. the bones of the trunk | h. the abdominal cavity |
| d. the bones of the arms | i. the cerebrospinal system |
| e. the ribs | |

VIII. Read and translate the text.

Text B WE STUDY ANATOMY

In the practical anatomy class we study the human body.

The principal parts of the human body are the head, the trunk and the limbs (extremities).

The head consists of two parts: the skull and the face. There are 26 bones in the skull. The face consists of the forehead, the eyes, the nose, the mouth, lips and cheeks, the ears and the chin.

The ear includes three main parts: the external ear, the middle ear and the internal ear.

The mouth has two lips: an upper lip and a lower lip. Important structures of the mouth are the teeth, the tongue, soft and hard palates and the salivary glands.

The head is connected with the trunk by the neck. The bones of the trunk are the spinal column or the spine and the chest. The spine consists of the cervical, thoracic, lumbar and sacral vertebrae and the coccyx.

The chest (thorax) is composed of 12 thoracic vertebrae, the breastbone and 12 pairs of ribs. The breastbone is a long bone in the middle of the chest. The basic part of the chest is formed by the ribs. On each side of the chest seven ribs are connected with the breastbone by cartilages. The cartilages of three other ribs are connected with each other and with the seventh rib. The 11th and the 12th ribs are free. Each rib is composed of a neck, head and body. The principal organs in the chest are the lungs, the heart and the esophagus.

The principal organs in the abdominal cavity are the stomach, the liver, the spleen, the intestines, the kidneys, the gallbladder and the bladder.

The upper extremity is connected with the chest by the shoulder. It is formed by the upper arm, forearm and hand. The lower extremity consists of the thigh, leg and foot. It is connected with the trunk by the pelvis.

The body is covered with the skin.

IX. Learn the words and the word-combinations to Text B:

extremity [ɪk'stremɪtɪ] – конечность	salivary glands ['sælvəri glændz] – слюнные железы
to consist of v – состоять из	neck n – шея
forehead ['fɒrɪd] n – лоб	vertebra ['vɜ:tɪbrə] (pl -rae, -ras) – позвонок
eye [aɪ] n – глаз	cervical ['sɜ:vɪk(ə)l] – шейный
lip n – губа	thoracic [θɔ:'ræsɪk] – грудной
cheek [tʃi:k] n – щека	lumbar ['lʌmbə] – поясничный
chin [tʃɪn] n – подбородок	sacral ['seɪkrəl] – крестцовый
external ear [ɪk'stɜ:nl'iə] – наружное ухо	sore [ˈkɒksɪks] (pl sores) – колючка
internal [ɪn'tɜ:nl] ear – внутреннее ухо	pair [peə] n – пара
middle ear – среднее ухо	stomach ['stʌmək] n – желудок
structure ['strʌktʃə] n – структура	intestine [ɪn'testɪn] n – кишечник
tongue [tʌŋ] n – язык	gallbladder ['gɔ:lblædə] n – желчный пузырь
palate ['pælɪt] n – нёбо;	skin n – кожа
soft and hard palates – мягкое и твердое нёбо	

X. Find in the Text English equivalents for the following word combinations and sentences:

1. мы изучаем человеческое тело
2. череп и лицо
3. в черепе 26 костей
4. ухо состоит из 3 частей
5. твердое и мягкое небо находится во рту
6. позвоночник состоит из различных позвонков
7. грудина – в середине грудной клетки
8. 11 и 12 ребра – свободные
9. печень и селезенка – это органы брюшной полости
10. человек имеет две верхние и две нижние конечности
11. человеческое тело покрыто кожей.

XI. Express in one word the following word combinations:

1. a long bone in the middle of the chest
2. one of the separate segments composing the spinal column
3. the upper part of the human body
4. the end of the arm
5. the part of the lower extremity between the thigh and the foot
6. the part of the leg on which one walks
7. the human body apart from the head and extremities
8. the part of the body that connects the head and the shoulder

XII. Put questions to the underlined words:

1. In the practical Anatomy class we study the human body.

2. The head consists of two parts.
3. There are 26 bones in the skull.
4. The mouth has two lips.
5. The tongue is the organ of taste.
6. The head is connected with the trunk by the neck.
7. The basic part of the chest is formed by the ribs.
8. The eleventh and the twelfth ribs are free.
9. The upper extremity is formed by the arm, forearm and hand.
10. The body is covered with the skin.

XIII. Make these sentences interrogative and negative:

1. The upper extremity is connected with the trunk by the shoulder girdle. 2. The lectures in Histology are attended by all the students. 3. On each side of the chest the breastbone is connected with seven ribs. 4. The skeleton is composed of bones. 5. The spinal column is formed by the vertebrae. 6. The cervical part of the spine is composed of seven cervical vertebrae.

XIV. Turn the verbs into Present Indefinite Passive:

1. Seven cervical vertebrae compose the cervical part of the spine.
2. Cranial and facial bones form the skull.
3. The pelvis connects the lower extremity with the trunk.

XV. Turn the verbs into Past and Future Indefinite Passive:

1. This text-book is composed for practical classes in Anatomy.
2. These experiments are made by the members of our scientific society.

XVI. Complete the sentences, changing the Russian words given in brackets into their English equivalents. Translate them.

1. The (мозг) is the main center which regulates and coordinates all body activities.
2. The human (сердце) normally beats about 70 times a minute making the (кровь) move along arteries ['ɑ:təri:z], veins and capillaries.
3. (Мышцы) produce all kinds of movements in our body, from smiling and eye blinking to running and weight lifting.
4. (Кости) protect and support the organs of the body.
5. (Легкие) are the main organ of breathing.
6. The function of the (печень) is to metabolize chemicals.
7. (Почки) serve as filters which separate the urine from the blood.
8. Man has several organs of sense: the organs of sight are the (глаза), the organs of hearing are the (уши), and the organ of smell is the (нос).

XVII. Complete the sentences using the words given below:

1. Four ... see more than two (a proverb).
2. A good surgeon must have an eagle's ..., and lady's ...

3. You are so thin! You look almost like a ... !
4. "The Jolly Roger" is the emblem on pirates' flag, it pictures
5. It's raining heavily! I am wet
6. They told him to hold his ... and to keep their secret.
7. This carpet is very expensive, it is ...-made.
8. He is a brilliant scientist, in fact, he is the ... of our research group.
9. He will forgive you, I am sure. I know him as a man with a kind
10. Parks and forests around Moscow are the "green ..." of the city.

eye (eyes); heart; hand; skeleton; hand; brain; from head to foot; tongue; skull and cross-bones; lungs

XVIII. Read and translate the additional text.

YOU ARE WONDERFUL

Do you know how wonderful you are?

Your heart beats normally about 72 times a minute. That is 103,680 times a day – or 2,649,024,000 times in a life of 70 years.

Each time your heart beats, it pumps five ounces of blood into circulation. That is 22 pints a minute, about 1,500 pints an hour and 4,000 gallons every day.

For two hours your heart generates enough energy to lift a weight of 65 tons one foot into the air.

Normally you breathe 25,920 times a day, inhaling about 450 cubic feet of air.

You may not realise it, but when you do not sleep, you spend about five minutes of each hour with your eyes shut. That is because you blink your eyes about 25 times a minute and each blink takes one-fifth of a second.

Here are more surprising facts about you. Altogether, there are about 12,000,000,000 cells in the brain. And scientists think that about 10,000,000 red-blood cells are destroyed and replaced each second in a human body.

Your fingernails grow about 0,00338 inches longer a day, and your hair 0,01714 inches. And, speaking of hair, a dark-haired person has on his head about 120,000 hairs; a blond about 150,000 hairs; and a red-haired person only about 90,000.

It requires many more muscles to frown than to smile. Frowning requires the use of muscles of the forehead and scalp. Smiling requires only the use of a smaller number of muscles in the vicinity of the mouth, nose, and eyes.

During normal activity, a man moves 750 major muscles.

A man weighing 140 pounds contains enough fat for 7 pieces of soap, enough carbon for 9,000 pencils, phosphorus for 2,200 match heads, iron to make a medium-sized nail, and water to fill a 10-gallon barrel.

Note

ounce [aʊns] n – унция (сокр. oz) (= 28,3 г); – жидкая унция (англ. = 1/20 пинты = 28,4 см³; амер. = 1/16 пинты = 29,57 см³)

pint [paɪnt] n – пинта (англ. = 0,57 л, амер. = 0,47 л)
gallon [ˈgælən] n – галлон (англ. = 4,54 л; амер. = 3,78 л)
inch [ɪntʃ] n – дюйм (≈ 2,54 см)
pound [paʊnd] n – фунт (англ. = 453,6 г)

Lesson 4. **PHYSIOLOGY**

THE HEART

I. Read and translate the following words:

Sodium [ˈsəʊdiəm], calcium [ˈkælsiəm], potassium [pəˈtæsiəm], salt [sɔ:lt],
oxygen [ˈɒksɪdʒ(ə)n], glucose [ˈglu:kəʊs], amino acids [əˌmɪnəʊˈæsið(z)].

II. Learn the following words by heart:

1. a pump [pʌmp] *n* - насос
to pump *v* – качать, перекачивать
2. to contract [kənˈtrækt] *v* – сокращаться
3. to carry [ˈkæri] *v* - нести, переносить
4. to remove [riˈmu:v] *v* - перемещать, передвигать
5. waste products [weɪst ˈprɒdʌkts] – продукты распада
6. ratio [ˈreɪʃiəʊ] *n* – соотношение, пропорция, коэффициент
7. hollow [ˈhɒləʊ] *adj* – пустой, полый
8. atrium [ˈeɪtriəm] *n* - предсердие
atria [ˈeɪtriə] *n* – предсердия
9. valve [vælv] *n* – клапан
10. vein [veɪn] *n* – вена
11. involuntary [ɪnˈvɒləntəri] *adj* – непроизвольный
12. tissue [ˈtɪʃu:] *n* – ткань
13. pacemaker [ˈpeɪs, meɪkə] *n* – водитель ритма; кардиостимулятор
14. to conduct [kənˈdʌkt] *v* – проводить, служить проводником
15. to stimulate [ˈstɪmjuleɪt] *v* – (зд.) заставлять
16. to affect [əˈfekt] *v* – влиять, воздействовать

III. Read and translate the text:

The Heart

The heart is the most important muscle in the human body. Without the heart a person cannot live. It is really nothing more than a pump, composed of muscle which pumps blood throughout the body, beating approximately 72 times per minute. Each day, the average heart contracts 100,000 times and pumps about 2,000 gallons of blood. Blood carries all the vital materials which help our bodies function and

removes the waste products that we do not need. For example, the brain requires oxygen and glucose; muscles need oxygen, glucose and amino acids, as well as the proper ratio of sodium, calcium and potassium salts in order to contract normally.

To understand how the heart works, we must first understand a little anatomy of the human heart. The human heart is a hollow, muscular organ about the size of a fist which is located in the thoracic cavity. The human heart has four chambers. The two upper chambers are known as the atria, and the two lower chambers are known as the ventricles.

The atria contract at the same time. When atria contract, blood is forced into the ventricles. The ventricles then contract simultaneously to pump blood out of the heart. The four heart valves open and close to keep the blood moving in the correct direction. Blood enters the right atrium, passes on to the right ventricle, moves to the lungs to become oxygenated, then returns through the left atrium and on to the left ventricle, which pumps the blood out to the body. Two large veins then return blood from the body to the heart.

The contractions of the heart are involuntary, meaning you don't have to think about contracting your heart. The heart has its own natural pacemaker and a system of specialized tissues that conduct electrical impulses that stimulate the heart to beat. Emotional reactions and hormonal factors can affect the heart rate, for example when a person sleeps his heart slows down, but when he does exercises or feels frightened it speeds up.

IV. Choose the right translation of the following words. Find in the text and read out the sentences, which contain them.

1. approximately	a. располагаться
2. to be located	b. мышечный
3. muscular	c. направление
4. direction	d. приблизительно
5. simultaneously	e. одновременно
6. to require	f. требовать
7. average	g. средний

V. Match the words in the right and in the left columns to get proper word-combinations. Translate them:

to become	reactions
emotional	factors
to conduct	oxygenated
hormonal	materials
thoracic	cavity
vital	electrical impulses
human	Heart

VI. Find the right pre(post)positions in order to translate the following Russian words and word-combinations:

(*about, up, of, in, down*)

- a. ускорять(ся) – *to speed* ...
- b. замедлять(ся) – *to slow* ...
- c. думать о – *to think* ...
- d. в грудной клетке – ... *the thoracic cavity*
- e. состоять из – *to be composed* ...

VII. Answer the questions according to the text:

1. What is the heart composed of?
2. How many times a day does the heart normally beat?
3. What are the basic functions of the heart?
4. What is the size of an average heart?
5. How many chambers has the heart?
6. Do we have to make our hearts contract?
7. What factors can affect the heart rate?

VIII. Put questions to the following sentences (the type of the question is indicated in the brackets):

1. Without the heart a person can not live (general).
2. The human heart has **four** chambers (special).
3. The heart contractions are involuntary (alternative).
4. The atria contract at the same time (disjunctive).
5. The brain requires oxygen and glucose (general).
6. The average heart contracts **100 000** times a day (special).
7. The heart is the most important organ in the human body (disjunctive).

Lesson 5.

THE BRAIN AND THE NERVOUS SYSTEM

I. Read and remember the following terms:

1. to lead [li:d] *v* – вести
2. cerebrum [sə'ri:brəm] *n* – головной мозг
3. medulla [me'dʌlə] *n* – костный мозг
4. fibre ['faɪbə] *n* – волокно, отросток
5. cell [sel] *n* – клетка
6. impulse ['ɪmpʌls] *n* – импульс
7. stimuli ['stimjulaɪ] *n* – стимул
8. memory ['mem(ə)rɪ] *n* – память
9. feeling ['fi:lɪŋ] *n* – чувство, ощущение

- 10.thought [θɔ:t] *n* – мысль
- 11.hearing [ˈhiəriŋ] *n* – слух
- 12.sight [saɪt] *n* – зрение
- 13.to connect [kəˈnekt] *v* – соединять, соединяться
- 14.to make up [meɪk ʌp] *v* – составлять, образовывать
- 15.to be made up of *v* – состоять из
- 16.to be responsible for [rɪsˈpɒnsɪbl] – отвечать за
- 17.cerebellum [ˌserɪˈbeləm] *n* – мозжечок
- 18.portion [ˈpɔ:ʃ(ə)n] *n* – отдел (syn. part)
- 19.bundle [ˈbʌndl] *n* – пучок
- 20.to swallow [ˈswɒləʊ] *v* – глотать
- 21.to yawn [ˈjɔ:n] *v* – зевать

II. Read and translate the text:

The Nervous System. The Brain and Nerves

Nerves lead from the spinal cord or from the brain to each part of the body. Then they lead from each part of the body back to the brain or spinal cord. The brain and spinal cord are the centres of this system of nerves.

All parts of the body are connected by nerves. The nerve cells with their fibres make up the nervous system. The nerve cells send impulses to each other by means of the fibres at their ends. These fibres do not actually touch but are so close to each other that an impulse can travel from one fiber to another.

Thus all nerve cells connect with each other. There are millions of these connecting nerve cells. Thus stimulus from any part of the body can reach any other part of it. In the spinal cord and brain, the nerve cells connect with each other by their connecting fibres. Outside the spinal cord and brain, certain long fibres are grouped together forming nerves. Each nerve is made up of thousands of nerve fibres together in a bundle, as a cable is made up of separate wires.

The Brain Centre of the Nervous System

We know that nerves carry impulses to the brain. The brain sends these impulses along so that they go to the right place. The brain is made up of three parts. The cerebrum sits like a cap on the cerebellum. And the medulla is that long portion connecting the brain with the spinal cord. The cerebrum has certain parts that do certain work. Scientists have discovered that the part for thought, memory, and feeling is found in the front of the cerebrum. The part for hearing is found at the side of the cerebrum. The back part of the cerebrum is responsible for sight. Many experiments have shown that the brain is the centre of feeling and understanding. The cerebellum is the centre for making the muscles work as a team. The medulla is the centre of our most important acts: breathing and heartbeat, on which life itself depends. The medulla is also capable of controlling acts such as swallowing and yawning.

III. Restore the correct order of words in the sentences and translate them:

1. Centers, the, system, of, cord, are, the, spinal, and, this, of, nerves, brain.
2. Any, body, reach, thus, of, can, a, part, from, the, part, any, other, stimulus, it, of.
3. Work, has, the, certain, that, parts, do, certain, cerebrum.
4. Made, a, of, nerve, each, thousand, is, fibres, up, in, bundle, of, nerve, together.
5. Making, the, your, work, a, is, team, the, as, cerebellum, for, centre, muscles.
6. Capable, the, controlling, acts, is, as, yawning, and, also, of, swallowing, medulla, such.

IV. Correct the following statements:

1. The cerebrum and the cerebellum are the centers of this system of nerves.
2. The nerve cells with their fibres make up the serebrospinal system.
3. These fibres touch each other thus an impulse can travel from one fibre to another.
4. In the medulla the nerve cells connect with each other by their connecting fibres.
5. The scientists discovered that the part for thought, memory, and feeling is found at the side of the cerebellum.
6. The medulla is the centre of certain of our most important acts: swallowing and yawning.

V. Answer the questions:

1. What do we know about the structure of the nervous system?
2. How many parts is the brain made up of?
3. What did scientists find out about the brain?

VI. Put questions to the underlined words:

1. The brain and spinal cord are the centres of this system of nerves.
2. The nerve cells with their fibres make up the nervous system.
3. The nerve cells send impulses to each other by means of the fibres.
4. In the spinal cord and brain the nerve cells connect with each other by their connecting fibres.
5. The brain is made up of three parts.
6. There are millions of these connecting nerve cells.

VII. Translate the sentences from Russian into English:

1. Мозг является центром нервной системы.
2. У каждой нервной клетки есть на конце отросток.
3. Отростки нервных клеток не соприкасаются друг с другом, но их импульс может проходить от одного отростка к другому.
4. Мозг состоит из трех частей: головной мозг, костный мозг, спинной мозг.
5. Передняя часть головного мозга отвечает за память, мысли и чувства.
6. Задняя часть головного мозга отвечает за зрение, а боковая часть – за слух.
7. Мозжечок является самым большим отделом головного мозга.

