

Міністерство охорони здоров'я України  
Українська медична стоматологічна академія

ЗАТВЕРДЖЕНО  
на засіданні кафедри  
іноземних мов з латинською мовою  
та медичною термінологією  
Протокол № 1  
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Завідувач кафедри  
к. пед. н., доц. О.М. Беляєва

**МЕТОДИЧНІ ВКАЗІВКИ  
ДЛЯ САМОСТІЙНОЇ АУДИТОРНОЇ ТА ПОЗААУДИТОРНОЇ  
РОБОТИ СТУДЕНТІВ ПІД ЧАС ПІДГОТОВКИ  
ДО ПРАКТИЧНОГО ЗАНЯТТЯ**

Навчальна дисципліна	Англійська мова
Модуль № 1	Медична термінологія
Тема заняття	Захворювання травної системи
Курс	II
Факультет	медичний № 1,2 (нті)
Кваліфікація	освітня «Магістр медицини» професійна «Лікар»
Галузь знань	22 «Охорона здоров'я»
Спеціальність	222 «Медицина»

## 1. АКТУАЛЬНІСТЬ ТЕМИ

«Іноземна мова» як навчальна дисципліна ґрунтується на вивченні студентами медичної біології, фізики, фізіології та латинської мови та інтегрується з цими дисциплінами; закладає основи знань з медичної термінології з перспективою їх подальшого використання у професійній діяльності; поглиблює знання спеціальних дисциплін; формує уміння застосовувати отримані знання у професійній підготовці та складанні ліцензійного іспиту «Крок 1. Медицина» (субтест англійською мовою).

## 2. КОНКРЕТНІ ЦІЛІ

Засвоїти базову термінологію, що відноситься до теми «Захворювання травної системи».

Виокремлювати значення автохтонних і міжнародних (греко-латинських) словотворчих елементів медичних термінів, виводити значення незнайомих слів, спираючись на їхні структурні компоненти та контекст. Демонструвати знання термінів під час інтерпретації фахових текстів на релевантну тематику.

Актуалізувати та інтерпретувати граматичні явища і синтаксичні конструкції типові для текстів, мікротекстів та тестових завдань.

Визначати смислові опори в тексті та реченнях (терміни, ключові слова, граматичні основи).

Розвинути навички швидкого безперекладного читання тестових завдань до складання інтегрованого ліцензійного іспиту КРОК 1 «Медицина» з їх детальним розумінням. Інтерпретувати зміст завдань субтесту ліцензійного іспиту «Крок 1» на релевантну тематику англійською мовою.

## 3. БАЗОВІ ЗНАННЯ, ВМІННЯ, НАВИЧКИ, НЕОБХІДНІ ДЛЯ ВИВЧЕННЯ ТЕМИ (МІЖДИСЦИПЛІНАРНА ІНТЕГРАЦІЯ)

Назви попередніх дисциплін	Отримані навички
<ol style="list-style-type: none"><li>1. Латинська мова.</li><li>2. Англійська мова.</li><li>3. Нормальна анатомія.</li><li>4. Біологія.</li><li>5. Біохімія.</li><li>6. Мікробіологія.</li><li>7. Нормальна фізіологія.</li><li>8. Гістологія.</li></ol>	Розуміти та правильно вимовляти терміни, запозичені з латинської (грецької) мови. Знати основні поняття та терміни з теми. Використовувати раніше отриману інформацію в контексті певної ситуації спілкування англійською мовою за зазначеною темою. Знати граматичний матеріал, типовий для викладу теми.

## 4. ЗАВДАННЯ ДЛЯ САМОСТІЙНОЇ РОБОТИ ПІД ЧАС ПІДГОТОВКИ ДО ЗАНЯТТЯ

### 4.1. Перелік основних термінів, які повинен засвоїти студент при підготовці до заняття:

**store** [stO:] берегти, зберігати  
**mix** [mIks] змішувати, перемішувати  
**segment** ['segment] ділянка, сектор  
**cardiac** ['kQ:dIqk] кардіальний, що належить до проксимального відділу **fundus** ['fAndqs] дно  
**pyloric** [paI'lOrIk] пілоричний  
**curvature** ['kq:vQcQ] вигин  
**sphincter** ['sfINktq] сфінктер  
**juice** [Gu:s] сік

**protein** ['prqtI:n] білок, протеїн  
**serve** [sq:v] служити; виконувати  
**hydrochloric** ['haIdro'klOrIk] соляний, хлористий, хлористоводневий  
**create** [krI'eIt] виробляти, створювати  
**lining** ['laInIN] слизова оболонка  
**push** [puS] проштовхувати, штовхати  
**solid** ['sOlId] твердий  
**primarily** ['praImqrIII] здебільшого, головним чином

**antrum** ['xntɹqm] печера, порожнина

**processed** ['prqusest] оброблений,  
перероблений

#### 4.2. Теоретичні питання до заняття:

1. What do you know about Simple Tenses (Interrogative Form, Active Voice)?
2. In what cases is it used?

#### 4.3. Практичні завдання, які виконуються на занятті:

1. Вивчення лексико-фонетичного та граматичного матеріалу з теми.
2. Читання та переклад тексту.
3. Виконання лексичних вправ.
4. Відповіді на запитання з теми.
5. Анутовання тексту з теми.
6. Складання діалогів за темою.
7. Надання інформації за темою, що вивчається.

### 5. ЗМІСТ ТЕМИ

#### WORD-BUILDING

##### Term Element

**gastr(o)GR.-** (the stomach or belly)

**gastritis** – *inflammation of the stomach*

**gastroenteritis** – *inflammation of the gastrointestinal tract*

**gastroscope** – *inspection of the interior of the stomach with a gastroscope*

**gastrectomy** – *surgical removal of all or part of the stomach*

#### Ex.1. Add the missing part (A-C) to the beginning of the medical term (1-4). Translate the sentences into English.

1. Gastro\_\_\_\_\_ is an instrument inserted through the mouth for visually inspecting the inside of the stomach.
2. Gastroentero\_\_\_\_\_ is the branch of medicine that is concerned with disorders of the digestive system.
3. Gastr\_\_\_\_\_ can occur as a result of acid-induced damage to the lining of the stomach when no ulcer is present.
4. Gastr\_\_\_\_\_ is the surgical removal of all, or especially part of the stomach.

**A.** -scope; **B.** -itis; **C.** -ectomy; **D.** -logy.

#### GRAMMAR

##### Ex. 1. Familiarize yourself with the data of the following tables:

#### SIMPLE TENSES (Interrogative Form, Active Voice) General Questions

Tense	Auxiliary verb	Subject	Predicate (V)	... ?
Present Simple	<b>Do</b>	you (they, we, I)	work	at the hospital?
	<b>Does</b>	he (she, it)		
Past Simple	<b>Did</b>	I (he, she, it, you, we, they)	study	at the University?
Future Simple	<b>Will</b>	they (you, he, she, it)		

	<b>Shall</b>	I (we)	go	to the polyclinic?
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**Ex. 2. Translate the following interrogative sentences into Ukrainian:**

1. Do you study? 2. Does the physician make a morning round? 3. Does she listen to the patient's heart? 4. Did you have measles? 3. Does he have narcotic habit? 4. Will you go to the polyclinic for prophylactic examination in a week? 5. Does this physician work at the local polyclinic? 6. Did they go to the registry first? 7. Did he make a correct diagnosis?

**Ex. 3. Insert the auxiliary verbs:**

1. \_ he measure blood pressure every day? 2. \_ she work as a therapist? 3. \_ they attend many lectures yesterday? 4. \_ he go to the lab tomorrow? 5. \_ you make the appointment with the definite specialist two days ago?

**Ex. 4. Make the following sentences interrogative:**

**Note:**

- 1) Determine the tense-form;
- 2) Select auxiliary verb;
- 3) Keep the structure of the interrogative sentence.

1. Neurologists work at the polyclinic. 2. The physician knows all the symptoms of grippe. 3. My friend works at the therapeutic department. 4. The doctor measured patient's blood pressure. 5. They went out to the calls yesterday. 6. Our students made notes at the lecture. 7. Nick will fill in all case-histories. 8. We shall examine the heart and lungs of the patient.