Lesson 6. MICROBIOLOGY

I. Read and learn the words:

1. tiny ['taɪni] *adj* – мельчайший, крошечный
2. one-celled ['wʌn 'seld] – одноклеточный
3. beneficial [ˌbenɪ'fɪʃəl] *adj* – полезный, приносящий пользу
4. to survive [sə'vaɪv] *v* – выживать
5. harmful ['hɑ:mfəl] *adj* – вредный, приносящий вред
6. to cause [kɔ:z] *v* – вызывать
7. to spread [spred] *v* – распространяться
8. to sneeze [sni:z] *v* – чихать
9. to cough [kɒf] *v* – кашлять
10. to bite [baɪt] *v* – кусать
11. contaminated [kən'tæmɪneɪtɪd] – загрязненный, зараженный
12. to invade [ɪn'veɪd] *v* – вторгаться, внедряться
13. poison ['pɔɪzən] *n* – яд
14. to produce [prɒ'dju:s] *v* – производить, вырабатывать
15. fever ['fi:və] *n* – лихорадка
16. rash [ræʃ] *n* – сыпь
17. vomiting ['vɒmɪtɪŋ] *n* – рвота
18. common ['kɒmən] *adj* – обычный, общий, распространенный
19. to protect [prə'tekt] *v* – защищать
20. sick [sɪk] *adj* – больной

II. Read and translate the text:

Text A Microorganisms

A microorganism [ˌmaɪkrəv'ɔ:gənɪzəm] or microbe is an organism that is so small that it is microscopic (invisible to the naked eye). Microorganisms are very tiny one-celled organisms (bacteria [bæk'tɪəriə], viruses ['vaɪərəsɪz], fungi ['fʌŋɡaɪ], algae ['ældʒi:] and protozoa [ˌprɒtə'zəʊə]), and are found everywhere in the world. They are found in all living things, plants and animals. There are more microorganisms on and inside your body than there are cells that make up your entire body. They are the oldest form of life on Earth and are found everywhere, Microorganisms can live in the air, on land, and in fresh or salt water environments. Some of them are beneficial and necessary for living things to survive. Others, pathogens (or germs [dʒə:mz]), can be harmful and cause diseases. These can be spread to humans from: other humans from sneezing or coughing, animals, insect bites, contaminated food or water. When microorganisms invade our bodies, they can produce toxins, which are like poisons. Those toxins cause symptoms of common infections, like fevers, colds, rashes, coughing, vomiting and diarrhea [ˌdaɪə'riə].

The best ways to protect yourself from germs are to wash your hands with soap before you eat or cook, and after using the toilet, playing outside, visiting sick people, touching animals or pets. Wash food and boil meat, eggs, fish properly.

III. Read the words correctly and translate them:

- microorganisms, microbe, microscope, microbiology;
- pathogen, pathology, neuropathy;
- harmful, careful, useful, powerful, colorful;
- disinfectant, disbalance, discomfort, disfunction.

IV. Read and translate the words, define their parts of speech:

- protect, protection, protective
- sick, sickens, sick-leave
- survive, survival
- virus, virology, anti-viral
- bacterium, bacterial, bacteriologist
- poison, poisoning, poisonous
- toxin, toxic, toxicology.

V. Find the synonyms:

To live, tiny, toxin, smallest, good, poison, beneficial, to produce, bad, to survive, harmful, to cause.

VI. Find in the text the answers to the following questions:

1. How can we see microbes?
2. Where can we find microbes?
3. How many microorganisms are there?
4. Are microorganisms beneficial or harmful?
5. How can diseases spread to humans?
6. What makes people ill?
7. What are the ways to protect oneself from germs?

VII. Read the text using a dictionary.

Text B Types of Microorganisms

Bacteria are single-celled spherical, spiral or rod-shaped organisms. Some bacteria cells exist as individuals while others cluster together to form pairs, chains, squares or other groupings. Vast numbers of bacteria live in, and on, our bodies. Some bacteria help us digest food, destroy disease-causing cells and give the body needed vitamins. Yoghurt is made by boiling milk and adding special bacteria to it. The bacteria turn the sugar in the milk into acid. The acid makes the milk go thick and stops any harmful bacteria growing. However, some types of infectious bacteria can make you ill. Examples include *Salmonella enteritidis* which causes food poisoning and *Streptococcus pyogenes* which causes sore throats.

Fungi can be of many different sizes and they are mushrooms, yeast in bread and beer and wine, bread mould. When bread is made, a yeast is added to the dough

to make the bread rise. The yeast turns the sugar into alcohol and a gas called carbon dioxide. As the dough is heated, the bubbles of gas get bigger, and the bread rises.

Viruses are the smallest of the microorganisms and can only be seen with a very powerful microscope. They are also included into microorganisms although they cannot live or reproduce on their own. They are particles, not cells; they consist of DNA (deoxyribonucleic acid) or RNA (ribonucleic acid), but not both. Viruses are parasites, which means they can only survive inside the cells of other living things! They invade the cells and multiply, killing the host cells. This is what makes people sick. Viruses are easily destroyed by disinfectants outside the body, but can be difficult to eliminate once infection has taken place. Examples of viral infections are: AIDS, chicken pox, flu, common cold, hepatitis, rubella, conjunctivitis, etc. Some viruses can transform normal cells to cancer cells.

VIII. Divide into the groups. Read the information about the types of microorganisms and finish the sentences:

1. Bacteria can be of different shape ...
2. Bacteria added in yoghurt ...
3. Salmonella bacteria cause ...
4. Fungi can be present in ...
5. The bread rises because ...
6. Viruses differ from other microorganisms because ...
7. Parasite is an organism which ...
8. Viruses can be killed by ...
9. I know that viruses cause such diseases as ...

IX. Fill in the table using the texts A and B:

Beneficial effects	Harmful effects

X. Translate the sentences. Put questions to the underlined words:

1. Microorganisms include bacteria, viruses, fungi, algae and protozoa.
2. Bacterium consists of one cell.
3. Some microbes produce toxins.
4. Microorganisms can live in the air, water and soil.
5. You can protect yourself by washing hands and boiling meat properly.
6. The bacteria turn the sugar in the milk into acid.
7. Streptococcus causes sore throats.

8. Viruses can only survive inside the cells of other living things.
9. Viruses are easily destroyed by disinfectants outside the body.

XI. Translate into English, using the modal verbs:

1. Микроорганизмы могут быть полезными и вредоносными.
2. Вирусы можно увидеть только под мощным микроскопом.
3. Микробы могут передаваться человеку от других людей, животных, загрязненной еды и воды.
4. Вам следует кипятить молоко, что бы убить бактерий.
5. Вирусы не могут жить и размножаться самостоятельно.
6. Дрожжи могут превращать сахар в алкоголь и углекислый газ.
7. Чтобы выжить, вирусы должны внедриться в клетку и размножаться там.
8. Вам не следует пить воду из-под крана (tap).
9. Люди должны мыть руки с мылом перед едой или приготовлением пищи.
10. В настоящее время врачи не могут вылечить СПИД.

Lesson 7.

JOSEPH LISTER

I. Read and translate the text, find infinitives and name their functions:

Joseph Lister [ˈdʒəʊzɪfˈlɪstə], Upton [ˈʌptən], Edinburgh [ˈedɪnb(ə)rə], James Syme [dʒeɪms saɪm], Glasgow [ˈglɑːzɡəv], Louis Pasteur [ˈluːi pæsˈtəː].

Joseph Lister (1827 - 1912), an English surgeon was born at Upton, Essex. He was the founder of antiseptic surgery. Joseph Lister was the first to discover the reasons for infection and the way to prevent it.

Joseph Lister became interested in science very early; when he was 14 he told his father that he was sure he wanted to be a surgeon. His medical training at the University College of London lasted for nearly eight years. Then he went to Edinburgh where he assisted James Syme in his operations. In 1850-s Lister was asked to take charge of the surgical section of Glasgow's Royal Infirmary.

To understand the great work which Joseph Lister did, we must know the conditions in the hospitals in the early 19th century. Because of the terrible pain the surgeon had to operate as quickly as possible. The instruments were often not even washed. At the end of each operation they were put into a drawer in the operating rooms ready for the next operation. The surgeon set to work in the clothes he wore every day. No wonder that nearly half the people died from blood poisoning after operations. A day or two after the operation the wound became red and inflamed, the patient had temperature and often died. The surgeons were not indifferent or careless. They had simply no understanding at all of the bad effect of dirt.

Louis Pasteur's papers brought by Lister's friend were a revolution to Lister. The French scientist wrote that gangrene [ˈgæŋɡriːn] was caused not by air itself, but by

tiny organisms called bacteria or germs in the air and they caused the inflammation of wounds after operations. Lister supposed that microbes could come not only from the air, but also from other sources: dirty hands of the surgeons, badly washed instruments. At once Lister set to work to find a way of preventing these microbes from reaching the open wound.

The first disinfectant used by Lister was carbolic acid. Once he had to operate on a boy whose leg was broken so badly that a broken bone could be seen. Before the operation he saturated his hands, instruments and everything that came in contact with the patient with the disinfectant. He cleaned the wound, set the broken bone and then covered the wound with bandage soaked in carbolic acid. The acid did what Lister expected: it killed the germs. After four days there was no sign of fever or inflammation.

The discovery of asepsis (the control of infection) created a new kind of surgery. Today the surgeon, his assistants, the nurses all wear gowns, caps, masks, rubber gloves that have been treated with steam to kill any germ on them. The surgical instruments are similarly treated with steam in a vessel called sterilizer. Joseph Lister won the battle against germs in the operating wards.

II. Find in the text "Joseph Lister" the English equivalents to the following words and word combinations and learn them:

Хирург; хирургия; обучение в колледже; причины инфекции; способы предотвращения инфекции; заинтересоваться наукой; возглавить хирургическое отделение; ассистировать при операциях; условия в больницах; операционные (палаты); заражение крови; источник инфекции; рана; воспаляться; вредное воздействие грязи; бактерии; вызывать воспаление; открытая рана; дезинфицирующее средство; пропитывать дезинфицирующим средством; наложить повязку; вправить сломанную кость; лихорадка; открытие асептики; обрабатывать паром халаты, шапочки, перчатки; стерилизатор.

III. Substitute synonyms for the italicized parts of the sentences from the list given below. Translate the sentence into Russian.

1. He *is responsible for* the organization of the conference.
2. The wound was infected with *bacteria*.
3. He was *inattentive* when he was writing a dictation and made a lot of mistakes.
4. There were too many patients in the city *hospital* during the epidemic of smallpox.
5. The sick man has all symptoms of the flu: headache, weakness, *high temperature*.
6. The bandage for a wound must be *free from bacteria*.
7. Lister saturated everything that came in contact with the wound with *a special substance which could kill the germs*.
8. *It is not surprising* that he has got learning problems. He is so indifferent and careless!

germs; no wonder; disinfectant; to take charge; fever; careless; antiseptic; infirmary.

IV. Point out the word combinations related to surgical operations. Translate them into Russian.

to bandage a wound; to saturate with a disinfectant; to carry out a work; to prevent infection; to set a broken bone; to be indifferent; to treat surgical instruments with steam; to clean a wound; to wash hands before an operation; to use a litmus paper; to put on a gown, a cap, a surgical mask and rubber gloves; to practice medicine; to assist during operations; to wash test-tubes and culture plates.

V. Correct the statements, using the information of the text "Joseph Lister":

1. Joseph Lister is known as the discoverer of vaccination.
2. In the 19th century all surgical instruments were treated with a disinfectant before operations.
3. When Lister began his work as a surgeon cases of blood poisoning after operations were very rare.
4. Lister paid no attention to the work written by Louis Pasteur.
5. Lister knew that microbes could come only from the air.
6. Nowadays all surgical instruments are treated with carbolic acid.

VI. Translate the following sentences into English.

1. Открытие антисептической хирургии было настоящей революцией в медицине.
2. Он возглавляет отделение инфекционных болезней в нашей больнице.
3. Его рана воспалилась и вызывала сильную боль.
4. В этой больнице не очень хорошие условия.
5. Предотвращение инфекции – важнейшее условие хирургических операций.
6. Гангрена вызывается не самим воздухом, а бактериями, которые в нем находятся.
7. После операции на рану накладывается повязка.
8. Хирург осмотрел рану и сказал, что необходима операция.
9. Медсестра ухаживает за больными, которым была сделана операция.
10. Все хирургические инструменты обрабатываются паром в стерилизаторе.

VII. a) Review the text "Joseph Lister" and answer the questions to it.

1. What is Joseph Lister famous for?
2. Where did he study medicine?
3. How long did his medical training last?
4. Where did he begin his medical career?
5. What were the conditions in hospital in the 19th century?
6. What helped Lister to make his discovery?
7. How did Lister hope to prevent the inflammation of wounds?
8. What disinfectant did he use?
9. Was his first operation with antiseptic measures successful?
10. What aseptic measures are taken in modern surgery?

Lesson 8.

MEDICAL EDUCATION IN GREAT BRITAIN

I. Read and learn the following words:

- | | |
|---|--|
| 1. To enter [ˈentə] – поступать | 27. Gynaecology [ˌgaɪniˈkɒlədʒi, ˌdʒaɪniˈkɒlədʒi] – Гинекология |
| 2. Application [ˌæplɪˈkeɪʃən] – заявление | 28. Senior [ˈsiːniə] students – Старшекурсники |
| 3. Experience [ɪkˈspɪ(ə)rɪəns] – опыт | 29. Undergraduates [ˈʌndəˌgrædʒjuɪts] – Студенты последнего курса |
| 4. To admit [ədˈmɪt] – принимать | 30. Post graduates – Аспиранты |
| 5. Grant [grɑːnt] – Стипендия | 31. Residency – Ординатура
Resident – Ординатор |
| 6. Term [tɜːm] – Семестр | 32. Postgraduate course – Аспирантура |
| 7. Duration – Продолжительность | 33. Finals [ˈfaɪnlz] – Выпускные экзамены |
| 8. A lab [læb] – Лаборатория | 34. Academic and practical problems – Теоретические и практические вопросы |
| 9. Basic sciences [ˈbeɪsɪk ˈsaɪənsɪz] – Основополагающие науки | 35. A hospital ward [wɔːd] – Больничная палата |
| 10. Pre-clinical years – Доклинические годы | 36. Bachelor [ˈbætʃ(ə)lə] of Medicine / Surgery – Бакалавр терапии, хирургии |
| 11. Human anatomy [əˈnætəmi] – Анатомия человека | 37. Graduation [ˌgrædʒvʊˈeɪʃ(ə)n] – Окончание высшего учебного заведения |
| 12. Biology [baɪˈɒlədʒi] – Биология | 38. Qualified [ˈkwɒlɪfaɪd] – квалифицированный |
| 13. Physiology – Физиология | 39. Internship [ɪnˈtɜːnʃɪp] – Интернатура |
| 14. Biochemistry [ˌbaɪəvˈkemɪstri] – Биохимия | 40. Intern [ˈɪntɜːn] – Интерн |
| 15. Statistics – Статистика | 41. Certificate [səˈtɪfɪkət] of experience – Сертификат практикующего врача |
| 16. Genetics [dʒəˈnetɪks] – Генетика | 42. Medical practitioner [prækˈtɪʃ(ə)nə] – Практикующий врач |
| 17. Latin [ˈlætɪn] – Латынь | 43. Further [ˈfɜːðə] – дальнейший |
| 18. Methods of clinical examination – методы обследования | 44. Specialization [ˌspeʃəlaɪˈzeɪʃ(ə)n] – специализация |
| 19. History taking [ˈhɪstəri ˈteɪkɪŋ] – Составление истории болезни | 45. Require [rɪˈkwaɪə] – требовать |
| 20. General pathology [ˈdʒen(ə)r(ə)l pəˈθɒlədʒi] – Общая патология | 46. Doctor of Medicine – Доктор медицины |
| 21. Microbiology [ˌmaɪkrəvbaɪˈɒlədʒi] – Микробиология | 47. Thesis [ˈθiːsɪs] – диссертация |
| 22. Pharmacology – Фармакология | |
| 23. Community medicine – Общественное здравоохранение | |
| 24. Medicine – Терапия | |
| 25. Surgery [ˈsɜːdʒ(ə)rɪ] – Хирургия | |
| 26. Obstetrics – Акушерство | |

II. Find Russian equivalents to the following word-combinations:

- | | |
|----------------------------------|-----------------------|
| 1. to enter a medical school | а) посещать лекции |
| 2. to take (pass) entrance exams | б) проходить практику |

- | | |
|-----------------------------------|--|
| 3.free of charge | в) получить степень |
| 4.to write a thesis | г) учебный год |
| 5.to receive financial assistance | д) стационар |
| 6.the academic year | е) поступить в медицинский институт |
| 7.to attend lectures | ж) бесплатный |
| 8.to do dissections | з) постановка диагноза |
| 9.to write out a prescription | и) делать вскрытие |
| 10.to have practical training | к) сдавать вступительные экзамены |
| 11.teaching hospitals | л) выписать рецепт |
| 12.in-patient department | м) родоразрешение |
| 13.out-patient department | н) получать финансовую помощь |
| 14.bedside instruction | о) обучающие больницы |
| 15.to attend ward rounds | п) ассистировать при операциях |
| 16.to obtain a degree | р) поликлиника, амбулаторное отделение |
| 17.diagnosing a case | с) участвовать в обходе палат |
| 18.to assist in operations | т) инструктаж у постели больного |
| 19.delivery of babies | у) написать диссертацию |

III. Restore the initial form of these words. Read both forms and name their part of speech.

1. medical, financial, clinical, practical, original.
2. internship, mastership.
3. generally, wholly, especially, highly, daily.
4. gynaecologist, urologist, neurologist, cardiologist, ophthalmologist, psychiatrist, oncologist, therapist.
5. registration, specialization, qualification, examination, instruction, demonstration.

IV. Read and translate the text:

Medical education in Great Britain

To enter a medical school in Great Britain candidates must send applications with the results of their secondary school examinations. Only students with the highest grades and some work experience are admitted.

In Great Britain higher medical education is not free of charge. But most students receive financial assistance in the form of grants, which cover their expenses wholly or in part.

Now about the academic year. It is divided into 3 terms, each of 10-11 weeks' duration. Undergraduate education (базовый университетский курс) occupies five years, consisting of two years of basic sciences and three years of clinical work. Two pre-clinical years are occupied by human anatomy and biology, physiology and biochemistry. Students also study statistics and genetics. They attend lectures, do dissections and practical work in labs. Unlike our country Latin is not taught in all medical schools. English and Latin spellings are similar and it is possible to write out prescriptions in English too.

Beginning with the third year the students study the methods of clinical examination and history taking, general pathology, microbiology, pharmacology and community medicine. Senior students and especially undergraduates spend most of the time in teaching hospitals. Daily bedside instruction in in-patient and out-patient departments is given by teachers and doctors. Students follow up their patients and attend ward rounds. Besides the work in the wards the students attend lectures, demonstrations and clinical conferences.

And now about the examinations. As in Russia at the end of each term and after each special course British students take exams. They are called sessionals. They include academic and practical problems and diagnosing a case. The final examinations or finals are in Medicine, Surgery, Obstetrics and Gynaecology and Pathology. Finals also include history taking and diagnosing. Before the final in Surgery students assist in operations. Before the final in Obstetrics and Gynaecology they must assist during the delivery of at least 20 babies. After the finals graduates obtain degrees of Bachelor of Medicine (B.M.) and Bachelor of Surgery (B.S.) which give the right to registration as a medical practitioner.

After the graduation newly qualified doctors work in hospital for a year. This period is called internship. An intern must work for six months as a house physician and six months as a house surgeon under the supervision [su:pə'vɪʒn] of his medical school. After internship a young doctor obtains a "Certificate of Experience" from the medical school and he or she may work as a medical practitioner. Further specialization requires training in residency. It takes 1 or 2 years of work in a hospital in some field. Residency trains highly qualified specialists in a definite field: gynaecologists, urologists, neurologists and others.

Besides the degrees of B.M and B.S., there is the degree of Doctor of Medicine (M.D). This degree is a postgraduate qualification obtained by writing a thesis based on the original work. It is not required for practice.

V. Find in the text and read out the extract, which talks about:

1. The peculiarities of the academic year in British Medical Schools
2. The cost of medical education in Great Britain
3. Sessionals
4. Entrance Exams
5. Possibilities of further specialization.

VI. Look through the text and pick out the sentences which are translated as follows:

1. Этот период называется интернатурой.
2. Степени бакалавра терапии и бакалавра хирургии дают право зарегистрироваться в качестве практикующего врача.
3. Английская орфография подобна латинской, поэтому можно выписывать рецепт и на английском.
4. Большинство студентов получают финансовую помощь в виде стипендий, которые покрывают их расходы полностью или частично.

5. В конце каждого семестра и после каждого спецкурса студенты сдают экзамены.
6. Ординатура подготавливает высоко квалифицированных специалистов в определенной области.
7. Помимо этих степеней есть степень Доктора Медицины.

VII. Restore the correct order of words in the sentences, translate them:

1. In hospital, the finals, work, graduates, after, for a year.
2. Problems, they, academic, and, include, practical.
3. Statistics, they, physiology, study, and, genetics, also.
4. Candidates, send, a medical school, in, to enter, Great Britain, must, applications.
5. In Surgery, students, final, operations, before, in, assist.
6. Patients, and, ward, attend, students, their, follow up, rounds.
7. Pre-clinical, human anatomy, two, biology, and, years, by, are occupied, physiology, biochemistry.

VIII. Read the statements. If you agree with them, say "It's true; I quite agree with you, that ..."; if you disagree, say "I disagree that ...; it's not true that" and give the correct version.

1. In Britain all candidates are admitted to medical schools.
2. Higher medical education in Great Britain is not free of charge.
3. As well as in Russia the academic year in British medical schools is divided into 2 terms.
4. Students spend their first year in teaching hospitals.
5. The final examinations or finals are taken in Medicine, Surgery, Obstetrics and Gynaecology and Pathology.
6. After residency a young doctor obtains a "Certificate of Experience" from the medical school and may work as a medical practitioner.
7. Writing a thesis is required for practice.

IX. Change the sentences, beginning with "In Russia ...":

1. In G.B. for entrance to a medical institution you must send applications with the results of their secondary school examinations.
2. In Great Britain higher medical education is not free of charge.
3. In British medical institutions the academic year is divided into 3 terms, each of 10-11 weeks' duration.
4. In Great Britain Latin is not taught in medical schools.
5. Examinations in British medical schools are held at the end of each term, that is, three times a year.
6. After the finals graduates get the degree of Bachelor of Medicine or Bachelor of Surgery which gives them the right to registration as a medical practitioner.
7. In G.B. training in residency takes 1 or 2 years of work in a hospital in some field.
8. A postgraduate qualification obtained by writing a thesis based on original work is called the degree of Doctor of Medicine.

Lesson 9.

THE IVANOVO STATE MEDICAL ACADEMY

Every year hundreds of young people come from different parts of our country and from abroad to enter the Ivanovo State Medical Academy. Those who are the best at the entrance examinations (about 400 persons) are enrolled and become students.

Our Academy was founded in 1930 by V. G. Belov and about one hundred students studied there. From that time to nowadays the Academy trained more than 25000 doctors.

Now nearly 2500 students are trained at the Academy. The Academy has 4 basic departments (the faculties of general medicine (therapeutic), pediatrics, stomatological (dental) and nursing) as well as a preparatory one and a post-graduate course for doctors. The course of study at the dental and nursing faculties is 5 years and at the other departments it is 6 years. The rector and pro-rectors (vice-rectors) are at the head of the Academy. The work of the department is directed by the dean's office with the dean at the head. The academy has more than 50 chairs. The head of the chair, usually a professor or assistant professor, is in charge of the work of the chair. Lectures are commonly delivered by professors or assistant professors, while instructors teach, instruct and guide students in their practical work. The teaching staff of the Academy includes more than 400 instructors, including 87 Doctors of Science and more than 280 Candidates of Science.

There are different forms of study at the academy. The students attend lectures, have practical classes, work in the laboratories and libraries. Attendance of practical classes is compulsory. During the practical classes our students carry on experiments in labs. They spend some time in different class-rooms, working on their own. During the first two years of studies the students master the preclinical subjects: Physics, Chemistry, Biology, Histology, Anatomy, Physiology, etc. The studies in the senior years are devoted to special medical subjects: Therapy, Surgery, Psychiatry, Gynaecology, Pharmacology, Neurology, Infectious diseases, etc.

Practical skills are very important for future doctors. In their third, fourth and fifth years the students have the opportunity to acquire these skills while having practical training at the hospitals, polyclinics, children and women centers working as medical nurses and doctors' assistants. In the sixth year the students gain experience in one of the three main clinical subjects: Therapy, Surgery, Obstetrics.

There are 2 terms in every academic year. At the end of the term the students have several credit tests and take some exams. After completing a full course of studies, the medical students take State examinations in clinical and special subjects and after that students obtain their diplomas. They also take the Oath of the Doctors of Russia.

After getting the diploma graduates must work in their field of specialization as interns for a year or as residents for two years. Then medical graduates may apply for the postgraduate course and research topical problems of modern medicine.

I. Translate the word-combinations and find in the text the sentences with these word combinations:

- | | |
|-------------------------------|--|
| 1) Basic departments | 11) to deliver a lecture |
| 2) the head of the chair | 12) the dean's office |
| 3) to be founded | 13) to be in charge of |
| 4) to master | 14) to work on one's own |
| 5) practical skills | 15) to be devoted to |
| 6) an opportunity | 16) to gain experience |
| 7) children and women centers | 17) credit tests |
| 8) to carry on experiments | 18) to complete a full course of studies |
| 9) to acquire skills | 19) State examinations. |
| 10) a preparatory faculty | |

II. Agree or disagree with the statements, using these expressions:

It's true; It's really so; I quite agree with you; That's right; I'm of the same opinion; I disagree; Surely not; Far from it; Nothing of the kind; Of course, not.

1. Our Academy was founded in 1940.
2. The Academy has 5 departments.
3. There are only 2 main faculties at the Medical Academy.
4. The course of study at the nursing faculty is 6 years.
5. The rector and professors are at the head of the Academy.
6. Each department is headed by the Dean.
7. Each chair is headed by a professor or an assistant professor.
8. Attendance of practical classes is voluntary.
9. During the first two years the students master the special medical subjects.
10. Assistants usually deliver lectures.
11. Practical skills are required during students' practical training.
12. After getting the diploma the students work for a year as interns.
13. At the end of each term the students have several credit tests.
14. The medical students take State examinations after the sixth year.
15. After getting the diploma graduates may not work at the field of specialization.

III. Fill in the missing parts:

1. You have entered ..., which was founded in
2. The Academy has 4 basic
3. The course of study at theis 5 years and at the other departments it is ... years.
4. is in charge of the work of the chair.
5. Lectures by professors or assistant professors.
6. The studies in the senior years are devoted to ... subjects: Surgery, ..., .., .., etc.
7. In the sixth year the students ... experience in one of the three... ..subjects: .., ...
8. are very important for future doctors.
9. At the end of the ... the students have several and take some

10. After completing, the medical students take ... examinations.
11. Graduates must work as ... for a year or as ... for two years.
12. In postgraduate course the graduates ... topical problems of

IV. Make up the questions to the following statements:

1. Our Academy was founded in 1930. (When?)
2. The Academy has five departments. (How many?)
3. The course of study at the nursing faculty is 5 years. (Where?)
4. Each department is headed by the Dean. (What?)
5. The rector and pro-rectors are at the head of the Academy. (Who?)
6. The students attend lectures. (What?)
7. The students do practical work in labs. (Where?)
8. Practical skills are very important for future doctors. (For whom?)
9. There are 2 terms in the academic year. (How many?)
10. At the end of the term the students have credit tests and exams. (When?)
11. At the end of the sixth year the students take State exams. (What?)
12. The graduates must work at the field of specialization in the hospital. (Where?)
13. The graduates may apply for the postgraduate course. (What?)

V. Speak about:

1. the departments of the Medical Academy;
2. the duration of study at the departments;
3. the head of the Academy, the department, the chair, the teaching staff ;
4. the forms of study at the Academy and the attendance of the classes;
5. the preclinical subjects;
6. special medical subjects;
7. practical skills of future doctors;
8. credit tests and examinations at the Academy;
9. postgraduate education at the Academy.

Lesson 10.
EDWARD JENNER

Today smallpox is practically unknown in civilized countries because every infant, when it is about one year old is vaccinated against this disease. But in the 18th century the whole world feared smallpox. One out of every five persons in London carried the marks of the disease on his face. It was the same in other countries of Europe. But these were the people who recovered from the disease. In those days smallpox was one of the chief causes of death.

It was Edward Jenner (1749 - 1823) an English physician, the discoverer of vaccination who saved the world from this disease. Edward Jenner was born at Berkeley [ba:kli], England. He liked to observe and investigate things ever since he was a boy and was always trying to gain knowledge. This led to the discovery of vaccination against smallpox.

Jenner studied medicine in London, at St. George's Hospital. He began practice in Berkeley when he was 24 years old. Once milkmaid said to him: "I can't catch smallpox, I've had cowpox." Jenner began to think about the milkmaid's words. He asked himself a question: "Could the harmless cowpox give immunity to smallpox?" Jenner made a detailed study of all dairy diseases. He believed that only one kind could be the preventive against smallpox. It took him fourteen years to find the answer.

On May 14, 1796 Edward Jenner accomplished one of the most important tasks in the history of medicine.

He vaccinated little Jimmy Phipps, the eight-year-old son of his neighbour with matter from cowpox vesicles. He squeezed that matter from the hands of a milkmaid. Several weeks later Jenner infected the boy with smallpox matter. The next few days were the most exciting in Jenner's life. But time passed, and the boy remained absolutely free from the disease. During the next two years Jenner repeated his experiment 23 times and felt certain enough of the truth of his discovery to publish the results.

In 1798 he published an account where he called his new method "vaccination" (the Latin word "vacca" means "a cow"). At first people paid no attention to the work of the country doctor. But soon doctors began to believe in vaccination.

The news of the wonderful discovery spread abroad. People rushed to their doctors to be vaccinated. Very soon there was no part of the world that had not taken up vaccination. France, Germany, Spain and Austria were the first. In America, Egypt, China the operation was done on thousands of people, and terrible smallpox began to disappear as if by magic. Honours and gifts from all over the world came to Jenner. "I hope, - said Jenner, - that someday the practice of producing cowpox in human beings will spread over the world. When that day comes, there will be no more smallpox."

Edward Jenner died at Berkeley in 1823, aged 74. To his last days the country doctor lived simply spending on research the money which Parliament granted him and vaccinating free of charge anyone who came to him.

We ought to remember that Edward Jenner brought into common use the doctrine of preventive medicine.

I. Find in the text "Edward Jenner" the English equivalents to the following words and word combinations:

- | | |
|---------------------------------------|--------------------------------------|
| 1. вакцинировать, вакцинация, вакцина | 11. заразиться оспой |
| 2. младенец | 12. заразить оспой |
| 3. носить следы болезни | 13. безвредный, безопасный |
| 4. то же самое | 14. дать иммунитет |
| 5. выздоравливать | 15. вещество |
| 6. одна из основных причин смерти | 16. оставаться здоровым, не заболеть |
| 7. спасти мир от болезни | 17. открывать, открытие |
| 8. наблюдать | 18. заболевания молочного скота |
| 9. исследовать | 19. являться профилактическим |
| 10. тщательное исследование | средством |

- | | |
|--------------------------------------|------------------------------------|
| 20. выполнить, завершить задачу | 25. верить, полагать |
| 21. опубликовать отчет | 26. исчезать |
| 22. означать | 27. тратить деньги на исследование |
| 23. не обратить внимания на что-либо | 28. доктрина профилактической |
| 24. распространяться | медицины |

II. Find in the text the synonyms to the following word combinations. Translate them into Russian.

Main causes; to be afraid of smyth; the disease of cows; to make sure of smyth; to get knowledge; to carry out a task; to be healthy; to publish the findings; to do once again; an awful smallpox; people; without money.

III. Find in the text the synonyms to the following words. Translate them.

Harmful; boring; uncertain; to appear; to fall ill; an adult.

IV. Translate the following sentences into Russian:

1. До открытия вакцинации инфекционные болезни были одной из основных причин смерти людей.
2. Э. Дженнер показал, что инфекционные болезни можно предотвратить с помощью прививок.
3. Тщательное изучение болезней молочного скота, помогло Э. Дженнеру найти тот вид коровьей оспы, который давал иммунитет к человеческой оспе.
4. Вещество, которое было взято из пузырьков коровьей оспы на руках доярки, было использовано как вакцина против оспы.
5. Э. Дженнер верил в большое будущее метода, который он открыл.
6. Профилактическая медицина успешно развивается.
7. Э. Дженнеру потребовалось 14 лет, чтобы создать вакцину от оспы.

Lesson 11.

SECHENOV AND HIS WORKS ON THE BLOOD GASES

I. Learn the following words.

1. prominent [ˈprɒmɪnənt] – выдающийся
2. psychology [saɪˈkɒlədʒi] – психология
3. range [reɪndʒ] – область, направление
4. to include [ɪnˈkluːd] – включать, заключать
5. observation [ˌɒbzəˈveɪʃn] – наблюдение to observe – наблюдать
6. investigation [ɪnˌvestɪˈgeɪʃn] – исследование to investigate – исследовать
investigator – исследователь
7. respiratory process [rɪsˈpraɪəret(ə)rɪˈprəʊsəs] – дыхательный процесс
8. to isolate [ˈaɪsəleɪt] – отделять, выделять, изолировать
9. blood gases [blʌd ˈgæzɪz] – газы крови
10. to combine [kəmˈbaɪn] – соединять, объединять
11. erythrocyte [ɪˈrɪθrəsaɪt] – эритроцит
12. to come to the conclusion – сделать вывод, прийти к заключению
13. hemoglobin [ˌhiːməˈglɒbɪn] – гемоглобин
14. substance [ˈsʌbst(ə)ns] – вещество
15. accomplishment [əˈkɒmplɪʃmənt] – выполнение, завершение

to accomplish– выполнять, заканчивать;

16. exchange [ɪks'tʃeɪndʒ] – обмен
17. oxygen [ˈɒksɪdʒ(ə)n] – кислород
18. carbon dioxide [ˈkɑ:bən daɪˈɒksaɪd] – углекислый газ
19. to estimate [ˈestɪmeɪt] – оценивать, определять, подсчитывать
20. act of respiration [ækt əv ˌrespəˈreɪʃ(ə)n] – процесс дыхания
21. to be due [dju:] to – обуславливаться
22. the process of absorption [əbˈsɔ:pʃ(ə)n] – процесс поглощения
23. solution of salts [səˈlu:ʃ(ə)n] – раствор солей
24. to complete [kəmˈpli:t] – завершать, заканчивать
25. to prove [pru:v] – доказывать
26. to dissolve [dɪˈzɒlv] – растворять(ся)
27. cell [sel] – клетка
28. transfer [ˈtrænsfə:] – перенос, передача;
to transfer [trænsˈfə:] – переносить
29. law of diffusion [lɔ: əv dɪˈfju:ʒ(ə)n] – закон диффузии
30. gas – газ
31. fluid [ˈflu:ɪd] – жидкость, жидкая среда
32. phenomenon [fɪˈnɒmənən] – явление; phenomena – явления
33. to pass [pɑ:s] – проходить, протекать
34. atmospheric [ˌætməʃˈferɪk] – атмосферный

II. Read and translate the text.

I.M. SECHENOV

I.M. Sechenov (1829–1905) was a prominent Russian scientist, the founder of Russian physiology and scientific psychology.

The range of Sechenov's scientific interests and the number of his research works are really great. 106 scientific works were written by him. In these works he included the findings which he had observed and determined before.

Some of his research works were connected with the investigation of the blood gases and their role in the respiratory process.