**Ex. 5. Translate into English:**

1. Чи Ви навчаєтесь в педагогічному інституті? 2. Чи він вимірює кров'яний тиск своїх пацієнтів? 3. Чи ці студенти працювали в лікарні? 4. Чи лікар вчора оглянув цього хворого? 5. Чи вони переклали цей текст? 6. Чи він буде дотримуватися постільного режиму?

**Ex. 6. Familiarize yourself with the data of the following table:**

Special Questions				
Tense	Interrogative word	Auxiliary verb	Subject	Predicate ...?
<b>Present Simple</b>	What	<b>do</b>	I (you, we, they)	<b>V</b>
	Which When Where How many How much	<b>does</b>	he (she, it)	
<b>Past Simple</b>	How long Why	<b>did</b>	I (we, he, she, it, you, they)	<b>V</b>
<b>Future Simple</b>	How often	<b>shall</b> <b>will</b>	I (we) he (she, it, you, they)	<b>V</b>

**Examples:**

Where	<b>do</b>	you	<b>study?</b>
What Academy	<b>does</b>	this student	<b>study at?</b>

When	<b>does</b>	Bill	<b>work</b> at the hospital?
Why	<b>did</b>	Nick	<b>go</b> to the lab?
When	<b>will</b>	they	<b>enter</b> the Academy?

**NOTE:** У запитаннях до підмета або визначення підмета зберігається прямий порядок слів: *Who studies English? What specialists work here?*

**Ex. 7. Translate the following questions into Ukrainian:**

1. When does your working day begin? 2. What subjects will you study? 3. What did you do after classes yesterday? 4. What specialists does the medical faculty train? 5. How long does the course of training take at your Academy? 6. What does a physician do during the medical examination? 7. In what cases does a local physician go out to the calls?

**Ex. 8. Insert the auxiliary verbs:**

1. What Institute \_ Ann study at? 2. What faculty \_ you study at? 3. Why \_ you choose medicine as your speciality? 4. What specialists \_ your faculty train? 5. What clinical subjects \_ the medical students study? 6. How many credit tests \_ you take next term? 7. How many terms \_ the academic year have? 8. How long \_ doctors' training take? 9. What \_ a local physician write down in every patient's card last week?

**Ex. 9. Put the questions to the following sentences:**

1. Doctors' training takes six years. (How long...?) 2. The students will study clinical subjects. (What subjects...?) 3. Senior students acquire practical skills working at the hospitals and polyclinics. (Where...?) 4. In addition to the consulting hours at the polyclinic local physician goes out to the calls. (In what cases...?) 5. Yesterday the doctor put him on a sick-leave. (What...?)

**Ex. 10. Translate the following questions into English:**

1. У якому інституті Ви навчаєтесь? 2. Коли ваші студенти працюватимуть в лікарні? 3. Де він працював минулого року? 4. Які предмети вивчатимуть студенти-старшокурсники наступної зими? 5. Як Ви проводите фізикальний огляд пацієнта? 6. Як часто він вимірює кров'яний тиск?

## READING AND DEVELOPING SPEAKING SKILLS

**Ex.11. Read VOCABULARY and memorize new words.**

**Ex. 12. Read and translate the following words and word-combinations into your native language:**

Prolonged use of drugs, indigestion, nausea, vomiting, chronic disease, loss of appetite, peptic ulcer, disorder, deficiency, relief, relieve, medication, small intestine, protect, protecting, protective, inflammation, inflamed, inflame, inhibition, inhibit.

**Ex 13. Find the synonyms from the box to the words that follow:**

Symptom, to upset, severe, pain, medicine, to increase, to complete, effective, to reduce, treatment, nutrition.

Therapy  
Feeding  
Acute  
Remedy  
To enhance

Sign  
Restoration  
To perform  
To impair  
Ache

**Ex. 14. Read the following text:**

**GASTRITIS**

“Gastritis” is a general term that means inflammation of the lining of the stomach. It can result from a number of causes, each of which may produce somewhat different symptoms, such as: upper abdominal discomfort, nausea and vomiting, and diarrhea.

Gastritis can occur as a result of acid-induced damage to the lining of the stomach when no ulcer is present. Excessive smoking or alcohol consumption are known to produce mild gastritis or to aggravate existing gastritis symptoms. Gastritis also can be a side effect of a number of prescription drugs. Severe stress due to burns, trauma, surgery, or shock may produce gastritis. Gastritis is also seen in some persons whose stomachs do not produce acid. In these cases, the lining of the stomach is atrophied. This condition may be associated with vitamin B12 deficiency and occurs in many older people. Even very healthy people may experience gastritis with some regularity.

In most cases, the symptoms of gastritis are relatively mild and short-lived, pose no real danger, and have no lasting effect. Occasionally, gastritis may cause bleeding, but it is rarely severe.

Antacids in liquid or tablet form are a suitable and common treatment of mild gastritis. If a person is troubled by excessive acid and antacids fail to provide relief, the physician may prescribe drugs such as cimetidine, ranitidine, or nizatidine, which decrease the amount of acid produced by the stomach. Medication to protect the lining of the stomach may be used.

**Ex. 15. Translate the following words and word-combinations into English:**

Гастрит, запалення слизової оболонки, травна система, нудота, блювання, дискомфорт у верхній частині черевної порожнини, надмірне вживання ліків, побічна дія, кровотеча, нестача, дефіцит, ліки, захищати, призначати відповідне лікування, залежати від типу гастриту.

**Ex. 16. Translate the text “Gastritis” into your native language.**

**Ex. 17. Answer the following questions:**

1. What is gastritis? 2. What are the main causes of gastritis? 3. What are the symptoms of gastritis? 4. How is gastritis treated? 5. Do excessive smoking or alcohol consumption cause gastritis? 6. Can gastritis be a side effect of drugs' intake? 7. What types of gastritis do you know? 8. Is gastritis characterized by cough and high temperature? 9. What happens if gastritis is left untreated?

**Ex. 18. Choose the words and phrases that do not go with the topic “gastritis”**

AIDS, vomiting, high temperature, disorder, renal impairment, weight loss, nausea, stomach cells, hepatic, bronchitis, inflammation of stomach lining, insufficiency, tuberculosis.

**Ex. 19. Say whether the following statements are true or false.**

1. Gastritis is an inflammation of the lining of the stomach.
2. Gastritis is caused by autoimmune disorders.
3. Gastritis is characterized by fever and cough.
4. Treatment of gastritis includes taking antacids.
5. The most common symptom of gastritis is pain in the pelvic cavity.

6. Many people with gastritis experience no symptoms at all.

**Ex. 20. Read the dialogue in pairs and reproduce the similar one.**

**AT THE GASTROENTEROLOGIST'S**

**Gastroenterologist:** What can I do for you?

**Patient:** Well, I have been having these pains in my abdomen.

**Gastroenterologist:** In what part of abdomen do you feel the pain?

**Patient:** In the upper part. Just here.

**Gastroenterologist:** What kind of pain is it? Is your pain acute or dull?

**Patient:** It is dull. But sometimes I have colics in my stomach.

**Gastroenterologist:** Is your pain constant or periodic?

**Patient:** I feel it just after meals.

**Gastroenterologist:** Do you take any medicines when you feel the pain?

**Patient:** Yes, I do. I take some medicines and my pain disappears.

**Gastroenterologist:** How long did it last? Where does the pain radiate to?

**Patient:** The pain appeared some months ago. It often radiates to the back.

**Gastroenterologist:** Do you have a feeling of heaviness?

**Patient:** Yes, I do.

**Gastroenterologist:** Does anything else trouble you?

**Patient:** Sometimes I have nausea or vomiting.

**Gastroenterologist:** Do you obtain relief after vomiting?

**Patient:** Yes, I do.

**Gastroenterologist:** Now undress, please. I'll examine you. Show me your tongue, please. Your tongue is thickly coated. Lie down on the couch. I'll palpate your abdomen. The abdomen is symmetrically enlarged. Show me where the pain is. Is it painful when I press here?

**Patient:** Yes, it is.

**Gastroenterologist:** That's all. Dress yourself and sit down here. Listen to me attentively. First you have to make roentgenography of your abdomen and your gastric juice analysis. Then come to me and I'll prescribe you the treatment. Keep to a diet. Don't eat sour and salt meals. Avoid the physical exertion and emotional overstrain.

**Patient:** Thank you. I'll fulfill all your administrations.

**Ex. 21. Add the missing part of the clinical terms pertaining to the pathology of stomach:**

Gastr\_\_\_\_\_ (the surgical removal of all, or especially part of the stomach).

Gastr\_\_\_\_\_ (inflammation of the stomach lining).

Gastroentero\_\_\_\_\_ (the branch of medicine that is concerned with disorders of the digestive system).

Gastro\_\_\_\_\_ (a bleeding from the blood vessels and the stomach lining).

Gastro\_\_\_\_\_ (surgical incision into the stomach).

a) -logy; b) -itis; c) -ectomy; d) -tomy; e) -rrhagia.

**Ex 22. Translate into English:**

1. Гастрит – це запалення слизової оболонки шлунка, спричинене вживанням алкоголю чи використанням ліків.
2. Більшість людей, які хворіють на гастрит, спочатку не відчують певних розладів у роботі травної системи.
3. Гастрит супроводжується, як правило, нудотою, блюванням, втратою апетиту та відчуттям дискомфорту в шлунку.
4. Люди, які хворіють на гастрит, повинні уникати вживання гострої їжі, алкогольних напоїв тощо.
5. Антацидні препарати часто призначають для лікування гастриту.

**Ex. 23. Read the text.**

**STOMACH TUMOR**

Most gastric tumors are malignant. They affect twice as many women as men, usually between the ages of 50 and 70. Approximately 1 of 10 stomach tumors is benign. Like the malignant tumors, the most common early symptom of a benign tumor may be microscopic bleeding that can be detected only by laboratory examination of the stool.

The cause of malignant gastric tumor is unknown. Genetic factors may have some influence. They are 2 to 4 times more common in members of the immediate family of people with the disease.

There is no one symptom that will suggest that the person has a malignant gastric tumor. One of every four persons with a malignant tumor has the same symptoms as someone with a peptic ulcer. They are discomfort in the upper or middle region of the abdomen, black stools, and vomiting after meals. But other symptoms are more serious: vomiting of blood, weight loss, anemia, and bloated feeling after meals. Malignant tumor is difficult to treat. If the cancer is confined to the stomach, the chance of cure is good. However, the disease often has spread, and the chance of cure is then significantly decreased.

If the tumor is malignant, surgical removal offers the only chance to cure. The likelihood of success depends almost exclusively on whether the cancer has spread (metastasized) to other areas of the body. If the cancer is caught early and it is determined that surgery can remove all of the affected areas, full recovery is possible. Sometimes surgery may be recommended to alleviate pain, bleeding, or obstruction. In addition to surgery for malignant tumors, the physician may choose chemotherapy as an additional treatment, using a number of anticancer medications. Radiation is sometimes used, but both radiation and chemotherapy can only relieve the symptoms, they do not cure the cancer. If the cancer is too far advanced for chemotherapy or surgery to be effective, analgesic drugs may be used to reduce pain.

**Ex.24.Complete the sentences.**

1. The most common early symptom of a benign tumor is \_\_\_\_\_. 2. Some persons with a malignant tumor may have the same symptoms as persons with \_\_\_\_\_. 3. The most serious symptoms of a malignant tumor are \_\_\_\_\_. 4. Surgical removal offers the only chance to cure in patients with \_\_\_\_\_. 5. Full recovery is possible if the cancer is caught \_\_\_\_\_.

**Ex.25. Ask the questions and answer in pairs.**

1. Are the most gastric tumors benign? 2. What is the cause of malignant gastric tumor? 3. What are the symptoms of gastric tumor? 4. In what cases is the chance of cure good? 5. In what cases does the surgical removal offer the only chance to cure? 6. What does the likelihood of success depend on? 7. When may the physician choose chemotherapy as an additional treatment?

**Ex. 26. Read and translate into Ukrainian the tests for licensing examination "KROK 1".**

1. Electrophoretic study of a blood serum sample, taken from the patient with pneumonia, revealed an increase in one of the protein fractions. Specify this fraction:

A.  $\gamma$ -globulins B. Albumins C.  $\alpha_1$ -globulins D.  $\alpha_2$ -globulins E.  $\beta$ -globulins

2 Examination of an 18-year-old girl revealed the following features: hypoplasia of the ovaries, broad shoulders, narrow pelvis, shortening of the lower extremities, "sphinx neck". Mental development is normal. The girl was diagnosed with Turner's syndrome. What kind of chromosome abnormality is it?

A. Monosomy X B. Trisomy X C. Trisomy 13 D. Trisomy 18 E. Nullisomy X

3. Hypertrichosis is the Y-linked character. The father has hypertrichosis, and the mother is healthy. In this family, the probability of having a child with hypertrichosis is:



A. 0,5 B. 0,25 C. 0,125 D. 0,625 E. 1

4. A casualty has a fracture in the region of the inner surface of the left ankle. What is the most likely site for the fracture?

A. Medial malleolus B. Lower third of the fibula C. Astragalus D. Lateral malleolus E. Calcaneus

5. Some infectious diseases caused by bacteria are treated with sulfanilamides which block the synthesis of bacteria growth factor. What is the mechanism of their action?

A. They are antivitamins of para-amino benzoic acid B. They inhibit the absorption of folic acid C. They are allosteric enzyme inhibitors D. They are involved in redox processes E. They are allosteric enzymes

6. A 42-year-old male patient with gout has an increased blood uric acid concentration. In order to reduce the level of uric acid the doctor administered him allopurinol. Allopurinol is the competitive inhibitor of the following enzyme:

A. Xanthine oxidase B. Adenosine deaminase C. Adenine phosphoribosyltransferase D. Hypoxanthine- phosphoribosyltransferase E. Guanine deaminase

7. A 40-year-old female patient diagnosed with acute pancreatitis has been delivered to the admission department of a regional hospital. What drug should be administered the patient in the first place?

A. Contrycal B. Platyphyllin C. Atropine D. Metacin E. Pirenzepine

8. A patient consulted a doctor about being unable to abduct his right arm after a past trauma. Examination revealed that the passive movements were not limited. The patient was found to have the atrophy of the deltoid muscle. What nerve is damaged?

A. Axillary B. Radial C. Ulnar D. Median E. Suprascapular

9. After a trauma of the upper third of the anterior forearm a patient exhibits difficult pronation, weakening of palmar flexor muscles and impaired skin sensitivity of 1-3 fingers. Which nerve has been damaged?

A. n. medianus B. n. musculocutaneus C. n. ulnaris D. n. cutaneus antebrachii medialis E. n. radialis

10. A 38-year-old female patient complains of general weakness, cardiac pain, increased appetite, no menstruation. Objectively: the height is 166 cm, weight 108 kg, the patient has moon-shaped face, subcutaneous fat is deposited mainly in the upper body, torso and hips. There are also blood-red streaks. Ps- 62/min, AP- 160/105 mm Hg. Which of the following diseases is the described pattern of obesity most typical for?