I.M. Sechenov isolated the blood gases and found out that most of the blood gases were combined with erythrocytes. No physiologist had been able to do it before Sechenov. On the basis of his observations I.M. Sechenov came to the conclusion that hemoglobin was that substance of the blood which accomplished the exchange of oxygen and carbon dioxide in the respiratory process. Physiologists of many countries who had worked on this problem before Sechenov could not estimate the role of hemoglobin in the act of respiration. So the accomplishment of the respiratory process is due to hemoglobin.

I.M. Sechenov investigated the process of absorption of carbon dioxide by the solution of salts. When he had completed his investigations, he proved that only 2/3 of carbon dioxide were dissolved in plasma. The rest of carbon dioxide was combined with red blood cells. The transfer of carbon dioxide from the blood into the lungs was due to the law of diffusion of gas from fluid into the air. When Sechenov had investigated this phenomenon, he was able to answer the question why oxygen

passed into the blood from atmospheric gases during the act of respiration.

II. Translate the following word combinations:

Наблюдать внимательно, наблюдать изменения, проводить наблюдения, исследовать состояние внутренних органов (inner organs), исследование клеток крови, закончить исследования, изолировать больного, выделить газы крови, в заключении, прийти к правильному выводу, доказать роль гемоглобина, подсчитать количество (the number) красных клеток крови, закончить эксперимент, завершение дыхательного процесса, обуславливаться высоким кровяным давлением, легкое – орган дыхания.

III. Make up questions to the underlined words:

1. 106 scientific works were written by I.M. Sechenov.
2. In these works he included the findings which he had observed before.
3. No physiologist had been able to do it before Sechenov.
4. The accomplishment of the respiratory process is due to hemoglobin. (or erythrocytes)
5. Only 2/3 of carbon dioxide are dissolved in plasma.
6. Physiologists could not estimate the role of hemoglobin in the act of respiration.

IV. Translate the sentences:

1. The doctor stated that the patient had gastritis.
2. It was estimated that blood was a fluid tissue.
3. She promised that she would make a report on Physiology the following week.
4. My friend said that he performed operations three times a week.
5. The professor found out that the patient had had tuberculosis two years before.
6. The scientists said that they had observed new phenomena.
7. I thought you would be back soon.
8. The nurse said that the doctor had prescribed that medicine.
9. The physician promised that he would examine the patient the next day.
10. The surgeon considered that the operation would be successful.

V. Put the verbs in brackets in the proper tense paying attention to the rule of sequence of tenses where necessary:

1. I considered that I (to accomplish) my investigations by the beginning of the following month.
2. The patient (to be) under medical care before the surgeon began the operation.
3. I knew the physician (to isolate) the patient with the flu from the others.
4. Do you think we (to complete) our observations by the next week?
5. The scientists not (to estimate) the importance of this experiment yet.
6. They thought that they (to prove) their conclusion by the end of their experiments.
7. Who told you that doctor Norman (to work) in the neurological department?
8. The researcher (to isolate) the necessary substance before he begins a new experiment.
9. We (to complete) our observations on the changes in the blood erythrocytes by tomorrow.
10. He proved that nobody (to investigate) that phenomenon before.

GRAMMAR PART

Глагол To Be

(быть, являться, находиться)

Present	Past	Future
1. I am He (she/it) is We (you/they) are	1. I (he/she/it) was <i>был</i> We (you/they) were <i>были</i>	1. I (we) shall be You (they/he/she/it) will be
2. I am not He is not We are not	2. I was not We were not	2. I shall not (shan't) be You will not (won't) be
3. Am I? Is she? Are you?	3. Was he? Were you?	3. Shall I be? Will they be?

1. *Переведите предложения. Поставьте данные предложения в вопросительную и отрицательную формы.*

1. My father is a neurologist.
2. Last week the weather was rather cold.
3. Mr. Jackson will be here in an hour.
4. I'm on business here.
5. They were very busy yesterday.
6. We are students of the Medical Academy.
7. Tomorrow she will be in clinic.
8. This story is the best in the book.
9. The analyses were ready in the afternoon.
10. Most young people are fond of sport.
11. His working day was over at 4 p.m.
12. She is often in our town.
13. I'm a first-year student.

2. *Заполните пропуски соответствующей формой глагола to be.*

1. Today the weather ... as fine as it ... yesterday.
2. "How ... you?" "I ... quite well, thank you."
3. To my mind, this student ... a good doctor in future.
4. Last class Nick and John ... absent because they ... ill.
5. "Who ... on duty today?" "Tom and Ann ..."
6. She ... a great dreamer in her childhood.
7. Our group ... not large, we ... ten.
8. "... Mr. Brown in now?" "No, he ... not. He ... on a business trip at present".
 "When ... he ... back?" "He ... back in three days".
9. The light ... off on stage. The performance ... over.
10. Last July and August ... very hot.

11. Look at this photo! This ... Mrs. Black and that ... her husband Mr. Black and these ... their children Ann and Mary.
12. I ... afraid, I ... at work the whole day tomorrow.

3. *Переведите предложения.*

1. Мой старший брат (elder brother) – студент.
2. Вчера погода была прекрасная. Мы были в парке.
3. Боюсь, что я в понедельник буду занят. Я буду на работе весь день.
4. Его семья сейчас не в Москве, а в Туле.
5. Моя сестра была студенткой в прошлом году, а сейчас она врач.
6. Наши занятия обычно заканчиваются в 16 часов.
7. Эта книга на второй полке в шкафу.
8. «Откуда мистер и миссис Грин?» «Они из Лондона».
9. «Кто твоя мама? Она учительница?» «Нет, она директор школы».
10. «Ты тоже был на студенческом фестивале?» «Да, конечно. И мои друзья тоже там были. Было очень интересно».

Оборот There Be.

4. *Переведите предложения. Поставьте данные предложения в вопросительную и отрицательную формы.*

1. There are two terms in the academic year.
2. There were a lot of interesting books on sale in the book-shop.
3. There will be a students' festival in June.
4. There is a magazine and several newspapers on the table.
5. There are many illustrated books on Human Anatomy.
6. There was an anxiety (волнение) in her voice.
7. There will be a concert in the hall tonight.
8. There is cold water in the glass.
9. There was a medical article (статья) in the newspaper.
10. There are two small pictures on the wall.
11. There will be an exhibition of painting of young artists soon.
12. There is Art Museum in our town.

5. *Заполните пропуски, используя конструкцию "there be" в соответствующих форме и времени.*

1. ... hot milk in the jar (кружка).
2. ... a presentation of a new book last Saturday.
3. ... a scientific conference next week.
4. ... no such magazines in this library.
5. ... a bathroom and two bedrooms on the first floor in our house.
6. ... an interesting meeting after our classes?
7. ... several specialized hospitals in our town.
8. ... much information about this event in the yesterday's newspaper.
9. ... a lot of guests in our institute last week.
10. ... a rehabilitation centre in Sosnevo?

- 11.... no changes in weather during the next day.
- 12.Before 1918 ... no higher educational institutions in Ivanovo.

6. *Переведите предложения, употребляя конструкцию “there be”.*

1. На столе находится ваза с цветами.
2. Вчера по радио была интересная передача об истории нашего города.
3. На встрече было много известных людей.
4. На стене висит красивая картина.
5. Завтра будет поездка в Кострому.
6. В этом городе есть драматический театр, три музея и два спортивных комплекса.
7. В понедельник будет лекция по биологии?
8. На прошлой неделе была конференция по проблемам экологии.
9. На выставке было много посетителей?
- 10.«В твоей библиотеке много книг?» «Не много, но есть несколько редких (rare) книг.
- 11.В следующем семестре будет несколько новых предметов.
- 12.В вашей контрольной работе нет ни одной ошибки.

Времена Группы Simple (Indefinite)Active

7. *Поставьте предложения в вопросительную и отрицательную формы Present Simple.*

1. He goes to the Academy on weekdays.
2. Professor Petrov works on this problem.
3. They are always ready to help other people.
4. The students study a lot of different subjects.
5. This patient feels bad.
6. My grandparents are doctors.
7. She usually does her homework after supper.
8. He has four classes a day.
9. We like to discuss new books with our teacher.
- 10.Mr. Stevens is the head of the faculty.
- 11.They have much knowledge on this problem.
- 12.Andy knows how to make an injection.
- 13.The little boy is afraid of dogs.
- 14.Jake, Sam and William live at the university hostel.

8. *Закончите предложения, поставив глаголы в форму Past Simple:*

Go	Pass	Feel
Discuss	Find	Finish
Take	Make	Attend
Speak	Write	Enter
Become		Work

1. John _____ the medical academy last year.
2. The students not_____ the explanation of this phenomenon.

3. The doctor _____ the examination of the patient.
4. We not _____ this question with our tutor (teacher) yesterday.
5. Two years ago he _____ to the international conference in Germany.
6. I _____ bad yesterday and my mother called for the doctor.
7. At the lecture he _____ about new types of vaccines.
8. He _____ a lecture in biology last Monday?
9. They _____ hard the whole term.
10. You _____ these books in our library?
11. The doctor _____ a diagnosis of pneumonia.
12. She is afraid he not _____ his exam in anatomy yesterday.
13. You _____ your name on the test-paper?
14. He _____ a good specialist in the field of psychology.

9. *Раскройте скобки, поставив глагол в нужную форму. Переведите предложения.*

1. He (not to study) medicine, he (to study) maths.
2. Your sister (to work) as a nurse?
3. Every year millions of applicants (to enter) different institutions of higher education.
4. Michael always (to pass) his exams excellently.
5. How many years a course of training at the academy (to last)?
6. He (not to get) a scholarship (стипендия) because he (to study) badly.
7. What methods of teaching they (to use)?
8. I (not to think) that he (to know) how to carry out this experiment.
9. My first lecture (to begin) at 8.30.
10. We (to be) never late for classes.
11. She seldom (to make) mistakes in dictations?
12. We (not to watch) soap operas, we watch educational programmes on TV.
13. Jane usually (to go) to the dean's office for the staff meetings.
14. Mary often (to give) you good advice?

10. *Поставьте глагол в соответствующем времени (Present/Past Simple)*

1. Surgeons (to operate) patients every day.
2. The doctor (to administer - назначать) a special treatment for the patient with gastritis 2 days ago.
3. You (to have) troubles with you stomach?
4. Every year thousands of applicants (to come) to Ivanovo to enter the Academy.
5. Last year we (not to study) Pharmacology but (to study) Microbiology.
6. Your father (to work) as an ophthalmologist?
7. As a rule at the end of each term the students (to have) credit tests and exams.
8. He (to open) the door and (to see) that she was writing a letter.
9. You (to see) her at the station last Sunday?
10. What diseases (to have) you in your childhood?
11. She (not to ring) me up an hour ago.
12. Susan (not to open) the windows when it rains.

13. The child (to eat) a lot of fruit and vegetables?
14. The doctor (not to examine) this patient with tonsillitis yesterday.
15. I (not to get up) at 6 o'clock at the weekend.

11. Раскройте скобки, поставив глагол в одном из времен группы Simple (Present, Past, Future).

1. She (to study) English 5 years ago.
2. I (to be) tired now.
3. When your lesson (to be) over next Friday?
4. He (to go) to bed at 11 o'clock every day.
5. It (to take) you long to find his house yesterday?
6. I (not to like) to watch psychological films.
7. My father (to take) me to the Zoo last weekend.
8. His friends (to tell) him about their holidays tomorrow?
9. She (to visit) her grandparents in the village every year.
10. Susan (to be) present at the lecture yesterday?
11. Frank (not to like) to visit the dentist.
12. She (to come) to the student's meeting next week.
13. The boys (to learn) the poem tomorrow?
14. They (not to sleep) well last night, probably they (to get) ill.
15. When he (to wake) up yesterday he (to look) at his clock and (to understand) that he (to oversleep).
16. This teacher always (to ask) many questions at the exam.
17. She (to know) where to post a letter?
18. He (to have) 4 classes every day.
19. Friday evenings students usually (to spend) in the labs and libraries.

12. Составьте предложения, используя слова.

1. Come, I, will, late, home, probably.
2. That, when, in, she, lived, was, she, house, young.
3. She, English, well, knows, does, sister, my, know, not, French, but.
4. Before, many, did, we, the day, the laboratory, in, yesterday, experiments.
5. The conference, will, place, where, take?
6. Condition, the first, you, changes, in, your, when, did, notice?
7. Microbiology, he, in, will, his, exam, take, 2 days, in.
8. In, a, little, I, late, Chemistry, our, for, afraid, class, will, am, I, be.
9. I, in, Histology, the, will, Ann, think, test, get, a five, for.
10. Lecture, does, the, time, what, begin?
11. On, this, did, you, where, buy, human, Anatomy, book?
12. Study, because, we, did, we, not, had, last, holidays, week.
13. Longer, do, live, in, my, St. Petersburg, any, not, friends.
14. Breakfast, drinks, she, never, tea, for.
15. An, class, we, have, on, English, Mondays.

Типы вопросов

		1	2	3	4	5		6
Типы вопросов	Вопр. слово	Всп. глагол	Подлежащее	Сказуемое	Дополнение	обстоятельство		
						места	времени	
Общий		Did	they	study	English	at the academy	last year?	
Альтернативный		Did	they	study	English or French	at the academy	last year?	
Специальный	What	did	they	study		at the academy	last year?	
К подлежащему			Who	studied	English	at the academy	last year?	
Разделительный			They	studied	English	at the academy	last year,	didn't they?

Вопросительные слова

What <i>Что</i> When <i>Когда</i> Where <i>Где, Куда</i> Why <i>Почему</i> Who <i>Кто</i> Whom <i>Кого</i> Whose <i>Чей</i>	Which <i>Который</i> How <i>Как</i> How many <i>Сколько (с исчисл. сущ.)</i> How much <i>Сколько (с неисчисл. сущ.)</i> How long <i>Как долго</i> How often <i>Как часто</i>
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13. *Напишите все возможные вопросы к предложениям.*

2. The experiment started four years ago.
3. She will spend the next summer in Great Britain with her relatives.
4. Deep knowledge in medicine is necessary for the future doctors.
5. They have a lot of friends in this town.
6. This patient was at the hospital a week ago.
7. She always comes to the academy at 7.50 in the morning.
8. At the conferences the scientists usually discuss new methods of treatment.
9. She has got a younger brother.

Страдательный залог (Passive Voice) времен группы Simple

to be + V₃ (III ф. гл./Participle II)

Present	Past	Future
<p>1. I am treated He (she/it) is treated We (you/they) are treated</p> <p><i>Меня лечат</i></p> <p>2. I am not treated He is not treated We are not treated</p> <p>3. Am I treated? Is he treated? Are you treated?</p>	<p>1. I (he/she/it) was treated We (you/they) were treated</p> <p><i>Меня лечили</i></p> <p>2. I was not treated We were not treated</p> <p>3. Was he treated? Were you treated?</p>	<p>1. I (we) shall be treated You (they/he/she/it) will be treated</p> <p><i>Меня будут лечить</i></p> <p>2. I shall not be treated You will not be treated</p> <p>3. Shall I be treated? Will you be treated?</p>

Способы перевода страдательного залога на русский язык

Примеры	Перевод	Способ перевода
1. The patient was operated by this surgeon.	1. <i>Больного оперировал этот хирург (букв. Больной был прооперирован этим хирургом).</i>	1. сочетанием глагола быть с краткой формой страдательного причастия; глаголом в личной форме;
2. The patient was treated for cancer.	2. <i>Больного лечили по поводу рака.</i>	2. неопределенно-личным оборотом;
3. The patient was treated at our clinic.	3. <i>Больной лечился в нашей клинике.</i>	3. глаголами с окончанием -ся, -сь.

14. Переведите на английский язык:

- нас спросили – нас спрашивают – нас спросят
- ему показали – ему показывают – ему покажут
- их обучили – их обучают – их обучат
- вам написали – вам пишут – вам напишут
- ей позвонили – ей звонят – ей позвонят
- меня выбрали – меня выбирают – меня выберут
- ответ нашли – ответ находят – ответ найдут
- операцию сделали – операцию делают – операцию сделают
- конференцию посетили – конференцию посещают – конференцию посетят
- книги купили – книги покупают – книги купят

15. Поставьте предложения в вопросительную и отрицательную форму.

- All exams were taken by the students of the general medicine department.
- Chemistry, Physics, Biology and Mathematics are taught during the first two preclinical years.
- The Certificate of experience will be given to you when you finish the course of internship.
- This patient will be given a new medicine.

5. The patient's personal card is filled in by his physician.
6. The operation was carried out by this experienced surgeon.
7. The Ivanovo state Medical Academy was founded in 1930.
8. This patient's blood analysis, the analysis of urine and other tests will be taken tomorrow.
9. A thesis will be written as soon as possible.
10. The diploma was given to him at the end of the year.
11. Some medicines and the necessary treatment were prescribed to me by this doctor.
12. Each department is headed by the dean.
13. Some practical skills are obtained by the students during their practical courses at the Academy.
14. The patient was prescribed a bed regimen.

16. Раскройте скобки, поставив глагол в соответствующее время страдательного залога.

1. Pre-clinical subjects (to teach) during the first two years.
2. Basic medical procedures (to learn) by the students during their practice in the hospital last summer.
3. He (to see) by an eye specialist next week.
4. Many people (to examine) by the doctor yesterday?
5. The student usually (to ask) a lot of questions at the exam?
6. This article (not to translate) into English a year ago.
7. He (to know) as the best surgeon in our town.
8. This film (not to show) on TV tonight.
9. The old man (to take) to the hospital yesterday?
10. Everything for your trip (to prepare) soon.
11. Obstetrics (not to study) in the first year.
12. The diagnosis (to make) last week.
13. His experiment (not to continue) by his students.
14. Their work (to publish) next month?
15. Breakfast (not to bring) in time.
16. Educational films (to show) to the students during some classes?

17. Переведите на английский язык, соответственно модели:

Я рассказал – мне рассказали I told – I was told

1. Я спросил – меня спросили
2. Он услышал – его услышали
3. Он пригласит – его пригласят
4. Они лечат – их лечат
5. Мы помогаем – нам помогают
6. Вы увидите – вас увидят
7. Она осматривает – ее осматривают
8. Они привезли – их привезли
9. Она выбрала – ее выбрали

10. Я напишу – мне напишут
11. Вы дали – вам дали
12. Мы читаем – нам читают

18. Трансформируйте предложения из действительного залога в страдательный, используя образец.