A. Cushing pituitary basophilism B. Alimentary obesity C. Myxedema D. Insulinoma E. Babinski-Frohlich syndrome

11. A 60-year-old patient with a long history of atherosclerosis and a previous myocardial infarction developed an attack of retrosternal pain. 3 days later the patient was hospitalized and then died of progressive cardiovascular insufficiency. At autopsy a white fibrous depressed area about 3 cm in diameter with clear boundaries was found in the posterior wall of the left ventricle and interventricular septum. The dissector evaluated these changes as:

A. Focal cardiosclerosis B. Myocardial ischemia C. Myocardial infarction D. Myocarditis E. Myocardial degeneration

12. Measurements of the arterial pCO<sub>2</sub> and pO<sub>2</sub> during an attack of bronchial asthma revealed hypercapnia and hypoxemia respectively. What kind of hypoxia occurred in this case?  
A. Respiratory B. Hemic C. Circulatory D. Tissue E. Histotoxic
13. A female patient with bronchial asthma had taken prednisolone tablets (1 tablet 3 times a day) for 2 months. Due to a significant improvement of her condition the patient suddenly stopped taking it. What complication is likely to develop in this case?  
A. Withdrawal syndrome B. Cushing's syndrome C. Gastrorrhagia D. Upper body obesity E. Hypotension
14. A patient with suspected dysentery has been admitted to the infectious diseases hospital. Which basic method of laboratory diagnosis must be applied in the first place?  
A. Bacteriological B. Serological C. Allergic D. Biological E. Microscopic
15. During a surgery with the use of hygonium the patient had an abrupt fall in blood pressure. Blood pressure can be normalized by the representatives of the following drug group:  
A.  $\alpha$ -adrenergic agonists B.  $\alpha$ -blockers C. Ganglionic blockers D. M-cholinergic agents E. N-cholinergic agents
16. A patient with respiratory failure has blood pH of 7,35. pCO<sub>2</sub> test revealed hypercapnia. Urine pH test revealed an increase in the urine acidity. What form of acid-base imbalance is the case?  
A. Compensated respiratory acidosis B. Compensated metabolic acidosis C. Decompensated metabolic acidosis D. Compensated respiratory alkalosis E. Decompensated respiratory alkalosis
17. On examination a patient was found to have medial strabismus, the inward deviation of the eyeball and inability to abduct the eyeball outwards. What nerve is damaged?  
A. Abducent B. Oculomotor C. Ocular D. Trochlear E. Visual
18. A patient with a dislocated shoulder had been admitted to a hospital. With the purpose of skeletal muscle relaxation he was given an injection of relaxant dithylinum acting normally 5-7 minutes. However, the effect of dithylinum in this patient lasted up to 8 hours. What is the most likely cause of the prolonged effect of dithylinum in this patient?  
A. Genetic deficiency of blood cholinesterase B. Reduced activity of microsomal liver enzymes C. Reduced drug excretion D. Material accumulation of the drug E. Potentiation by another drug
19. As a result of an injury of the knee joint a patient shows a drawer sign, that is the anterior and posterior displacement of the tibia relative to the femur. What ligaments are damaged?  
A. Cruciate ligaments B. Arcuate popliteal ligaments C. Oblique popliteal ligament D. Interosseous membrane E. Collateral ligaments
20. The neurosurgical department has admitted a 54-year-old male complaining of no sensitivity in the lower eyelid skin, lateral surface of nose, upper lip. On examination the physician revealed the inflammation of the second branch of the trigeminal nerve. This branch comes out of the skull through the following foramen:  
A. Round foramen B. Lacerated foramen C. Oval foramen D. Spinous foramen E. Superior orbital fissure

## МАТЕРІАЛИ ДЛЯ САМОКОНТРОЛЮ

### А. Запитання для самоконтролю

1. What is gastritis? 2. What are the main causes of gastritis? 3. What are the symptoms of gastritis? 4. How is gastritis treated? 5. Do excessive smoking or alcohol consumption cause gastritis? 6. Can gastritis be a side effect of drugs' intake? 7. What types of gastritis do you know? 8. Is gastritis characterized by cough and high temperature? 9. What happens if gastritis is left untreated?

### Б. Тестові завдання

1. Insert the missing word: Gastritis can occur as a result of acid-induced \_\_\_\_ to the lining of the stomach when no ulcer is present.

- A. damage
- B. relief
- C. relieve
- D. remedy
- E. insufficiency

2. Insert the missing words: Gastritis also can be a \_\_\_\_ of a number of prescription drugs.

- A. side effect
- B. reason
- C. cause
- D. case
- E. disease

3. Insert the missing word: Severe stress due to burns, trauma, surgery, or shock may \_\_\_\_ gastritis.

- A. produce
- B. involve
- C. consist of
- D. compose
- E. lead

4. Insert the missing word: Even very healthy people may \_\_\_\_ gastritis with some regularity.

- A. experience
- B. vulnerable
- C. suffer
- D. produce
- E. maintain

5. Insert the missing word: Antacids in liquid or tablet form are a suitable and common \_\_\_\_ of mild gastritis.

- A. treatment
- B. treat
- C. prescription
- D. prescribe
- E. administration

6. Insert the missing word: Medication to \_\_\_\_ the lining of the stomach may be used.

- A. protect
- B. protection
- C. protective

- D. effect
- E. affect

7. Insert the missing word: By the movements of the \_\_\_\_ and cheek the food is turned around and chewed.

- A. tongue
- B. ton
- C. tang
- D. cheekbones
- E. temple

8. Insert the missing word: The \_\_\_\_ may be caused by an infection or a chemical reaction, such as a medicine you're taking or drinking too much alcohol.

- A. irritation
- B. irritate
- C. produce
- D. accumulation
- E. relief

9. Insert the missing word: Treatment for gastritis usually involves taking antacids and other drugs to \_\_\_\_ stomach acid.

- A. reduce
- B. release
- C. improve
- D. remove
- E. increase

10. Insert the missing word: The main cause of gastritis is \_\_\_\_ of the stomach lining.

- A. inflammation
- B. inflame
- C. inflammatory
- D. inflammable
- E. consumption

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Oxford University Press. – Режим доступу : **<http://www.oup.co.uk/>**

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Oxford DNB, online references, etc. – Режим доступу :

Longman Dictionary. – Режим доступу: **<http://www.ldoceonline.com/>**

Internet Grammar of English (very academic). – Режим доступу :

**<http://www.ucl.ac.uk/internet-grammar/home.htm>**

English Grammar and Writing online. – Режим доступу :

**<http://www.edufind.com/english/grammar/>**

Good tests and exercises in English Grammar. – Режим доступу :

**<http://www.usingenglish.com/online-tests.html>**

Методичні рекомендації укладено к. філол. н., ст. викл. Мелашенко М.П.

Міністерство охорони здоров'я України  
Українська медична стоматологічна академія

ЗАТВЕРДЖЕНО  
на засіданні кафедри  
іноземних мов з латинською мовою  
та медичною термінологією  
Протокол № 1  
«30» серпня 2019 р.  
Завідувач кафедри  
к. пед. н., доц. О.М. Беляєва

**МЕТОДИЧНІ ВКАЗІВКИ  
ДЛЯ САМОСТІЙНОЇ АУДИТОРНОЇ ТА ПОЗААУДИТОРНОЇ  
РОБОТИ СТУДЕНТІВ ПІД ЧАС ПІДГОТОВКИ  
ДО ПРАКТИЧНОГО ЗАНЯТТЯ**

Навчальна дисципліна	Англійська мова
Модуль № 1	Медична термінологія
Тема заняття	Нервова система
Курс	II
Факультет	медичний № 1,2 (нті)
Кваліфікація	освітня «Магістр медицини» професійна «Лікар»
Галузь знань	22 «Охорона здоров'я»
Спеціальність	222 «Медицина»

## 1. АКТУАЛЬНІСТЬ ТЕМИ

«Іноземна мова» як навчальна дисципліна ґрунтується на вивченні студентами медичної біології, фізики, фізіології та латинської мови та інтегрується з цими дисциплінами; закладає основи знань з медичної термінології з перспективою їх подальшого використання у професійній діяльності; поглиблює знання спеціальних дисциплін; формує уміння застосовувати отримані знання у професійній підготовці та складанні ліцензійного іспиту «Крок 1. Медицина» (субтест англійською мовою).

## 2. КОНКРЕТНІ ЦІЛІ

Засвоїти базову термінологію, що відноситься до теми «Нервова система».

Виокремлювати значення автохтонних і міжнародних (греко-латинських) словотворчих елементів медичних термінів, виводити значення незнайомих слів, спираючись на їхні структурні компоненти та контекст. Демонструвати знання термінів під час інтерпретації фахових текстів на релевантну тематику.

Актуалізувати та інтерпретувати граматичні явища і синтаксичні конструкції типові для текстів, мікротекстів та тестових завдань.

Визначати смислові опори в тексті та реченнях (терміни, ключові слова, граматичні основи).

Розвинути навички швидкого безперекладного читання тестових завдань до складання інтегрованого ліцензійного іспиту КРОК 1 «Медицина» з їх детальним розумінням. Інтерпретувати зміст завдань субтесту ліцензійного іспиту «Крок 1» на релевантну тематику англійською мовою.

## 3. БАЗОВІ ЗНАННЯ, ВМІННЯ, НАВИЧКИ, НЕОБХІДНІ ДЛЯ ВИВЧЕННЯ ТЕМИ (МІЖДИСЦИПЛІНАРНА ІНТЕГРАЦІЯ)

Назви попередніх дисциплін	Отримані навички
1. Латинська мова. 2. Англійська мова. 3. Нормальна анатомія. 4. Біологія. 5. Біохімія. 6. Мікробіологія. 7. Нормальна фізіологія. 8. Гістологія.	Розуміти та правильно вимовляти терміни, запозичені з латинської (грецької) мови. Знати основні поняття та терміни з теми. Використовувати раніше отриману інформацію в контексті певної ситуації спілкування англійською мовою за зазначеною темою. Знати граматичний матеріал, типовий для викладу теми.

## 4. ЗАВДАННЯ ДЛЯ САМОСТІЙНОЇ РОБОТИ ПІД ЧАС ПІДГОТОВКИ ДО ЗАНЯТТЯ

### 4.1. Перелік основних термінів, які повинен засвоїти студент при підготовці до заняття:

**neuron** ['nju:qɹɒn] нейрон

**branching** ['brʌŋkɪŋ] розгалуження, гілкування

**axon** ['xksɒn] аксон, провідна частина нервової клітини, відросток нервової клітини

**dendrite** ['dɛndraɪt] дендрит, відросток нервової клітини, що розгалуджується

**synapse** ['sɪnəpsɪs] синапс

**spinal cord** ['spʌɪnəl 'kɔ:d] спинний мозок

**afferent** ['æfɪrɪnt] аферентний

**efferent** ['ɛfɪrɪnt] еферентний, відцентровий

**forth** ['fɔ:t] вперед, далі

**distribution** ['dɪstrɪ'bju:ʃ(ə)n] розподіл

**brainstem (brain stem)** ['breɪnstɛm] стовбур головного мозку

**hypothalamus** ['həlpə'tæləməs] гіпоталамус

**blood supply** ['blʌd sʌplai]

**meninges** (sing. meninx) [mɪ'nɪŋdʒɪz]  
 мозкові оболонки  
**dura mater** ['djʊɑrə 'mɛltə] тверда мозкова оболонка  
**arachnoid** [ə'ræknɔɪd] павутинна оболонка (мозку)  
**pia mater** ['paɪə 'mɛltə] м'яка мозкова оболонка  
**innermost** ['ɪnəməʊst] той, що знаходиться глибоко усередині; внутрішній  
**relay** [rɪ'leɪ] передавати

кровопостачання  
**critical** ['krɪtɪkəl] важливий, суттєвий, необхідний  
**signal** ['sɪɡnəl] сигнал  
**output** ['aʊtpʊt] об'єм  
**consume** [kən'sju:m] вживати, поглинати, споживати  
**action potential** ['æksən pəʊ'tɛnʃ(ə)l] потенціал дії  
**viscera** ['vɪsɪərə] внутрішні органи

#### 4.2. Теоретичні питання до заняття:

1. What are the main functions of Participle II in the sentences?

#### 4.3. Практичні завдання, які виконуються на занятті:

1. Вивчення лексико-фонетичного та граматичного матеріалу з теми.
2. Читання та переклад тексту.
3. Виконання лексичних вправ.
4. Відповіді на запитання з теми.
5. Анутовання тексту з теми.
6. Складання діалогів за темою.
7. Надання інформації за темою, що вивчається.

### 5. ЗМІСТ ТЕМИ

#### WORD-BUILDING COMPOUND WORDS

##### Ex. 1. Familiarize yourself with the following material:

head *голова* + ache *біль* = headache *головний біль*

##### Ex. 2. Read and translate the following words:

Textbook; homework; stomachache; toothache; gallbladder; cheekbone; eyebrow.

#### GRAMMAR

##### Ex. 3. Read the following grammar material:

#### PARTICIPLE II (V<sub>3</sub>)

Infinitive	Participle II
deliver	delivered
treat	treated
say	said
make	made
take	taken

##### Ex. 4. Form Participles II from the following infinitives:

**A.** locate, call, connect, examine, remember, love, need, graduate, include, obtain;

**B.** begin, come, give, know, see, feel, give, go, cut, do, find, send, sleep, speak, write.

##### Ex. 5. Read the following examples:

1. <b>Measured</b> blood pressure was very high.	1. Виміряний кров'яний тиск був дуже високий.
2. Blood pressure <b>measured</b> was high.	2. Виміряний кров'яний тиск був високим.
3. Blood pressure <b>measured</b> by the doctor	3. Кров'яний тиск, виміряний лікарем, був



was very high.

ВИСОКИМ.

**Ex. 6. Read and translate the following sentences:**

1. Prescribed medicine is useful for this patient. 2. The operation performed under general anaesthesia was very complex. 3. Injured leg hurts very badly. 4. The examined patient was seriously ill. 5. All drugs taken from the chemist's shop must be returned. 6. The problems discussed at the conference are very important for cardiologists. 7. Our scientists know about great successes achieved by them. 8. One of the greatest contributions to the world science made by V. Vorobyov was "Atlas on Human Anatomy". 9. Young specialist graduated from the Medical University works as intern. 10. The patient directed to make blood analyses had grippe.

**Ex. 7. Translate the sentences containing Participles II into Ukrainian:**

1. O.M. Shumlyansky described the kidney texture. 2. The outstanding Ukrainian anatomist V.P. Vorobyov born in Odesa finished gymnasium. 3. He improved his education in the field of obstetrics and received his doctor's degree. 4. The Institute of Eye Diseases named after V.P. Filatov in Odesa is one of the largest clinics in Ukraine. 5. A new school built for poor children was very popular in 19<sup>th</sup> century. 6. O. Bohomolets graduated from the medical faculty was a director of the Institute of Hematology and Transfusion.

## READING AND DEVELOPING SPEAKING SKILLS

**Ex. 8. Read VOCABULARY and memorize new words.**

**Ex. 9. Compose 2-3- sentences using the words of VOCABULARY.**

**Ex. 10. Insert the missing letters and translate the following words and word-combinations:**

S\_napse; effer\_nt; menin\_es; h\_pothalamus; den\_rite; vis\_era; sp\_nal cord; brain\_tem; dura m\_ter; a\_on; arac\_noid; ne\_ron.

**Ex. 11. Read the following words and word-combinations:**

Neuron; branching fiber; chemical; peripheral; spinal cord; vertebrae; meninges; liquid; numerous; sources; primarily; potential; muscle; blood flow; sweating.