Tom gave her a book. – *She was given a book.*

The book was given to her by Tom.

The nurse looks after the patient well – *The patient is well looked after by the nurse.*

1. He will make a new discovery soon.
2. They usually send their children to camp for summer.
3. They sent for doctor Belov.
4. Steve will make a report at the conference.
5. Everybody listened to his speech very attentively.
6. After the operation the nurse will sterilize the instruments.
7. They spoke to him about his attendance of classes.
8. Ecologists say that we take bad care of our planet.
9. Professor will examine these students tomorrow.
10. Did she diagnose the disease?
11. Will he repair the table tomorrow?
12. Do you usually give this medicine for bronchitis?
13. Who will translate the text?
14. What experiment do you carry on?
15. Did the doctor or the nurse make you an injection?
16. Where does the head nurse keep the medicines?

Придаточные предложения времени и условия

Для выражения будущего действия (вместо Future Indefinite) в обстоятельственных придаточных предложениях условия и времени, которые вводятся союзами if, unless, when, until, till, as soon as, as long as, before, употребляется Present Indefinite:

If he comes, I'll ask him about it.

She will go there unless it rains.

Союзы	Перевод глагола-сказуемого	Пример
if <i>если</i> when <i>когда</i> as soon as <i>как только</i> after <i>после того, как</i> before <i>до того, как</i> till <i>пока</i> until <i>пока не</i>	будущим временем (как в главной, так и в придаточной части предложения)	If you take this medicine regularly, you will feel much better. <i>Если вы будете принимать это лекарство регулярно, вы будете чувствовать себя намного лучше.</i>

19. *Поставьте глаголы в соответствующем времени (Future Simple or Present Simple).*

1. If you (to come) at five o'clock we (to see) an interesting programme on TV.
2. Before you (to leave) home ring me up.
3. As soon as you (to get) my letter let me know.
4. When I (to enter) the Academy I (to study) two foreign languages.
5. If you (to be busy) on Sunday afternoon we (not to go) to the stadium.
6. If you (to look through) today's paper you (to find) an interesting article.
7. When she (to arrive) at the hotel it (to be) 5 o'clock.
8. When you (to be tired) we (to stop) working.
9. As soon as I (to get) any news about him I (to tell) you about it.
10. Before he (to begin) to read a book he (to look through) it.

20. *Переведите предложения, обращая внимание на перевод сказуемого придаточного предложения.*

1. If you strictly follow all the doctor's recommendations you will feel much better very soon.
2. As soon as the cardiologist confirms (подтверждать) the diagnosis of infarction the patient will be hospitalized at once.
3. You will have problems with your lungs until you give up smoking.
4. The patient will be examined very attentively before he is operated on.
5. If the child's condition is worse you will have to call in a doctor once again.
6. The patient will be allowed to sit up when his heartbeat is normal.
7. After you are given this injection you will have to stay in bed.
8. The doctor will write out a prescription as soon as the final diagnosis is made.
9. Until the course of treatment is finished the patient will not be allowed to leave the sanatorium.
10. Before the operation is performed the patient will be given a local anaesthesia.
11. The patient will be told about his blood group after his blood analysis is ready.

21. *Переведите предложения.*

1. Мы пойдём в кино, после того как закончим нашу работу.
2. Перед тем как он поедет в Лондон, он позвонит нам.
3. Если я получу хорошую работу, я останусь в этом городе.
4. Погасите (turn off) свет, когда вы будете уходить.
5. Он не выполнит эту работу, если она не поможет ему.
6. Вы не будете говорить по-английски хорошо, если не будете знать грамматику.
7. Подождите, пока не придёт преподаватель.
8. После того как я закончу институт, я поступлю в интернатуру.
9. Я пойду домой, после того как закончу свою работу.
10. Я поговорю с ним об этом, когда его встречу.

Модальные глаголы и их эквиваленты

Значение, перевод	Примеры
Can (could)	
<p>1) способность, умение, физическая возможность <i>Перевод: могу, умею, (быть) в состоянии</i></p> <p>2) сомнение, недоверие, удивление, невероятность (в отриц. и вопр. предл-х) <i>Перевод: не может быть (чтобы), неужели, вряд ли</i></p>	<p>1. I can (=I am able to) speak English. <i>Я могу (способен) говорить по-английски.</i> I cannot (=can't) speak French. <i>Я не могу говорить по-французски.</i></p> <p>Could you do the work? (=Were you able to do...?) <i>Мог (Смог) ли ты выполнить эту работу?</i> Will they be able to translate the text? <i>Смогут ли они перевести текст?</i></p> <p>2. Can it be true? <i>Неужели это правда?</i></p>
May (might)	
<p>1) разрешение <i>Перевод: можно, могу, разрешите</i></p> <p>2) маловероятное предположение (в утверд. и отриц. предл-х) <i>Перевод: может, возможно, может быть</i></p>	<p>1. May I come in? <i>Можно мне войти?</i> He was not allowed to take the book. <i>Ему не разрешили взять книгу.</i></p> <p>2. He may know the news. <i>Он, возможно, знает новости.</i></p>
Must*	
<p>1) необходимость, приказание, долженствование <i>Перевод: должен, обязан, нужно, надо</i></p> <p>2) вероятное предположение (в утверд. предл-и) <i>Перевод: должно быть, по всей вероятности, наверное, вероятно</i></p>	<p>1. You must do this work. <i>Вы должны (обязаны) выполнить эту работу.</i></p> <p>2. He must know the news. <i>Он, должно быть, знает новости.</i></p>
Have to	
<p>необходимость (в силу обстоятельств) <i>Перевод: должен, нужно, надо, вынужден, приходится</i></p>	<p>He had to do this work. <i>Ему пришлось (он должен был) выполнить эту работу.</i> He doesn't have to do it. <i>Ему не нужно делать это.</i> They will have to do this work. <i>Им придется выполнить эту работу.</i></p>
Be to	
<p>необходимость, долженствование (по предварительной договоренности, расписанию, заранее намеченному плану) <i>Перевод: должен, нужно</i></p>	<p>The lecture is not to begin at 10 a.m. <i>Лекция не должна начинаться в 10 ч.</i> The lecture was to begin at 10 a.m. yesterday. <i>Лекция должна была начаться в 10 часов утра вчера.</i></p>
Should/ought to	
<p>моральный долг, мнение, личный совет <i>Перевод: следует, следовало (бы), нужно, должен</i></p>	<p>He should do morning exercises every day. <i>Ему следует делать зарядку каждый день.</i> He ought to help his friend. <i>Ему следует помочь своему другу.</i></p>

*Примечания:

Форма **must not (mustn't)** выражает **запрещение** *Перевод: нельзя.* May I do it? No, you mustn't. *Можно мне сделать это? Нет, нельзя.*

Для выражения **отсутствия необходимости** употребляется глагол **needn't (не нужно)**: Must I do it? No, you needn't. *Должен ли я делать это? Нет, не нужно.*

Модальные глаголы и их эквиваленты	Значение	Present	Past	Future
1. CAN	возможность совершения действия	Can	could	-
to be able to		am able to is able to are able to	was able to were able to	shall be able to will be able to
2. MAY		May	might	-
to be allowed to		am allowed to is allowed to are allowed to	was allowed to were allowed to	shall be allowed to will be allowed to
3. MUST		Must	-	-
to have to	долженствование	have to has to	had to	shall have to will have to
to be to		am to is to are to	was to were to	-
should		Should	-	-
ought to		ought to	-	-

22. Переведите на русский язык. Поставьте в вопросительную и отрицательную формы.

1. Water and food can be a source (источник) of infection in human beings.
2. Any surgeon is able to operate on for appendicitis.
3. The results of the analyses had to be shown to another doctor.
4. The veterinarian has to vaccinate animals.
5. You may open the window.
6. The student was to prepare a report.
7. You ought to have much knowledge in order (чтобы) to make a correct diagnosis.
8. You must take these two medicines together.
9. The child may stay at home if he feels badly.
10. The blood analyses will have to be done once more.
11. Jack was able to call the ambulance despite (несмотря на) the strong pain.
12. You should consult the doctor about the side-effects of this drug before you start taking it.

13. Vitamin B₁₂ can be prescribed for liver diseases.
14. The patient will be allowed to get up on his foot soon.

23. *Поставьте предложения в прошедшее и будущее время.*

1. What medicine can ease a pain in the substernal area?
2. My sister must apply a hot-water bottle to her feet in the evening.
3. Professor Smirnov has to deliver a lecture in Histology.
4. All my fellow students are to do this work successfully.
5. Before starting to examine the patient the physician has to put on his white gown [gaun] (халат).
6. The patient is allowed to stay in bed for a week.
7. Can we talk to the doctor in the consulting room?
8. My brother is to make an appointment (записаться на прием) with the doctor for 9 a.m.
9. Is he able to take an active part in this discussion?
10. This patient may not follow strict bed regimen in this case.
11. Everybody has to keep the thermometer in the armpit for about 7 minutes.
12. Must she be on a strict diet every day to be strong and healthy?
13. Our district doctor is able to go out to the calls in the afternoon.
14. Does she have to learn these anatomical terms?
15. Donors with a history of hepatitis are not allowed to give blood.

24. *Вставьте вместо точек модальные глаголы CAN, MAY, MUST, SHOULD, NEEDN'T, OUGHT TO или их эквиваленты.*

1. You ... follow the doctor's treatment if you want to be well again soon.
2. What ... cause pains in the heart?
3. ... I feel your pulse?
4. ... the students take notes of every lecture?
5. What ... I take to keep the fever down?
6. You ... take this medicine any longer, your condition is fine.
7. If you have a bad headache you ... take some medicine.
8. ... you tell me what subjects the first-year curriculum includes?
9. The doctor ... have your blood analysis to be sure of your diagnosis.
10. ... you cope with the task which the teacher gave you some days ago?
11. A patient ... have a scalding footbath, if he has a bad cold.
12. You ... listen to what your parents tell you.
13. ... you ... to go for your blood analysis after the doctor examined you?
14. As my sister has caught a bad cold she ... stay in bed.
15. You ... take the drug three times a day before meals.

25. *Поставьте вопросы к выделенным словам и переведите предложения.*

1. The students must attend lectures and classes regularly.
2. The therapist may diagnose this disease.
3. The nurse can perform laboratory analyses.
4. She should do this work.

5. He had to visit a dentist because of (из-за) a bad toothache.
6. The patients were allowed to go for a walk.
7. Medical students ought to remember that it is not easy to be a good doctor.
8. He was able to enter the medical institute last year.
9. The students could correct their mistakes themselves.
10. You might visit your friend at the hospital yesterday.
11. The exam in Chemistry is to begin at 8 a.m. tomorrow.
12. You will have to be treated in the clinic.

26. *Переведите на английский язык, употребляя модальные глаголы.*

1. Тебе следует поговорить с ней об этом.
2. Студент должен будет разработать (to work out) план научной работы.
3. Мне разрешили посещать этого больного каждый день.
4. Он не смог выучить правила вчера.
5. Наши студенты смогут присутствовать при операции на сердце.
6. Можно мне будет ответить этот текст завтра?
7. Они думают, что им разрешат уйти пораньше.
8. Я могу дать тебе эту книгу, но только до завтра.
9. Мне не разрешают держать (хранить) эти лекарства у себя.
10. Тебе не следует идти пешком, ты можешь опоздать на занятие.
11. Мы вынуждены были выполнить (to perform) эту операцию вчера.
12. Она не может работать врачом, так как у нее нет высшего медицинского образования.
13. Вы можете перейти улицу, когда горит зелёный свет.
14. Как ты можешь слушать такую музыку?
15. Она больна. Нельзя её беспокоить (to disturb) сейчас.
16. Ты сумеешь перевести этот текст завтра?
17. Если работа готова, вы можете пойти домой.

Времена группы Progressive (Continuous)Active

27. *Сделайте предложения отрицательными.*

1. Ben is reading a new text now.
2. Tomorrow morning they will be playing tennis.
3. It was snowing at noon.
4. I was working at the reception ward (приемный покой) from 3 till 6 p.m.
5. He will be giving a lesson at that time.
6. I'll be sleeping if you come late in the night.
7. I am waiting for a friend of mine here.
8. Don't call him now. I think he is sleeping.

28. *Поставьте вопросы к подчеркнутым словам.*

1. She is filling in the patient's case history now.
2. The fifth-year students are working at the anatomy museum now.
3. He was making a report on the muscular system for the whole hour.

4. We were translating the text from Russian into English when we were interrupted (прерывать).
5. Now we are discussing the characteristic features of cardiac muscles.
6. He is sleeping now.
7. Tom is sitting at the table and doing nothing.
8. When I came in Sally was watching TV.
9. The cat is running along the wall.
10. I was preparing for my credit test in physics when my friend called me.
11. Tomorrow at 10 a.m. I'll be taking the examination on Physiology.
12. Now my sister is receiving the treatment at the surgical department.

29. *Поставьте глаголы в соответствующую форму Progressive Active. Переведите предложения.*

1. Please, be quiet. I ... (to give) an injection to you.
2. Doctor N ... (to perform) the operation from 10 till 12 a.m. yesterday.
3. All the surgeons are busy now. They ... (to fight) for the life of the patient.
4. When he ... (to make) his speech everybody ... (to listen) to him with great attention.
5. Look. It ... (to rain).
6. You ... (to make) a lot of noise. Can you be a bit quieter?
7. I ... (to look for) a text-book on Anatomy. Can you help me?
8. Tomorrow at 5 p.m. I ... (to prepare) my homework.
9. They ... (to take) the examination at ten o'clock yesterday.
10. Hallo, Henry! I ... (to return) home from the academy.
11. Look. That man ... (to try) to open the door of your car.
12. I ... (to study). Please don't make so much noise.
13. The patient ... (to sleep) when his relatives came to visit him.

30. *Составьте предложения, используя слова.*

1. is, better, becoming, he, slowly.
2. are, what, talking, they, about?
3. think, Spanish, I, those, are, people, speaking.
4. the end, the academic, to, is, year, coming.
5. TV, was, yesterday, watching, she, at, time, that.
6. senior, were, medical, watching, some, students, the operation.
7. the whole, he, for, from, a bad, in, suffering, night, was, pain, back, his.
8. now, at, not, are, the laboratory, we, working.
9. now, he, his, is, in history, examination, taking?
10. you, talking, I, to, whom, were, met, you, when, yesterday?
11. at, tomorrow, he, making, at, 4 o'clock, will, a report, be, the conference.

Некоторые глаголы не могут выражать процесс, следовательно, не могут употребляться во временах Progressive. Они употребляются в форме Simple

to be <i>быть, находиться</i>	to want <i>хотеть</i>	to understand <i>понимать</i>
to see <i>видеть</i>	to wish <i>желать</i>	to remember <i>помнить</i>
to hear <i>слышать</i>	to like <i>нравиться</i>	to know <i>знать</i>
to notice <i>замечать</i>	to love <i>любить</i>	to forget <i>забывать, не помнить</i>
to recognize <i>узнавать</i>	to hate <i>ненавидеть</i>	to believe <i>верить, полагать</i>
	to seem <i>казаться</i>	to think <i>думать = полагать</i>

31. Раскройте скобки, обращая внимание на глаголы, не употребляющиеся в длительном времени (*Progressive*).

1. You (to hear)? She (to sing) wonderfully.
2. Look! It (to seem) to me that she (to plant) rosebushes in her garden.
3. What you (to talk) about? I (not to understand) you.
4. What you (to want) to say? You (to think) I (to do) this incorrectly?
5. This is Ferry Street. I (not to remember) exactly the number of his house. You (to recognize) it?
6. Now I (to know) that you (not to like) oranges. You didn't tell me before.
7. Why you (not to translate) the text? – I (to forget) what this words means.
8. How you (to feel)? We (to wish) you a soon recovery.

Revision exercise

32. Раскройте скобки, поставив глагол в соответствующее время (*Simple or Progressive*):

1. He (to enter) the academy last year, and his sister (to pass) the entrance exams this year.
2. They (to work) in the lab at the moment.
3. I (not to go) to the disco tonight, I (to prepare) for my examination.
4. Medical education in Russia (to be) free of charge, so students (not to pay) for their training.
5. He (to speak) five foreign languages?
6. I (not to come) tomorrow. I (to prepare) for my classes all the evening.
7. The test last Tuesday (to be) very difficult, so she is afraid she (not to pass) it.
8. What you (to do) yesterday at 11 o'clock?
9. I (to write) a research work yesterday, so I (not to watch) this film.
10. Next year the curriculum (to be) not as difficult as it (to be) last year.
11. We have a lot of homework to do. We (to work) in the library until it (to close).
12. Who (to know) what research they (to make) now?
13. He (to call) the ambulance because he (to suffer) from a sharp pain the whole morning.
14. You (to get) the necessary information in the library last week?

Времена группы Progressive Passive.

33. Переведите предложения на русский язык, обращая внимание на времена группы *Progressive Passive*.

1. This question is being discussed at the conference just now.
2. When I entered the room these questions were being discussed.

3. You'll have to wait half an hour. These patients are being examined.
4. The building is being reconstructed. Don't come up to it.
5. When you came we were being instructed on how to work with this apparatus.
6. The doctor is being sent for. Don't worry.
7. The new blockbuster is being demonstrated in all big cinemas.
8. The contract is being signed. Wait a minute.
9. While the patient was being bandaged he was telling the nurse some anecdotes.
10. A new modern hospital is being built in that region.
11. When the nurse came into the consulting room, the patient was being questioned by the doctor.

34. *Переведите предложения, употребляя времена группы Progressive Passive.*

1. Первая часть этого учебника печатается сейчас в Москве, а вторая будет печататься в Санкт-Петербурге (to print).
2. В нашем городе строится сейчас новый торговый центр (trade).
3. Пациенты какой палаты (ward) обследовались, когда вы приехали в больницу?
4. Когда они появились в аудитории, на них смотрели с большим интересом.
5. Над ним смеялись, когда он сказал это.
6. Когда мы пришли в Университетскую клинику, операцию проводил хорошо известный профессор. За операцией наблюдали студенты-старшекурсники.
7. Эксперимент проводился ими с 5 до 7 вечера.
8. Весь урок нами изучались функции сердца.