**Ex. 12. Read the following text:**

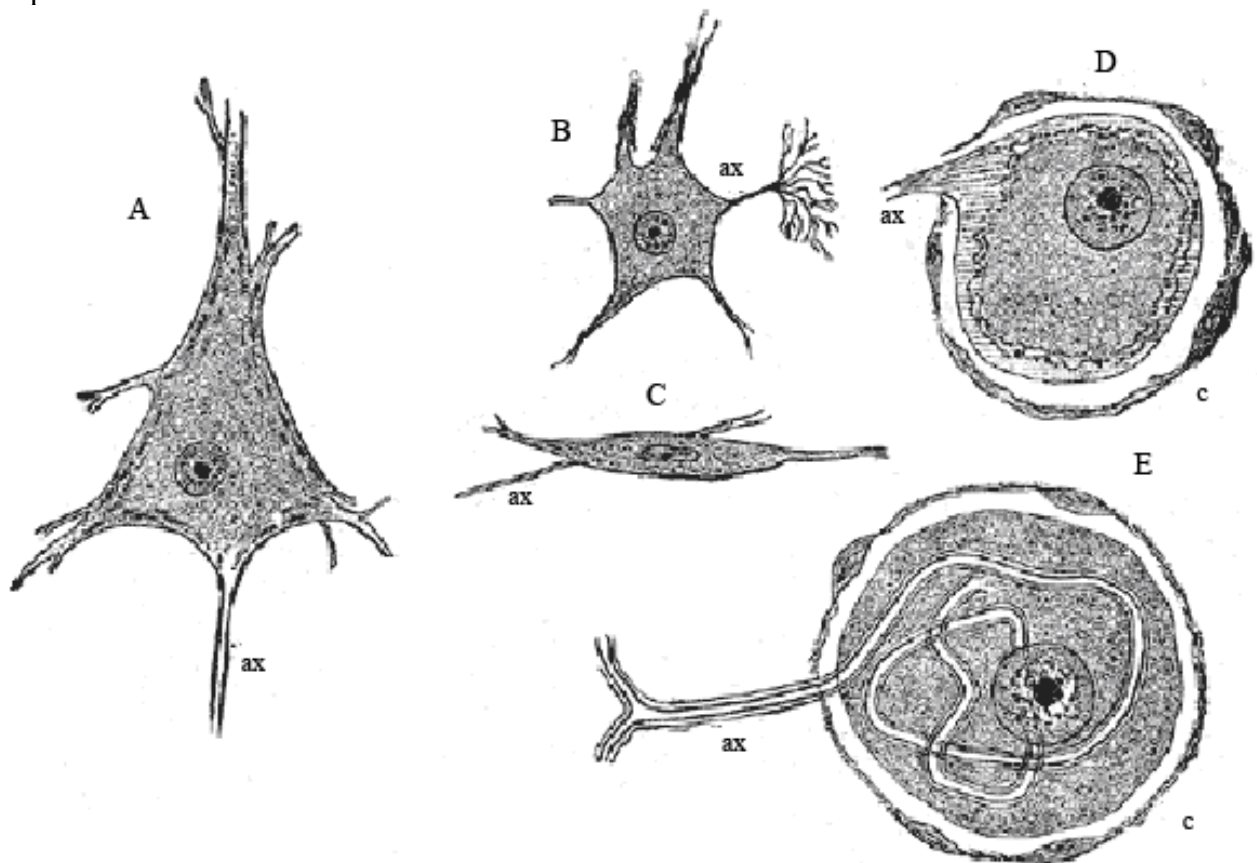
### NERVOUS SYSTEM

The nervous system is the human's information center and control system. The basic unit in the system is the nerve cell, called neuron. A neuron consists of a cell body, one major branching fiber (axon), and numerous smaller branching fibers (dendrites). Each neuron is connected to other neurons by synapses on the axons and dendrites. A neuron receives chemical signals from other neurons through the synapses. All of these incoming signals are combined as an electrical signal within the neuron, and it may or may not send an outgoing chemical signal down its axon to another set of synapses. The nervous system can be divided into central nervous system (CNS) and peripheral nervous system (PNS).

The CNS processes information, initiates responses, and integrates mental processes. The central nervous system consists of the brain and the spinal cord. The brain is protected by the skull, and the spinal cord is protected by the vertebrae. Three connective tissue layers (the meninges) surround and protect the brain and spinal cord. They are dura mater (outermost), arachnoid (middle), and pia mater (innermost). In addition, a liquid called cerebrospinal fluid, between the arachnoid and pia mater, protects the brain and spinal cord from injury.

The peripheral nervous system (PNS) consists of cranial part, consisting of 12 pairs of nerves, and spinal part, consisting of 31 pairs of nerves. The PNS collects information from numerous sources both inside and on the surface of the individual and relays it by way of afferent fibers to the central nervous system. Efferent fibers in the PNS relay information from the CNS to various parts of the body, primarily to muscles and glands. Peripheral nerves run from the spinal cord to all parts of the body.

The parts of this system are named for the four spinal regions from which they branch: neck (cervical), chest (thoracic), lower back (lumbar), and pelvis (sacral). The spinal cord acts as a central communication network to transmit signals back and forth between the brain and peripheral nervous system. Two subdivisions comprise the PNS: the afferent, or sensory, division and the efferent, or motor, division. Afferent neurons carry action potentials from the periphery to the CNS, and efferent neurons carry action potentials from the CNS to the periphery. The efferent neurons belong to either the somatomotor (somatic) nervous system, which supplies skeletal muscles, or to the autonomic nervous system (ANS), which supplies smooth muscles, cardiac muscle, and glands. The ANS regulates the activities of viscera such as the heart, blood vessels, digestive organs and reproductive organs. This system controls distribution of blood flow, regulation of blood pressure, heartbeat, sweating, and body temperature.



*Various forms of nerve cells.*

*A. Pyramidal cell. B. Small multipolar cell, in which the axon quickly divides into numerous branches. C. Small fusiform cell. D and E. Ganglion cells (E shows T-shaped division of axon). ax. Axon. c. Capsule.*

**Ex. 13. Translate the following words and word-combinations into English:**

Дендрит; стовбур головного мозку; аксон; включати; синапс; поглинати; аферентний; внутрішні органи; мозкова оболонка; спинний мозок; павутинна оболонка (мозку); м'яка мозкова оболонка; тверда мозкова оболонка.

**Ex. 14. Translate the text “Nervous System” into Ukrainian.**

**Ex. 15. Answer the following questions:**

1. What is the nervous system of the human?
2. What is the major unit of this system?
3. What does a neuron consist of?
4. How is neuron connected to other neurons?
5. What is the function of a neuron?
6. What parts is the nervous system divided into?
7. What does the CNS consist of?
8. Where are the brain and spinal cord located?
9. What meninges do you know?
10. What is cerebrospinal fluid?
11. What parts is the PNS composed of?
12. What neurons does the PNS consist of?
13. What is the function of PNS?
14. What is the function of the spinal cord?
15. What is the major function of the ANS?

**Ex. 16. Insert the missing words:**

1. The nervous system is the information center and \_ system. 2. The basic \_ is the neuron. 3. A neuron \_ a cell body, axon, and dendrites. 4. A neuron \_ chemical signals from other neurons through the \_. 5. Neuron sends an outgoing \_ signal to another synapses. 6. The nervous system is divided into \_ nervous system and \_ nervous system. 7. The central nervous system consists of the brain and the \_. 8. The meninges surround and \_ the brain and spinal cord. 9. They are dura mater, \_, and pia mater. 10. The peripheral nervous system \_ cranial part and spinal part. 11. It is composed of afferent and \_ neurons. 12. The peripheral nervous system collects information from numerous sources and \_ it to the central nervous system. 13. The autonomic nervous system \_ smooth muscle, cardiac muscle, and glands. 14. It regulates the \_ of the heart, blood vessels, digestive organs and reproductive organs. 15. The somatic nervous system transmits action potentials from \_ to skeletal muscles.

**Ex. 17. Try to organize the information of the text in table:**

Parts of the nervous system	Structure	Function
CNS		
PNS		

### Ex. 18. Crossword.

**Find key word:**

							1							
							2							
							3							
						4								
						5								
						6								
						7								
						8								
						9								

1. Functional membrane-to-membrane contact of a nerve cell with another nerve cell, muscle cell, gland cell, or sensory receptor; functions in the transmission of action potentials from cell to another.
2. Portion of the brain derived from the telencephalon: the cerebral hemispheres, including cerebral cortex, cerebral medulla, and basal ganglia.
3. Important autonomic and neuroendocrine control center beneath the thalamus.
4. Basic living subunit of humans, plants, and animals.
5. Bundle of nerve fibers and accompanying connective tissue located outside of the central nervous system.
6. Morphological and functional unit of the nervous system, consisting of the nerve cell body, the dendrites, and the axon.
7. Neuron cell body or the enlarged portion of the neuron containing the nucleus and other organelles.
8. Portion of the brain consisting of the midbrain, pons, and medulla oblongata.
9. Perspiration; secretions produced by the sweat glands of the skin.

**Ex. 19. Insert the prepositions (to; at; by; for; of; from, about):**

1. Connections between autonomic and other brain functions occur \_ the brainstem and hypothalamus. 2. The arterial blood supply, carrying oxygen and nutrients, is critical \_ the functioning of the brain. 3. Despite its small size and weight, the brain uses 20 percent of the heart's output of blood and 20 percent of the oxygen consumed \_ the body at rest. 4. The major function of nervous system is to collect information \_ the external conditions in relation to the body's external state, and to analyze this information. 5. The peripheral nervous system is responsible \_ the body functions, which are not under conscious control like the heartbeat or the digestive system. 6. The nervous system uses electrical impulses, which travel along the length \_ the cells. 7. The cell processes information \_ the sensory nerves and initiates an action within milliseconds.