Времена группы Perfect Active

35. *Раскройте скобки, употребляя времена Present Perfect Active. Переведите предложения.*

1. The students of our group already (to get) grants?
2. Patient Smirnov (not to receive) the direction from the polyclinic yet.
3. The nurse just (to give) an injection.
4. You ever (to hear) about alternative medicine?
5. The resident (not to determine) how to treat this disease.
6. I (to prepare) for the practical class in Anatomy.
7. They (to finish) the translation of the text this week.
8. He never (to see) patients with such symptoms.
9. You already (to determine) what specialization to choose?
10. The condition of the patient we are treating (to become) better.
11. He (not to see) his instructor yet.
12. The professor just (to deliver) the lecture on the exchange of gases in the lungs.
13. He (to take) the examination in Histology this month?

36. *Раскройте скобки, употребляя время Past или Future Perfect. Переведите предложения.*

1. A woman said she (to have) abdominal pains before the operation.
2. He was well as he (to take) already some water, air and sun baths.
3. The temperature of the child (to fall) by tomorrow morning.
4. You (to finish) all necessary experiments by tomorrow?
5. The patient (not to restore - *восстановить*) his health by the end of September.
6. The patient (to have) flu before he was admitted to the clinic.
7. By that time every patient of our department (to go) to bed.
8. By the end of the year all (to fall) ill.
9. When we got to the University, the professor (to start) already to deliver a lecture.
10. They (not to complete) the test when the teacher came.
11. What you (to do) by the time I come back?
12. You (to consult) your doctor by the next week?

37. *Составьте вопросы к подчеркнутым словам.*

1. The doctor has just discharged (*выписывать*) my mother from the hospital.
2. I shall have finished my experiment by the beginning of the next year.
3. He had prepared his report by the end of the week.
4. The patient has lost 3 kg of weight this month.
5. They have found an unknown virus affecting poultry (*домашняя птица*).
6. Today the surgeon has completed the operation.
7. The researcher will have isolated the necessary substance before he begins a new experiment.
8. I have not seen him since he went to Germany.
9. His temperature had greatly decreased (*уменьшаться*) by 5 p.m.

38. *Переведите предложения, используя соответствующее время группы Perfect.*

1. Медсестра приготовила раствор (solution) для инъекций.
2. Учёный уже определил необходимую дозу (dose) лекарства.
3. К сентябрю он опишет новые методы лечения в своей научной работе.
4. Вы уже видели новое расписание (time-table)?
5. Мы перевели этот текст к концу занятий.
6. Студенты сдадут все экзамены к концу июня.
7. Тебе уже сделали рентген грудной клетки?
8. Мой брат поступил в институт в этом году.
9. Кто-нибудь до Везалия давал правильное описание скелета человека?
10. Все студенты нашей группы получили учебники к началу учебного года.
11. К началу семестра я получу комнату в общежитии (hostel).

Времена группы Perfect Passive

39. *Прочитайте и переведите предложения. Укажите время глагола-сказуемого в пассивном залоге.*

1. The local polyclinic has been attended by lots of people this week.
2. Had the analysis been made by the 1st of October? – No, it hadn't.

3. Will the operation have been finished by noon? I hope, it will.
4. The prescribed pills have just been taken by the patient.
5. The plan had been changed, hadn't it?
6. Those case histories will have been looked through by the post-graduate by the end of the week.
7. Nothing has been done to help him.
8. The patient had been given the injection before the ambulance took him to the hospital.

40. *Преобразуйте предложения согласно модели.*

When will they complete the plan? (tomorrow)

The plan will have been completed by tomorrow.

1. When will he buy the prescribed mixture? (next Monday)
2. When will they set the new apparatus? (next year)
3. When will they perform the operation? (5p.m.)
4. When will the doctor examine the sick person? (11 a.m.)
5. When will they organize a conference? (May)

Is the new hospital still being built?

No, it has already been built.

1. Is the physician still writing out a prescription?
2. Is the nurse still sterilizing the instruments?
3. Is the ward doctor still examining the new-comers?
4. Are the junior nurses still cleaning the wards?
5. Is the student still writing a report?
6. Is the dentist still filling in her teeth?

They operated on 3 patients yesterday. Did you know?

Yes, I knew 3 patients had been operated on.

1. They studied 7 clinical subjects last term. Did you know?
2. The attending doctor administered her bed regimen. Did you know?
3. Jane brought a new stethoscope. Did you know?
4. He ordered the ointment (мазь) at the drug-store. Did you know?
5. Alex received an invitation to undergo a medical check-up. Did you know?
6. The nurse gave 25 injections. Did you know?

41. *Перепишите следующие предложения в пассивном залоге.*

1. The patients have always respected Doctor Smirnov.
2. Nobody had treated this elderly man before he came to the polyclinic.
3. The nurse will have carried out all the administered procedures by 11 a.m.
4. Somebody has recently opened those boxes.
5. The relatives had visited this girl several times by the time she recovered.
6. The head doctor will have shown the delegation the new surgical department.
7. John has already called for an ambulance.
8. The doctors have recommended this patient a milk diet.

Revision exercises

42. Раскройте скобки, поставив сказуемое в соответствующие времена действительного или страдательного залога (**Simple, Progressive or Perfect**):

1. What you (to do) at your English classes yesterday?
2. We (to have) a lecture on Anatomy tomorrow.
3. The doctor (to examine) his patient now.
4. Yesterday I (to take) my Russian exam at this time.
5. When I entered the consulting room the pediatrician (to examine) a child.
6. You (to make) an X-ray already?
7. The lecture on Biology (to miss) by 10 students.
8. The child's chest (to x-ray) now?
9. I can't prepare my homework because I (to lose) my text-book.
10. I bought the medicine that the doctor (to prescribe) to my mother.
11. The final diagnosis (to make) after the analyses are ready.
12. Children (to take) care of in the hospital.
13. He never (to be) on duty in the hospital.
14. When you (to graduate) from the Academy?
15. In summer we usually (to work) at the hospital.
16. The analyses (to be) ready by 11 a.m. tomorrow.
17. All the necessary textbooks (to give) to you in half an hour.
18. The sick man (to operate on) for cancer (рак) before it was too late.

43. Переведите предложения.

1. Я готовлю домашние задания по вечерам.
2. Не мешайте ему. Он готовится к занятиям.
3. Завтра с 3 до 5 я буду готовиться к докладу.
4. Вы уже подготовились к коллоквиуму. Тогда дайте мне, пожалуйста, ваш учебник.
5. Мы сделали домашнее задание, прежде чем отправиться в кино.
6. К концу недели я закончу доклад.
7. Ты уже сдала экзамен? Какую оценку ты получила?
8. К 20 июня студенты нашей группы сдали все экзамены.
9. Я увидела детей во дворе. Они играли в футбол. Уроки они уже сделали.
10. Вы не можете сейчас поговорить с профессором: он читает лекцию.
11. Завтра в это время я буду лететь на самолёте в Лондон.
12. Когда я вошёл в аудиторию, студенты что-то обсуждали.
13. К тому времени как они вошли в зал, концерт уже начался.

Времена группы Perfect Progressive.

44. Завершите предложения, выбрав подходящее обстоятельство времени. Переведите полученные предложения.

For 2 years, when the war began, by 2016, for several hours, since 2008, by the end of last week, for a long time.

1. My cousin has been working at the Mother and Child Health Centre ...
2. We'll have been studying at the medical academy for some years ...

- c) do you smoke d) have you smoke
4. Don't worry about the dog. It ... you.
- a) it won't hurt you b) it is not hurting you
- c) it doesn't hurts you d) it don't hurt you
5. She ... interested in the book because she ... it.
- a) is not ... don't understand b) am not ... doesn't understand
- c) wasn't ... was not understanding d) was not ... didn't understand
6. Last night I ... in bed when suddenly I ... a scream.
- a) was sleeping ... heard b) slept ... was hearing
- c) was sleeping ... was hearing d) will be sleeping ... hear
7. How long ... you ...?
- a) have ... smoke b) are ... smoking
- c) have ... been smoking d) does ... smoke
8. The house was very quiet when I got home. Everybody ... to bed.
- a) had gone to bed b) have gone to bed
- c) went to bed d) gone to bed
9. Don't come to me tomorrow – I ... a composition the whole evening.
- a) will write b) will be writing
- c) will have writing d) will be written
10. The students ... all examinations by the end of the year.
- a) will have pass b) will have passing
- c) will have passed d) will have been passed
11. You were very tired when you arrived home. ...you ... hard all day?
- a) have ... been working b) did ... work
- c) had ... worked d) had ... been working
12. ... you ... him since you finished your school?
- a) did ... see b) were ... seeing
- c) have ... seen d) had ... seen
13. Your pain ... unless you ... this medicine.
- a) not disappear ... will take b) won't disappear ... take
- c) won't disappear ... will take d) doesn't disappear ... take
14. Next week we'll have a party. We ... in our company for already 15 years.
- a) will have been working b) will work
- c) had worked d) had been working
15. I ... you this grammar rule for 15 minutes, but you made mistakes again.
- a) have been explaining b) am explaining
- c) was explaining d) had been explaining

Aspect Tense	Indefinite (Simple) 1. Обычное, повторяющееся действие. 2. Простой факт.	Continuous (Progressive) 1. Действие, протекающее в <u>определенный момент</u> (глаголы be, see, hear, love, like, wish, want, know, forget, believe, understand, remember, belong не употребляются)
Present	V, V-s I go / she goes I don't go/ she doesn't go Do you go?/ Does she go <i>always, daily, regularly, often, usually, sometimes, seldom, occasionally, never</i> 3. Вместо Future Ind. а) в придат. предлож. времени и условия (when, (un)till, before, after, as soon as, if, unless <u>he comes</u>); б) с глагол. движения (to come, to leave, to go)	am/is/are + V-ing He is going I am not going Are we going? <i>now, at the moment, still</i> 2. Запланирован. будущее действие с глаголами движения: His brother is arriving on Saturday.
Past	V-ed, V₂ I/ she went I/ she didn't go Did you/ she go <i>yesterday, the day before yesterday, last ..., ... ago, in 1995, when (в вопросах и придаточных предложениях)</i> 3. последовательность действий в прошлом заменители — used to + Infinitive (иметь обыкновение)	was/were + V-ing He was going They weren't going Were you going? <i>yesterday at 3 o'clock, all day, the whole evening, from 3 till 5, when you came</i>
Future	shall/will V I/we shall go They won't go Will he go? <i>tomorrow, the day after tomorrow, next week, in a month, in 2025, one of these days</i> 3. последовательность действий в будущем заменители — to be going to (собираться), to be about to (ближайшее будущее)	shall/will be V-ing We shall be going She won't be going Will they be going? <i>tomorrow at 12 o'clock, all day, the whole evening, from 3 till 5, when you return</i>
Future-in-the-Past (согласование времен)	should/would V I/we should go They wouldn't go Would he go? 1. Будущее действие с точки зрения прошедшего. He <u>said</u> they would come later.	would be V-ing I should be going He wouldn't be going Would you be going? 1. Действие, продолжающ. в определенный момент в будущем с т.з. прошлого. I <u>knew</u> they would be discussing it the whole day

Perfect 1. <u>Действие, совершенное к моменту</u>	Perfect Continuous <u>Действие, длящееся до</u> <u>определенного момента</u>	Aspect Tense
<p align="center">have/has V-ed (V₃)</p> <p align="center">They have gone He hasn't gone Has she gone?</p> <p><i>связанное с настоящим —just, already, ever, never, not yet, recently, lately, so far, for ages, this month, today, отсутствие показателя</i></p> <p>2. <u>Вместо Future Perfect в придаточных предложениях времени и условия</u> – I will give you the book after I <u>have read</u> it.</p>	<p align="center">have/has been V-ing</p> <p align="center">I have been going She hasn't been going Have they be going?</p> <p>1. Действие, начавшееся в прошлом и продолжающееся до настоящего времени</p> <p align="center"><i>for, since</i></p>	Present
<p align="center">had V-ed (V₃)</p> <p align="center">He had gone We hadn't gone Had they gone?</p> <p>1. Действие, совершившееся до другого действия в прошлом</p> <p align="center"><i>before you came,</i> <i>by 6 p.m. yesterday</i></p>	<p align="center">had been V-ing</p> <p align="center">She had been going I haven't been going Had you been going?</p> <p>1. Действие, которое началось и продолжалось до пределен. действия в прошлом</p> <p align="center"><i>for/ since...by/ when/ before</i></p>	Past
<p align="center">shall/will have V-ed (V₃)</p> <p align="center">I shall have gone He won't have gone Will they have gone?</p> <p>1. Действие, которое совершится к определенному моменту в будущем</p> <p align="center"><i>before you come,</i> <i>by 6 p.m. tomorrow</i></p>	<p align="center">shall/will have been V-ing</p> <p align="center">He will have been going You won't have been going Shall I have been going?</p> <p>б. Действие, кот. началось/ начнется до определенного момента в будущем и будет продолжаться до него.</p> <p align="center"><i>for/ since...by/ when/ before</i></p>	Future
<p align="center">would have V-ed (V₃)</p> <p align="center">He would have gone We shouldn't have gone Would they have gone?</p> <p>Действие, которое совершится к моменту в будущем с т.з. прошлого.</p> <p>She <u>told</u> she would have finished the work by noon.</p>	<p align="center">would have been V-ing</p> <p align="center">They would have been going He wouldn't have been going Would you have been going?</p> <p>Действие, продолжающееся до определенного момента в будущем с т.з. прошлого.</p>	Future-in-the-Past (согласование времен)

48. *Времена страдательного залога*

1. The ambulance arrived and she ... to hospital.
a) has been taken b) was being taken
c) was taken d) will have been taken
2. After she ... by a doctor she went home.
a) had been examined b) was examined
c) has been examined d) will have been examined
3. Now her temperature ... every two hours.
a) will have been taken b) is being taken
c) be taken d) is taken
4. She ... by her parents at the in-patient department every day.
a) is being visited b) will have been visited
c) has been visited d) is visited
5. She ... a medicine and woke up two hours later.
a) will have been given b) was given
c) had been given d) has been given
6. We know that the experiment on these animals ... by the end of the year.
a) will have been completed b) is completed
c) will be completed d) was completed
7. A new equipment ... by our clinic this week.
a) will have bought b) have been bought
c) will be bought d) has been bought
8. When I entered the room the lecture ... to with great attention.
a) is being listened b) had been listened
c) was being listened d) was listened
9. His new book ... in Moscow at the moment.
a) was published b) will be published
c) is published d) is being published
10. Microbiology, Physiology, History of Medicine, Immunology, Biochemistry ... next year.
a) will have been studied b) will be studied
c) are studied d) is being studied
11. Latin ... by the students for already one year.
a) will have been studied b) has been studied
c) had been studied d) will be studied
12. The exam in Anatomy ... at 9 o'clock next Monday.
a) will held b) has been held
c) will have been held d) will be held
13. Right now he ... by the dentist.
a) is examined b) will be examined
c) is being examined d) was examined
14. The dissection of the corpse ... already
a) had been finished b) will have been finished
c) was finished d) has been finished
15. Yesterday we ... to the medical conference by our colleagues.

- a) were invited
c) invite

- b) are invited
d) was invited

Таблица всех времен страдательного залога				
	Simple	Progressive	Perfect	Perfect Progressive
Present	am/ is/ are V-ed (V ₃)	am/ is/ are being V-ed (V ₃)	have/ has been V-ed (V ₃) ←	_____ ←
Past	was/ were V-ed (V ₃)	was/ were being V-ed (V ₃)	had been V-ed (V ₃) ←	_____ ←
Future	will/ shall be V-ed (V ₃) ←	_____	will /shall have been V-ed (V ₃) ←	_____ ←
Future-in-the-Past	would/ should be V-ed (V ₃) ←	_____	would/ should have been V-ed (V ₃) ←	_____ ←

49. Раскройте скобки, поставив сказуемое в соответствующее время и залог.

1. She (to suffer) from hypertension for 2 years.
2. The findings of these observations (to determine) by the scientist last week.
3. Recently the boy (to examine) in a surgical department for intestinal pains.
4. We (to discuss) the characteristic features of cardiac muscles now.
5. She (to learn) everything about that sanatorium before she decided to go there.
6. The professor just (to deliver) the lecture on the exchange of gases in the lungs.
7. They still (to work) at this problem.
8. I am afraid he (not to pass) his exam in anatomy tomorrow. He (not to learn) 7 questions yet.
9. My friend (to know) German well and I am sure he (to help) you.
10. The patient (to be) under medical care before the surgeon began the operation.
11. When the conference on infectious diseases (to take place)? – It (to take place) last month.
12. We (to carry out) the experiments for 1 year by the next month.
13. My experiments (not to prove) anything yet.
14. We (to complete) our observations on the changes in the blood erythrocytes by tomorrow?
15. (to be) there any new magazines in the reading-room today? Yes, there (to be) some.
16. An important grammar rule (to explain) now.
17. The teacher corrected the tests which the students (to write) the day before.
18. The man (to suffer) from the bad headaches for several days before he came to the polyclinic.
19. The students (to work) in the physical laboratory from 9 to half past 10 yesterday.
20. As soon as the anaesthetist (to make) anaesthesia the surgeon will start the operation.
21. How long you (to study) anatomy?
22. When the solution (to inject) the patient complained of the pain.
23. After the patient (to follow) a strict diet for 3 months the laboratory analyses showed positive results.

Согласование времен

(в дополнительном придаточном предложении при главном предложении в прошедшем времени)

Действие и время глагола придаточного предложения	Перевод глагола придат. предлож-я на русский язык	Примеры
одновременное (Past Indefinite или Past Progressive)	настоящим временем	He said that he worked in hospital. <i>Он сказал, что он работает в больнице.</i>
предшествующее (Past Perfect)	прошедшим временем	He said that he had worked in hospital before. <i>Он сказал, что он работал в больнице раньше.</i>
будущее в прошедшем (shall→should will→would)	будущим временем	He said that he would work in hospital. <i>Он сказал, что он будет работать в больнице.</i>

Замена местоимений и наречий при преобразовании прямой речи в косвенную речь

Прямая речь→Косвенная речь	Прямая речь→Косвенная речь
this→that	yesterday→the day before
these→those	the day before yesterday→two days before
now→then	tomorrow→the next day
here→there	the day after tomorrow→two days later
today→that day	ago→before
	next→the next / the following

Глагольные формы при согласовании времен в дополнительном придаточном предложении

глагол	одновременное действие	предшествующее действие	будущее в прошедшем
ask	asked / was asking	had asked / had been asking	should/would ask
be	was/were	had been	should/would be
have	had	had had	should/would have

50. Раскройте скобки, соблюдая правило согласования времен.

1. The patient said that he (to have) tuberculosis some years before.
2. I saw that the nurse (to take) the patient's temperature.
3. Everybody knew that Anatomy (to be) one of the most important subjects for medical students.
4. It was found out that the patient (to suffer) from a heart disease.

5. She knew that her mother (to be) very famous gynaecologist.
6. She said that she (to write) this composition for three hours.
7. The explanation was that he (not to expect) that sort of questions.
8. The old woman was told that the medicine already (to buy) for her.
9. He promised that he (to give) up smoking in the nearest future.
10. The patient was told that he (have to) follow a diet.
11. It was stated that blood (to be) a fluid tissue.
12. She promised that she (to make) a report on Physiology the following week.
13. My friend said that he (to perform) operations three times a week.
14. I thought you (to be) back soon.
15. The nurse said that the doctor already (to prescribe) that medicine.
16. The patient (to be) under medical care before the surgeon began the operation.
17. I knew the physician (to isolate) the patient with the flu from the others.
18. The scientists not (to estimate) the importance of this experiment yet.
19. They thought that they (to prove) their conclusion by the end of their experiments.
20. Who told you that doctor Norman (to work) in the neurological department?
21. The researcher (to isolate) the necessary substance before he begins a new experiment.

51. Переведите предложения, соблюдая правило согласования времен.

1. а) Мы знаем, что А.Везалий написал книгу о структуре человеческого тела.
 б) Мы знали, что А.Везалий написал книгу о структуре человеческого тела.
2. а) Он говорит, что А.Везалий был первым ученым, который дал правильное описание скелета.
 б) Он сказал, что А.Везалий был первым ученым, который дал правильное описание скелета.
3. а) Все знают, что кости скелета делятся на кости головы, кости туловища, кости верхних и нижних конечностей.
 б) Все знали, что кости скелета делятся на кости головы, кости туловища, кости верхних и нижних конечностей.
4. а) Мы учим, что в запястье находятся 8 маленьких костей.
 б) Мы учили, что в запястье находятся 8 маленьких костей.
5. а) Она говорит, что главные органы грудной клетки – это сердце и легкие.
 б) Она сказала, что главные органы грудной клетки – это сердце и легкие.
6. а) Мы знаем, что после того, как кровь обогатится кислородом в легких, левый желудочек направит (to move) ее по всему телу.
 б) Мы знали, что после того, как кровь обогатится кислородом в легких, левый желудочек направит (to move) ее по всему телу.
7. а) Она говорит, что врач рекомендовал ей кардиостимулятор.
 б) Она сказала, что врач рекомендовал ей кардиостимулятор.
8. а) Учитель говорит, что во время сна сердцебиения будут замедляться, а во время упражнений – учащаться.
 б) Учитель сказал, что во время сна сердцебиения будут замедляться, а во время упражнений – учащаться.

9. а) Он считает, что травма головного мозга привела к потере памяти.
 б) Он считал, что травма головного мозга привела к потере памяти.
10. а) Мы знаем, что нервные импульсы путешествуют от одного пучка волокон к другому.
 б) Мы знали, что нервные импульсы путешествуют от одного пучка волокон к другому.

Do you play chess?	He asked me if/ whether I played chess.
Is he a student?	Mary wondered if/ whether he was a student.
Has she done her work?	I asked Kate if/ whether she had done her work.
What were you discussing?	She asked them what they had been discussing.
Why have you done it?	He wanted to know why he had done it.
When will she come?	Henry inquired when she would come.

52. *Переведите предложения из прямой речи в косвенную, соблюдая правило согласования времен.*

- The teacher asked: "Do you attend lectures regularly?"
- The physician asked: "When did you catch cold?"
- He wondered: "Where will you take electrocardiogram?"
- The doctor asked: "Do you feel pain in the chest?"
- He said: "Dr. Milton operates twice a week."
- The surgeon said: "The operation will be performed tomorrow."
- She said: "I met him last year."
- The eye doctor asked: "When did you check your eyesight?"
- The surgeon was asked: "Where will the pain spread in case of appendicitis?"

Come to the blackboard!	She told him to come to the blackboard.
Don't open the window!	She asked him not to open the window.

53. *Преобразуйте в косвенную речь.*

- John said to me: "Wait 5 minutes for me".
- The teacher said to us: "Don't write your lessons in pencil".
- I asked him: "Be more careful".
- She asked me: "Try to come in time".
- He said to me angrily: "Don't make the same mistake again".
- Mike said: "Don't forget what I told you".
- He begged me: Please send the money at once".

54. *Преобразуйте в прямую речь.*

- He asked me where I lived.
- He asked her whether she liked Kiev.
- She said that he was out of town.
- She said her name was Smith.
- He told me not to wait for her.
- He said that he couldn't meet us.
- He asked how much it cost.

8. He told her to leave.
9. He asked if I had mailed the letter.
10. He asked if I would be back soon.

55. *Переведите на английский язык, обращая внимание на правило согласования времен.*

1. Он был уверен, что они работают вместе.
2. Он думал, что его друзья работают с утра.
3. Он знал, что они никогда не работали прежде.
4. Он думал, что она работает, и не хотел ей мешать.
5. Он полагал, что они будут работать вместе.
6. Она не знала, что они её ждут.
7. Она знала, что этот студент интересуется историей.
8. Мне сказали, что лекция начнется в 5 часов.
9. Я не знала, что вы тоже любите музыку.
10. Она сказала, что думает, что завтра будет хорошая погода.
11. Он спросил меня, подготовила ли я доклад.
12. Я спросила, часто ли она ходит в музей.
13. Он спросил, где я купил этот словарь.

Усилительная конструкция

56. *Переведите предложения, обращая внимание на перевод усилительной конструкции:*

Professor Smith spoke about his new diagnostic method at this conference yesterday.

1. **It was Professor Smith who** spoke about his new diagnostic method at this conference yesterday.
2. **It was his new diagnostic method that** Professor Smith spoke about at this conference yesterday.
3. **It was at this conference that** Professor Smith spoke about his new diagnostic method yesterday.
4. **It was yesterday that** Professor Smith spoke about his new diagnostic method at this conference.
5. **It wasn't until yesterday that/when** Professor Smith spoke about his new diagnostic method at this conference.

57. *Выделите подчеркнутые члены предложения с помощью усилительной конструкции и переведите.*

1. Prof. Lesgaft understood well the importance of physical culture.
2. Vesalius published his 1st scientific work in 1538
3. The respiratory metabolism takes place in the alveoli.
4. The blood circulation was described by William Harvey in 1628.
5. Cow's milk is an adequate source of many vitamins.
6. The nervous system is composed of nerve cells.
7. Fever is an expression of the body's effort (усилие) to fight the disease.
8. The X-rays were discovered only at the end of the 19th century.

9. Professor N. commonly delivers lectures on biology.

10. The new drug can be tested in our centre.

11. N.I. Pirogov was the first to carry out an operation under the anesthesia on the battle field in 1847.

Инфинитив

Формы инфинитива

Forms	Active	Passive
1. Indefinite (Simple)	to examine	to be examined
2. Continuous (Progressive)	to be examining	
3. Perfect	to have examined	to have been examined
4. Perfect Progressive	to have been examining	

Значения инфинитива

Значения форм инфинитива (по отношению к действию, выраженному гл.-сказуемым)	Примеры
Indefinite (одновременное; произойдет в будущем: после глаголов to expect, to hope, to want, may, can, must, should)	1. I was pleased to see you. <i>Я был рад видеть вас.</i> 2. I want to make a report. <i>Я хочу сделать доклад.</i>
Progressive (длительное, в момент речи)	The weather seems to be improving . <i>Кажется, что погода улучшается.</i>
Perfect (предшествующее)	He is sure to have seen this man before. <i>Он уверен, что видел этого человека раньше.</i>
Perfect Progressive (началось раньше и продолжается в момент его совершения.)	He is glad to have been working in this office for so many years. <i>Он рад, что работает в этой организации уже столько лет.</i>

Функции инфинитива в предложении

1. Подлежащее	1. To treat such disease is very difficult. <i>Лечить такое заболевание сложно.</i> 2. It is better to prevent a disease. <i>Лучше предупредить болезнь.</i>
2. Часть сказуемого	1. Our duty is to treat people. <i>Наш долг – лечить людей.</i> 2. I began to translate the article yesterday. <i>Я начал переводить статью вчера.</i>
3. Дополнение	I want to be a surgeon. <i>Я хочу быть хирургом.</i>
4. Обстоятельство а) цели	а) I've come to discuss a problem with you. <i>Я пришел, чтобы обсудить одну проблему с вами.</i>

б) следствия (после слов: too слишком, enough достаточно)	б) The task was <u>too</u> difficult to be solved in an hour. <i>Задача была слишком трудной, чтобы решить ее за час.</i>
5. Определение	1. The exam to be taken consists of oral and written parts. <i>Экзамен, который нужно сдать, состоит из устной и письменной частей. (= Экзамен, который будут сдавать, состоит из устной и письменной частей.)</i> 2. He <u>was the first</u> to come to the hospital. <i>Он пришел в больницу первым.</i>

58. Определите функции инфинитива:

1. To become a doctor is not easy.
2. My dream is to become a doctor. He has to be operated on.
3. He wants to specialize in internal diseases. The doctor asked the nurse to bring the syringe (шприц).
4. To master all medical subjects you must work hard.
He was too weak to speak.
5. The method to be used depends on the task to be accomplished. The test to be written is hard.

59. Переведите предложения, обращая внимание на инфинитив:

1. We must isolate the patient to prevent the spreading of the infection.
 2. He returned to Great Britain to get education there.
 3. You must be very careful not to get into trouble.
 4. The researchers decided to continue their experiment to obtain the new compound (соединение).
 5. To see the components of the cell we must use a microscope.
 6. Water must pass through a filter to be purified.
 7. To have a clear picture of the process we can simulate (моделировать) it in the laboratory.
 8. This device (прибор) is used to simulate physiological processes in the organism.
 9. To produce motion (движение) muscle cells must contract.
 10. He stepped aside (в сторону) not to be seen.
1. The patient to be operated on is already in the operating room.
 2. There are still a lot of children to be vaccinated.
 3. The medicine to be prescribed is absolutely harmless.
 4. He was the last to leave the building during the evacuation.
 5. The doctor to be sent for is Doctor Petrov.
 6. N. I. Pirogov was the first to use anaesthesia [, ænəs'θi:ziə] during operations.
 7. The test to be made requires special skills.
 8. Who is the next to answer?
 9. The portion of blood to be tested is usually taken from a fingertip or a vein.
 10. Who was the first to discover antibiotics?
 11. The best method to be used in such cases is described further (далее).

60. *Переведите предложения. Определите форму и функцию инфинитива.*

1. The patient to be operated on was brought to the hospital on a stretcher (носилки). 2. This is the patient to be given general anaesthesia. 3. The surgeon took a scalpel to make a midline abdominal incision. 4. Surgeon Maslov must be operating on the patient with a perforative appendicitis now. 5. To prevent complications (осложнения) after the flu one must go to bed at the beginning of the disease and take the prescribed drugs. 6. To treat advanced cases of malignant tumours (злокачественные опухоли) is very difficult. 7. The stitches (швы) are to be removed on the tenth post-operative day. 8. I remember to have been prescribed this ointment (мазь) for skin irritation. 9. We had to take the newly admitted patient for an operation at once to prevent the rupture (разрыв) of the appendix. 10. A surgeon wanted to be given a sharp scalpel. 11. The old man was too weak to be operated on and the doctor decided to postpone the operation. 12. The students were glad to have been allowed to close the wound (рана) themselves. 13. N. I. Pirogov was the first to use ether (эфир) anaesthesia during operations. 14. The tumour to be removed is benign (доброкачественный).

61. *Раскройте скобки, употребляя инфинитив в правильной форме:*

1. This is the patient (to take) to ward 7. 2. I remember (to treat) this boy before. 3. He wanted (to send) to the Oncological centre for practice. 4. He seems (to recover) by and by (постепенно). 5. The students were glad (to show) a plastic operation yesterday. 6. He was the last (to leave) the Theatre yesterday. 7. (To operate) on this patient we must give him a local anaesthesia first. 8. The nurse brought the blood (to transfuse) to the patient (to operate).

62. *Переведите предложения, используя инфинитив:*

1. Чтобы выписать этого больного, мы должны иметь все анализы. 2. Доктор Уланов, должно быть, сейчас делает обход палат. 3. Я помню, что посещала кого-то в этой больнице раньше. 4. Вот больной, которому нужно срочно сделать рентген. 5. Я хочу, чтобы меня оперировали под общим наркозом. 6. Женщина решила подвергнуться пластической операции, чтобы избавиться (to get rid of) от шрама (scar) на лице. 7. Я рада, что мне прописали курс физиотерапии. Она мне очень помогает. 8. «Скорая помощь» привезла больного, которого нужно было немедленно оперировать по поводу острого (acute) аппендицита. 9. Он слишком стар, чтобы перенести такую сложную операцию. 10. Удалить эту опухоль необходимо как можно скорее.

Причастие

Формы причастия

Forms		Active	Passive
Participle I	Present	examining	being examined
	Perfect	having examined	having been examined
Participle II	Past		examined

<u>Participle I</u> verb+ing	
to play – playing <i>играющий</i>	to lie – lying <i>лежащий</i>
to carry – carrying <i>несущий</i>	to sit – sitting <i>сидящий</i>
to take – taking <i>берущий</i>	

<u>Participle II</u> verb+(e)d / III ф. неправил. гл.
E.g. divided – <i>разделенный</i>
studied – <i>изучаемый, изученный</i>
taken – <i>взятый</i>

Способы перевода причастия на русский язык

Формы причастия		Способы перевода причастия	
		в функции определения	в функции обстоятельства
		причастием	деепричастием / личной формой глагола придаточного предложения
<i>Present</i>	examining	осматривающий осматривавший	осматривая
	being examined	осматриваемый / которого осматривают (осматривали)	когда [его] осматривают (осматривали / осмотрели)
<i>Perfect</i>	having examined	X	осмотрев
	having been examined		так как / когда / после того, как [его] осмотрели ([он] был осмотрен)
<i>Past</i>	examined	осмотренный / которого осмотрели	X

Функции Participle I в предложении

Функция, способ перевода	Примеры
определение <i>Перевод:</i> причастием	1. The examining teacher is in room 5. <i>Экзаменующий преподаватель находится в 5 аудитории.</i> 2. The man examining the patient is our local physician. <i>Человек, осматривающий больного, - наш участковый врач.</i> 3. The hospital being built in our town will be supplied by new

	equipment. <i>Больница, строящаяся в нашем городе, будет оснащена новым оборудованием.</i>
обстоятельство <i>Перевод:</i> деепричастием, придаточным предложением	1. Examining the patient the doctor listened to his lungs. <i>Осматривая</i> больного, врач прослушал ему легкие. 2. Being examined the patient complained of the backaches. <i>Когда</i> больного <i>осматривали</i> , он жаловался на боли в спине. 3. Having examined the patient the doctor wrote out the prescription. <i>Осмотрев</i> больного, врач выписал рецепт.

Примечание:

Present Participle в функции обстоятельства часто употребляется после союзов **while/when** и переводится деепричастием или ‘при+существительное’. Союзы **while, when** перед Present Participle обычно на русский язык **не переводятся** (Но: **when comparing** *при сравнении*). E.g. **When taking** this medicine the patients keep to a milk diet. *Принимая* это лекарство, больные придерживаются молочной диеты.

63. А. Вставьте соответствующие формы Participle I:

	Present/Indefinite Participle Active	Present/Indefinite Participle Passive	Perfect Participle Active	Perfect Participle Passive
1	-	being carried out	-	-
2	prescribing	-	-	-
3	-	-	having prevented	-
4	-	-	-	having been operated

В. Определите функции Participle I:

1. He is bandaging the man's arm.
2. Do you know the woman speaking to the nurse?
The patient suffering from arthritis was administered special pills and ointments.
3. (When) Being examined, the patient complained of pains in the side.
Having prepared the reagents he started the test.

64. Переведите предложения. Определите формы и функции Participle I:

1. Having finished the operation the surgeon left the operating-room. 2. Being rather ill Nick was not able to answer our letter. 3. When writing a telegram we must use as few words as possible. 4. Not understanding the rule John asked the teacher to explain it once again. 5. Having been given antipyretic (*жаропонижающее*) the boy felt better and fell asleep. 6. Being asked by the examining instructor about some additional facts on the matter the student was able to answer all the questions and received an “excellent” mark. 7. Having been used in a wrong way the drug had a side (*побочный*) effect. 8. Producing antibodies lymphocytes fight a disease. 9. While observing the course of the disease in the patient the doctor added a physiotherapy treatment. 10. Having fallen ill with an infectious illness the man was hospitalized at once.

65. Определите функции Participle II:

1. The patient was taken to the clinic yesterday.
2. The baby born pre-term is in the special care ward.
The vaccinated boy didn't fall ill with measles (*корь*).
3. When asked about his symptoms, the patient noted pain in the abdomen.

66. *Переведите предложения. Определите формы и функции Participle II:*

1. The problem discussed at the meeting was of current importance.
2. Performed in time the operation saved the patient's life.
3. When questioned about her previous diseases Mary forgot to mention meningitis.
4. The measures recommended by this scientist stopped the epidemic.
5. A source (*источник*) of some infections may be untreated teeth.
6. Jack didn't answer all the given questions as he prepared for the test badly.
7. The repeated X-ray test gave no results.
8. Shocked by acute (*острый*) pain she fainted.
9. The prescribed treatment was very effective.