**Ex. 20. Write out key words of the text “Nervous System”.**

**Ex. 21. Make up a plan of the text “Nervous System”.**

**Ex. 22. Speak on the structure and functions of nervous system.**

**Ex. 23. Compose the dialogue on nervous system.**

**Ex. 24. Find in the dictionary unknown medical terms from the text “Spinal Cord” and memorize them.**

**Ex. 25. Read the following text and retell it:**

### **SPINAL CORD**

The spinal cord is extremely important to the overall function of the nervous system. It is the communication link between the brain and the peripheral nervous system inferior to the head, integrating incoming information and producing responses through reflex mechanisms.

The spinal cord extends from the foramen magnum to the level of the second lumbar vertebra. It is shorter than the vertebral column because it does not grow as rapidly as the vertebral column during embryonic development. It is composed of cervical, thoracic, lumbar, and sacral segments, which are named according to the area of the vertebral column from which their nerves enter and exit. Because the spinal cord is shorter than the vertebral column, the nerves do not always exit the vertebral column at the same level that they exit the spinal cord. Thirty-one pairs of the spinal nerves exit the spinal cord and pass out of the vertebral column through the intervertebral foramina.

The spinal cord is not uniform in diameter throughout its length. There is a general decrease in diameter superiorly to inferiorly, and there are two enlargements where nerves supplying the limbs enter and leave the cord. The cervical enlargement in the inferior cervical region corresponds to the location at which nerves that supply the upper limbs enter or exit the cord, and the lumbosacral enlargement in the inferior thoracic and superior lumbar regions is the site at which the nerves that supply the lower limbs enter or exit.

Immediately inferior to the lumbar enlargement the spinal cord tapers to form a cone-like region called the conus medullaris. Its tip is at the level of the second lumbar vertebra and is the inferior end of the spinal cord. A connective tissue filament, the filum terminale, extends inferiorly from the apex of the conus medullaris to the coccyx and functions to anchor the cord to the coccyx. The nerves supplying the legs and other inferior structures of the body (L2 to S5) exit the lumbar enlargement and conus medullaris, course inferiorly through the vertebral canal, and exit through the intervertebral foramina from L2 to S5. The conus medullaris and the numerous nerves extending inferiorly from it resemble a horse's tail and are therefore called the cauda equina.

**Ex. 26. Read and translate into Ukrainian the tests for licensing examination “KROK 1”.**

1. A male patient is 28 years old. Histological study of a cervical lymph node revealed a change of its pattern due to the proliferation of epithelioid, lymphoid cells and macrophages having nuclei in form of a horseshoe. In the center of some cell clusters there were non-structured light-pink areas with fragments of nuclei. What disease are these changes typical for?

A. Tuberculosis B. Hodgkin's disease C. Actinomycosis D. Tumor metastasis E. Syphilis

2. A 35-year-old male patient has been referred by an andrologist for the genetic counselling for the deviations of physical and mental development. Objectively: the patient is tall, has asthenic constitution, gynecomastia, mental retardation. Microscopy of the oral mucosa cells revealed sex chromatin (single Barr body) in 30% of cells. What is the most likely diagnosis?

A. Klinefelter syndrome B. DiGeorge syndrome C. Down syndrome D. Recklinghausen's disease E. Cushing pituitary basophilism

3. A patient with jaundice has high total bilirubin that is mainly indirect (unconjugated), high concentration of stercobilin in the stool and urine. The level of direct (conjugated) bilirubin in the blood plasma is normal. What kind of jaundice can you think of?

A. Hemolytic B. Parenchymal (hepatic) C. Mechanical D. Neonatal jaundice E. Gilbert's disease

4. A male with a lesion of one of the CNS parts has asthenia, muscular dystonia, balance disorder. Which CNS part has been affected?

A. Cerebellum B. Black substance C. Reticular formation D. Red nuclei E. Vestibular nuclei

5. A 50-year-old patient has been administered laevomycetin for the treatment of typhoid fever, but on the next day the patient's condition worsened, the temperature rose to 39,60C. The deterioration of the patient's condition can be explained by:

A. Effects of endotoxins of the causative agent B. Allergic reaction C. Insensitivity of the pathogen to laevomycetin D. Secondary infection E. Re-infection

6. A 12-year-old patient has been admitted to a hospital for hemarthrosis of the knee joint. From early childhood he suffers from frequent bleedings. Diagnose the boy's disease:

A. Hemophilia B. Hemorrhagic vasculitis C. Hemolytic anemia D. B12 (folic acid)-deficiency anemia E. Thrombocytopenic purpura

7. Examination of a patient with ischemic heart disease revealed the impaired venous blood flow in the territory of the cardiac vein running in the anterior interventricular sulcus of heart. What vein is it?

A. V. cordis magna B. V. cordis media C. V. cordis parva D. V. posterior ventriculi sinistri E. V. obliqua atrii sinistri

8. For the direct injection of medications into the liver surgeons use the round ligament of liver. This manipulation involves bougienage (lumen dilatation) of the following vessel:

A. V. umbilicalis B. A. umbilicalis C. Ductus venosus D. V. porta E. A. hepatica propria

9. A patient with lobar pneumonia has had body temperature of 39oC with daily temperature fluctuation of no more than 1oC for 9 days. This fever can be characterized by the following temperature curve:

A. Persistent B. Hectic C. Remittent D. Hyperpyretic E. Recurrent

10. The temperature in a production room is 36oC. Relative air humidity is 80%. Under these conditions the human body transfers heat mainly through:

A. Sweat evaporation B. Heat conduction C. Radiation D. Convection E. –

11. A hospitalized patient bitten by a rabid animal has an avulsive wound of shin. What kind of vaccine must be given to prevent rabies?

A. Anti-rabies vaccine B. DTaP C. Td D. BCG E. TABte

12. At autopsy the occipital lobe of brain was found to have a cavity 2,5x1,5 cm large filled with a transparent liquid. The cavity had smooth brownish walls. What process had developed in the brain?

A. Cyst on the site of a hemorrhage B. Softening of the cerebrocortical grey matter C. Brain abscess D. Paracephalia E. A cyst on the site of the softening of the cerebrocortical grey matter

13. A child entering the school for the first time was given Mantoux test in order to determine if there was a need for revaccination. The reaction was negative. What is the meaning of this test result?

A. No cell-mediated immunity to tuberculosis B. Availability of cell-mediated immunity to tuberculosis C. No antibodies to the tuberculosis bacteria D. No anti-toxic immunity to tuberculosis E. Presence of antibodies to the tuberculosis bacteria

14. Study of the biopsy material revealed a granuloma consisting of lymphocytes, plasma cells, macrophages with foamy cytoplasm (Mikulicz cells), many hyaline globules. What disease can you think of?

A. Rhinoscleroma B. Leprosy C. Syphilis D. Tuberculosis E. Actinomycosis

15. Autopsy of a 78-year-old patient revealed that retroperitoneal tissue was soaked with blood, the abdominal aorta had a sacciform protrusion including a defect with irregular edges. The wall of the aorta was here and there of stone-like density. This is the complication of the following disease:

A. Atherosclerosis B. Essential hypertension C. Systemic vasculitis D. Visceral syphilis E. Marfan syndrome

16. Glycogen polysaccharide is synthesized from the active form of glucose. The immediate donor of glucose residues during the glycogenesis is:

A. UDP-glucose B. Glucose-1-phosphate C. ADP-glucose D. Glucose-6-phosphate E. Glucose-3-phosphate

17. After the diagnostic tests a 40-year-old male has been referred for the lymphography of the thoracic cavity. The surgeon revealed that the tumor had affected an organ whose lymphatic vessels drain directly into the thoracic duct. Specify this organ:

A. Esophagus B. Trachea C. Left main bronchus D. Heart E. Pericardium

18. A patient with biliary dyskinesia and constipations has been prescribed a cholagogue having also a laxative effect. What drug has been administered?