67. *Переведите предложения, обращая внимание на Participle I и Participle II:*

1. All the doctors working in the Mother-and-Child Centers are concerned with different medical research.
2. The boy with a broken hand was hospitalized immediately.
3. While operating the whole night the doctor was able to save the lives of five sick persons.
4. The patient admitted last night complained of severe pain in the throat.
5. A man complaining of the pain in the chest was administered an X-ray examination.
6. The scientific work presented caused a great interest.
7. Looking through new illustrated magazines sent to me by my friend I found a lot of articles describing the treatment in sanatoriums.
8. Yesterday we were at a conference organized by the Ministry of Health.

68. *Выберите подходящую форму Participle I или Participle II:*

1. The medicine (prescribing; prescribed) by the doctor had no side effects.
2. The (attending; attended) doctor thinks that the child's temperature will fall to normal.
3. The (operating; operated) patient was allowed to get up on his foot next day.
4. The symptoms (accompanying, accompanied) the flu are high temperature and headaches.
5. (Administering, administered) the treatment the therapist must take into consideration the general condition of the patient.
6. The little boy (saving; saved) in the accident was taken to the hospital at once.
7. (Taking; taken) in time, any general well-known preventive measures are always useful.
8. The laboratory work (doing, done) by the pupils was easy.
9. The book (writing, written) by this scientist is very interesting.
10. The doctor (treating, treated) my sister is famous Dr. Smith.

Герундий

verb+ing

Формы герундия

Forms	Active	Passive
1. Indefinite (Simple)	examining	being examined
2. Perfect	having examined	having been examined

Перевод герундия на русский язык

Способы перевода	Примеры
1. существительным	reading ‘чтение’, waiting ‘ожидание’
2. инфинитивом	Laser helps in treating different diseases. <i>Лазер помогает лечить различные болезни.</i>
3. деепричастием	On taking this medicine he felt better. <i>Приняв лекарство, он почувствовал себя лучше.</i>
4. глаголом в личной форме (в составе придаточного предложения)	1. The doctor insisted on the patient’s giving up smoking. <i>Врач настоял на том, чтобы больной бросил курить.</i> 2. After having performed the physical examination the doctor made a diagnosis. <i>После того, как врач провел физикальное обследование, он поставил диагноз. (=После проведения физикального обследования врач поставил диагноз.)</i>

Функции герундия

1. Подлежащее	Making a new experiment was necessary. <i>Проведение нового эксперимента было необходимо.</i>
2. Часть сказуемого (после гл.: to stop, to finish, to begin, to continue, to start, to keep, to go on, to give up, to be)	а) He went on making his experiment. <i>Он продолжил проводить свой эксперимент.</i> б) His task was making a new experiment. <i>Его задачей было проведение нового опыта.</i>
3. Дополнение (после гл.: to remember, to mention, to mind, to think of, to insist on, to depend on, to result in, to object to, to be interested in, to prevent from, to be responsible for)	I think of making a new experiment. <i>Я думаю провести новый эксперимент.</i>
4. Определение (после сущ.+of/in/for): problem of, method of, idea of, way of, interest in, reason for, possibility of, и др.	I like your idea of making a new experiment. <i>Мне нравится твоя идея провести новый эксперимент.</i>
5. Обстоятельство (после предл.: in при; after после того, как; before прежде чем; by при помощи, путем; on после; besides кроме; instead of вместо того, чтобы; through благодаря; из-за; without без/не +дееприч.)	Before making an experiment he checked up all the data. <i>Перед проведением эксперимента он проверил все данные.</i>

69. Определите функции герундия:

1. – Making different tests took us 2 weeks.
– Taking a cold shower in the morning is very useful.
2. – The biggest problem in life is choosing.
– His hobby is swimming.
– She began examining a patient with auscultation.
3. – He likes asking questions.

- Do you mind my smoking here?
- She is afraid of walking out when it is dark.
- 4. – They discovered a new method of treating this disease.
 - I like the idea of going to the sea.
- 5. – After finishing the experiments they began production of vaccines.
 - He left without saying good-bye.
 - In administering medicine the doctor must know everything about the side effects of the drugs.

70. Выберите подходящую форму герундия:

- 1) ... is associated with chronic bronchitis.
 - a) smoking b) being smoked c) having smoked
- 2) Your recovery depends on ... the administered treatment properly.
 - a) having followed b) following c) being followed
- 3) After ... for a long period of time the drug caused a side effect.
 - a) taking b) being taken c) having taken
- 4) You must not use this drug without ... a doctor.
 - a) consulting b) being consulted c) having been consulted
- 5) Mother insisted on my ... by a physician.
 - a) examining b) having examined c) being examined
- 6) In ... scarlet fever penicillin or other antibiotics are usually given for 10 days.
 - a) having been treated b) being treated c) treating
- 7) On ... of all the painful symptoms the patient fell asleep.
 - a) relieving b) being relieved c) having relieved
- 8) ... the dose and the name of any medicine is necessary for chemists, nurses and patients.
 - a) indicating b) being indicated c) having been indicated
- 9) On ... the patient's past history the physician made a conclusion.
 - a) being studied b) studying c) having been studied
- 10) Before ... the medicine the patient must know that he is taking a proper drug and in the necessary dosage.
 - a) taking b) being taken c) having taken

71. Переведите предложения. Определите формы и функции герундия:

1. On graduating from the academy successfully she became a highly qualified doctor.
2. Reading classical literature increases the cultural level of people.
3. The neurologist remembers treating this old man.
4. He wants being referred to a hospital for tests.
5. He knew of his sister's having been sent to a hospital a month ago.
6. It is impossible to treat this patient without performing an operation.
7. Scientists have learned to prevent some diseases by studying their causes.
8. This doctor has had very much experience in treating cancer diseases.
9. The initial diagnosis must be made before the patient's being admitted to the in-patient department.
10. The student was happy to have a chance of working under the supervision of the well-known scientist.
11. He was afraid of learning the results of the tests.
12. This medical history is the

most important factor in helping the doctor to make a diagnosis. 13. Avoid staying in the cold for so long.

71. Раскройте скобки, употребив нужную форму герундия:

1. We are tired of (to listen) to your problems.
2. Never sneeze or cough without (to cover) the mouth and nose.
3. I don't mind (to operate) by surgeon Petrov.
4. The mother thanked the doctor heartily for (to save) her child's life.
5. His experience in (to assist) in operations will be useful for his future work.
6. The child was afraid of (to punish – наказывать).
7. He insisted on his assistant's (to repeat) the experiment.
8. She said she had lost every hope of (to get) this book.
9. I hate (to interrupt – прерывать) when I speak.
10. Give up (to smoke) and you'll stop (to cough).
11. Everybody was surprised at this question (to solve – решать) so quickly.
12. In this season there is only one way of (to get) there – by plane.
13. After (to look) through all the magazines he came across a very interesting article.
14. He sat in the hall without (to take) off his coat.

72. Переведите предложения. Определите части речи ing-форм.

a) 1. She insisted on helping the old man at once. 2. Watching happy children the old lady was smiling all the time. 3. Making a correct diagnosis in this patient is very difficult. 4. The regular reading aloud will improve your pronunciation. 5. He dreams of his son's becoming an experienced doctor. 6. Being adult we should never forget to thank our parents for all they have done for us. 7. Mary entered the house without being noticed. 8. Having started eating more fresh vegetables and fruit she began losing weight. 9. Not knowing English grammar he made a lot of mistakes in talking and writing. 10. Having been given an injection of an anesthetic the patient fell asleep. 11. One can say that the heart sounds are very important in making the diagnosis of a heart disease. 12. Human beings cannot live without air, food and water. 13. The work of studying new viruses is carried out in this laboratory. 14. After giving up smoking he felt much better. 15. Being asked by the physician about my previous illnesses I could remember being operated because of appendicitis. 16. You can't make a correct diagnosis without having the laboratory findings.

b) 1. Do you think of administering this patient a diet? 2. I remember being treated for pneumonia at this hospital. 3. The researcher carrying out experiments in our laboratory at present may get very important findings. 4. On being applied cups the patient stopped complaining of the pains in his back. 5. While taking part in the discussion he told us his famous theory. 6. On finding out some mistakes in his work the student corrected them immediately. 7. We are interested in determining the heart sounds ourselves. 8. Having made his ward rounds the doctor on duty went to the reception ward to examine a newly admitted patient. 9. Treating patients with infarction is necessary at the in-patient department. 10. He wants being operated by

this surgeon. 11. In making observations particular care to obtain exact findings is necessary. 12. Existing first-aid stations provide an emergency medical care. 13. An unfavourable reaction developed through administering the remedy in too large dose. 14. Are antibiotic injections used for preventing inflammation?

73. Переведите текст «В аптеке». Найдите и определите части речи ing-форм, указав их форму и функцию. Составьте к тексту вопросы разных типов.

At a Chemist's

Having examined the patient, the doctor usually prescribes some medicine helping him to recover. And as you know, on receiving a prescription from a doctor or on following a home treatment we should get medicines which are ordered or bought at a chemist's. People often use different types of drugs, including pills, tablets, solutions, tinctures, ointments and powders. At a chemist's one can buy different drugs for intramuscular and intravenous injections, for oral administration and for external use. Being taken incorrectly, these drugs may cause harm.

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

At any chemist's all the drugs are kept in drug cabinets. Every small bottle, a tube or a box of medicine has a label on it. The indicating of the usage is very important. There are labels of different colours: white labels indicating drugs for internal use, yellow – indicating drugs for external use and blue ones indicating drugs used for injections. The dose to be taken, the time for taking and the directions for the administration are also indicated on a label. Indicating the dose and the name of any medicine is necessary for chemists, nurses, doctors and patients themselves. It prevents confusing different remedies, some of which are poisonous. Their overdosage may cause unfavourable reactions and sometimes even death.

Before using the medicine every patient must know well that he is taking the right one and in the correct dosage.

Note

a chemist's department – отдел ручной продажи

a prescription department – рецептурный отдел

to confuse — путать

Таблица неправильных глаголов.

IRREGULAR VERBS			
VERB	PAST SIMPLE	PAST PARTICIPLE	ПЕРЕВОД
<u>be</u> [bi:]	<u>was</u> [wɔz] <u>were</u> [wə:]	<u>been</u> [bi:n]	Быть
<u>beat</u> [bi:t]	<u>beat</u> [bi:t]	<u>beaten</u> [ˈbi:tn]	Бить
<u>become</u> [bi`kʌm]	<u>became</u> [bi`keim]	<u>become</u> [bi`kʌm]	Становиться
<u>begin</u> [bi`gin]	<u>began</u> [bi`gæn]	<u>begun</u> [bi`gʌn]	Начинать
<u>bend</u> [bend]	<u>bent</u> [bent]	<u>bent</u> [bent]	Сгибать(ся)
<u>bite</u> [bait]	<u>bit</u> [bit]	<u>bitten</u> [ˈbitn]	Кусать
<u>break</u> [breik]	<u>broke</u> [brɔk]	<u>broken</u> [ˈbrɔk(ə)n]	Ломать, разбивать
<u>bring</u> [brɪŋ]	<u>brought</u> [brɔ:t]	<u>brought</u> [brɔ:t]	Приносить
<u>build</u> [bild]	<u>built</u> [bilt]	<u>built</u> [bilt]	Строить
<u>burn</u> [bɜ:n]	<u>burnt</u> [bɜ:nt]	<u>burnt</u> [bɜ:nt]	Гореть
<u>buy</u> [bai]	<u>bought</u> [bɔ:t]	<u>bought</u> [bɔ:t]	Покупать
<u>catch</u> [kætf]	<u>caught</u> [kɔ:t]	<u>caught</u> [kɔ:t]	Ловить, хватать, успеть
<u>choose</u> [tʃu:z]	<u>chose</u> [tʃɔuz]	<u>chosen</u> [ˈtʃɔuzn]	Выбирать
<u>come</u> [kʌm]	<u>came</u> [keim]	<u>come</u> [kʌm]	Приходить
<u>cost</u> [kɔst]	<u>cost</u> [kɔst]	<u>cost</u> [kɔst]	Стоить
<u>cut</u> [kʌt]	<u>cut</u> [kʌt]	<u>cut</u> [kʌt]	Резать
<u>do</u> [du:]	<u>did</u> [did]	<u>done</u> [dʌn]	Делать
<u>draw</u> [drɔ:]	<u>drew</u> [dru:]	<u>drawn</u> [drɔ:n]	Рисовать, тащить
<u>dream</u> [dri:m]	<u>dreamt</u> [dremt]	<u>dreamt</u> [dremt]	Мечтать, дремать
<u>drink</u> [drɪŋk]	<u>drank</u> [dræŋk]	<u>drunk</u> [drʌŋk]	Пить
<u>drive</u> [draiv]	<u>drove</u> [drouv]	<u>driven</u> [ˈdrɪvn]	Водить
<u>eat</u> [i:t]	<u>ate</u> [et]	<u>eaten</u> [ˈi:tn]	Есть
<u>fall</u> [fɔ:l]	<u>fell</u> [fel]	<u>fallen</u> [ˈfɔ:l(ə)n]	Падать
<u>feed</u> [fi:d]	<u>fed</u> [fed]	<u>fed</u> [fed]	Кормить
<u>feel</u> [fi:l]	<u>felt</u> [felt]	<u>felt</u> [felt]	Чувствовать
<u>fight</u> [fait]	<u>fought</u> [fɔ:t]	<u>fought</u> [fɔ:t]	Бороться
<u>find</u> [faɪnd]	<u>found</u> [faʊnd]	<u>found</u> [faʊnd]	Находить

fly [flai]	flew [flu:]	flown [floun]	Летать
forget [fə`get]	forgot [fə`gɔt]	forgotten [fə`gɔtn]	Забывать
forgive [fə`giv]	forgave [fə`geiv]	forgiven [fə`givn]	Прощать
freeze [fri:z]	froze [frouz]	frozen [`frouzn]	Замерзать
get [get]	got [gɔt]	got [gɔt]	Получать
give [giv]	gave [geiv]	given [givn]	Давать
go [gou]	went [went]	gone [gɔn]	Идти
grow [grou]	grew [gru:]	grown [groun]	Расти
have [hæv]	had [hæd]	had [hæd]	Иметь
hear [hiə]	heard [hə:d]	heard [hə:d]	Слышать
hit [hit]	hit [hit]	hit [hit]	Ударять
hold [hould]	held [held]	held [held]	Держать
hurt [hə:t]	hurt [hə:t]	hurt [hə:t]	Ушибить, ранить
keep [ki:p]	kept [kept]	kept [kept]	Держать, хранить
know [nou]	knew [nju:]	known [noun]	Знать
lay [lei]	laid [leid]	laid [leid]	Класть
lead [li:d]	led [led]	led [led]	Вести
learn [lə:n]	learnt [lə:nt]	learnt [lə:nt]	Учить
leave [li:v]	left [left]	left [left]	Оставлять
let [let]	let [let]	let [let]	Позволять
lie [lai]	lay [lei]	lain [lein]	Лежать
lose [lu:z]	lost [lɔst]	lost [lɔst]	Терять
make [meik]	made [meid]	made [meid]	Производить, делать
mean [mi:n]	meant [ment]	meant [ment]	Значить
meet [mi:t]	met [met]	met [met]	Встречать
mistake [mis`teik]	mistook [mis`tuk]	mistaken [mis`teik(ə)n]	Ошибаться
pay [pei]	paid [peid]	paid [peid]	Платить
prove [pru:v]	proved [pru:vd]	proved [pru:vd] proven [pru:vn]	Доказывать
put [put]	put [put]	put [put]	Положить
read [ri:d]	read [red]	read [red]	Читать
ring [riŋ]	rang [ræŋ]	rung [rʌŋ]	Звонить

rise [raɪz]	rose [rouz]	risen [ˈrɪzn]	Подниматься
run [rʌn]	ran [ræn]	run [rʌn]	Бежать
say [seɪ]	said [sed]	said [sed]	Сказать
see [si:]	saw [sɔ:]	seen [si:n]	Видеть
sell [sel]	sold [sould]	sold [sould]	Продавать
send [send]	sent [sent]	sent [sent]	Посылать
set [set]	set [set]	set [set]	Ставить, устанавливать
show [ʃou]	showed [ʃoud]	shown [ʃoun]	Показывать
shut [ʃʌt]	shut [ʃʌt]	shut [ʃʌt]	Закрывать
sing [sɪŋ]	sang [sæŋ]	sung [sʌŋ]	Петь
sit [sɪt]	sat [sæt]	sat [sæt]	Сидеть
sleep [sli:p]	slept [slept]	slept [slept]	Спать
speak [spi:k]	spoke [spouk]	spoken [ˈspouk(ə)n]	Говорить
spend [spend]	spent [spent]	spent [spent]	Тратить, проводить
spread [spred]	spread [spred]	spread [spred]	Распространяться
stand [stænd]	stood [stud]	stood [stud]	Стоять
swell [swel]	swelled [sweld]	swollen [ˈswoul(ə)n]	Опухать
swim [swɪm]	swam [swæm]	swum [swʌm]	Плавать
take [teɪk]	took [tuk]	taken [ˈteɪk(ə)n]	Брать, взять
teach [ti:tʃ]	taught [tɔ:t]	taught [tɔ:t]	Обучать
tell [tel]	told [tould]	told [tould]	Рассказывать
think [θɪŋk]	thought [θɔ:t]	thought [θɔ:t]	Думать
throw [θrou]	threw [θru:]	thrown [θroun]	Бросать
understand [ˌʌndəˈstænd]	understood [ˌʌndəˈstud]	understood [ˌʌndəˈstud]	Понимать
wake [weɪk]	woke [wouk]	woken [ˈwouk(ə)n]	Просыпаться
wear [weə]	wore [wɔ:]	worn [wɔ:n]	Носить (одежда)
win [wɪn]	won [wʌn]	won [wʌn]	Выигрывать
write [raɪt]	wrote [rout]	written [ˈrɪtn]	Писать