A. Magnesium sulfate B. Allochol C. Cholosas D. Cholenzyme E. Nicodinum

19. It is known that individuals with genetically caused deficiency of glucose-6-phosphate dehydrogenase may develop RBC hemolysis in response to the administration of some antimalarial drugs. Manifestation of adverse reactions to drugs is called:

A. Idiosyncrasy B. Allergy C. Sensibilization D. Tachyphylaxis E. Tolerance

20. A 40-year-old patient with the progressing staphylococcal purulent periodontitis developed purulent inflammation of bone marrow spaces of the alveolar process, and then of the body of

mandible. Microscopy revealed thinning of bone trabeculae, foci of necrosis, bone sequestrars surrounded by the connective tissue capsule. What is the most likely diagnosis?

- A. Chronic osteomyelitis B. Acute osteomyelitis C. Parodontoma D. Chronic fibrous periostitis  
E. Purulent abscess

### **МАТЕРІАЛИ ДЛЯ САМОКОНТРОЛЮ**

#### **A. Запитання для самоконтролю**

1. What is the nervous system of the human?
2. What is the major unit of this system?
3. What does a neuron consist of?
4. How is neuron connected to other neurons?
5. What is the function of a neuron?
6. What parts is the nervous system divided into?
7. What does the CNS consist of?
8. Where are the brain and spinal cord located?
9. What meninges do you know?
10. What is cerebrospinal fluid?
11. What parts is the PNS composed of?

#### **Б. Тестові завдання**

1. Insert the missing words: The nervous system is the information center and \_\_\_\_ system.  
A. control  
B. delivery  
C. provisional  
D. providing  
E. supportive
2. Insert the missing words: \_\_\_\_ make up the conducting tissue of the nervous system.  
A. neurons  
B. mast cells  
C. myelin  
D. synapse  
E. relapse
3. Insert the missing words: The autonomic nervous system \_\_\_\_\_ smooth muscle, cardiac muscle, and glands.  
A. supplies  
B. contains  
C. involves  
D. consists  
E. concludes
4. Insert the missing words: The somatic nervous system transmits action potentials from \_\_\_\_ to skeletal muscles.  
A. brain  
B. periphery  
C. spinal cord  
D. environment  
E. sensory organs

5. Insert the missing words: The CNS \_\_\_\_ information, \_\_\_\_ responses, and integrates mental processes.
- A. processes, initiates
  - B. initiates, processes
  - C. suppresses, informs,
  - D. interacts, initiates,
  - E. initiates, interacts
6. Insert the missing words: Neurons have special structures that allow them \_\_\_\_ signals rapidly and precisely to other cells.
- A. to send
  - B. to get
  - C. to put
  - D. to take
  - E. sold
7. Insert the missing words: Both autonomic and enteric nervous systems function \_\_\_\_.
- A. involuntarily
  - B. voluntarily
  - C. voluntary
  - D. involuntary
  - E. unexpectedly
8. Insert the missing words: The \_\_\_\_ part of the nervous system consists of the nerves that innervate the skin, joints, and muscles.
- A. somatic
  - B. visceral
  - C. somatic
  - D. sympathetic
  - E. autonomic
9. Insert the missing words: Most neurons send signals via their \_\_\_\_.
- A. axons
  - B. dendrites
  - C. synaptic vesicles
  - D. receptors
  - E. glands
10. Insert the missing words: Physically, the brain and spinal cord are surrounded by tough \_\_\_\_ membranes.
- A. meningeal
  - B. myeline
  - C. ventricular
  - D. osseous
  - E. sublinear



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<http://www.usingenglish.com/online-tests.html>

Методичні рекомендації укладено к. філол. н., ст. викл. Мелашенко М.П.

Міністерство охорони здоров'я України  
Українська медична стоматологічна академія

ЗАТВЕРДЖЕНО  
на засіданні кафедри  
іноземних мов з латинською мовою  
та медичною термінологією  
Протокол № 1  
«30» серпня 2019 р.  
Завідувач кафедри  
к. пед. н., доц. О.М. Беляєва

**МЕТОДИЧНІ ВКАЗІВКИ  
ДЛЯ САМОСТІЙНОЇ АУДИТОРНОЇ ТА ПОЗААУДИТОРНОЇ  
РОБОТИ СТУДЕНТІВ ПІД ЧАС ПІДГОТОВКИ  
ДО ПРАКТИЧНОГО ЗАНЯТТЯ**

Навчальна дисципліна	Англійська мова
Модуль № 1	Медична термінологія
Тема заняття	Захворювання нервової системи
Курс	II
Факультет	медичний № 1,2 (нті)
Кваліфікація	освітня «Магістр медицини» професійна «Лікар»
Галузь знань	22 «Охорона здоров'я»
Спеціальність	222 «Медицина»

## 1. АКТУАЛЬНІСТЬ ТЕМИ

«Іноземна мова» як навчальна дисципліна ґрунтується на вивченні студентами медичної біології, фізики, фізіології та латинської мови та інтегрується з цими дисциплінами; закладає основи знань з медичної термінології з перспективою їх подальшого використання у професійній діяльності; поглиблює знання спеціальних дисциплін; формує уміння застосовувати отримані знання у професійній підготовці та складанні ліцензійного іспиту «Крок 1. Медицина» (субтест англійською мовою).

## 2. КОНКРЕТНІ ЦІЛІ

Засвоїти базову термінологію, що відноситься до теми «Захворювання нервової системи».

Виокремлювати значення автохтонних і міжнародних (греко-латинських) словотворчих елементів медичних термінів, виводити значення незнайомих слів, спираючись на їхні структурні компоненти та контекст. Демонструвати знання термінів під час інтерпретації фахових текстів на релевантну тематику.

Актуалізувати та інтерпретувати граматичні явища і синтаксичні конструкції типові для текстів, мікротекстів та тестових завдань.

Визначати смислові опори в тексті та реченнях (терміни, ключові слова, граматичні основи).

Розвинути навички швидкого безперекладного читання тестових завдань до складання інтегрованого ліцензійного іспиту КРОК 1 «Медицина» з їх детальним розумінням. Інтерпретувати зміст завдань субтесту ліцензійного іспиту «Крок 1» на релевантну тематику англійською мовою.

## 3. БАЗОВІ ЗНАННЯ, ВМІННЯ, НАВИЧКИ, НЕОБХІДНІ ДЛЯ ВИВЧЕННЯ ТЕМИ (МІЖДИСЦИПЛІНАРНА ІНТЕГРАЦІЯ)

Назви попередніх дисциплін	Отримані навички
1. Латинська мова. 2. Англійська мова. 3. Нормальна анатомія. 4. Біологія. 5. Біохімія. 6. Мікробіологія. 7. Нормальна фізіологія. 8. Гістологія.	Розуміти та правильно вимовляти терміни, запозичені з латинської (грецької) мови. Знати основні поняття та терміни з теми. Використовувати раніше отриману інформацію в контексті певної ситуації спілкування англійською мовою за зазначеною темою. Знати граматичний матеріал, типовий для викладу теми.

## 4. ЗАВДАННЯ ДЛЯ САМОСТІЙНОЇ РОБОТИ ПІД ЧАС ПІДГОТОВКИ ДО ЗАНЯТТЯ

### 4.1. Перелік основних термінів, які повинен засвоїти студент при підготовці до заняття:

<b>vulnerable</b> ['vʌlnərəbl] уразливий <b>stroke</b> [straʊk] інсульт, порушення мозкового кровообігу <b>seizure</b> ['si:ʒə] напад, епілепсія <b>neuralgia</b> [njuˈrɪlɡɪə] невралгія <b>consciousness</b> ['kɒnʃənsnɪs] свідомість <b>impair</b> [ɪmˈpaɪə] погіршувати, ослаблювати, знижувати, зменшувати <b>excitation</b> [ˈɛksɪtəʃən] активізація,	<b>disrupt</b> [dɪsˈrʌpt] порушити <b>grand mal seizure</b> великий (судорожний) епілептичний напад <b>rigidity</b> [rɪˈɡɪtɪ] ригідність, заціпеність, негнучкість <b>identify</b> [aɪˈdɛntɪfaɪ] встановлювати <b>nevertheless</b> [ˈneɪvəðəls] проте, однак <b>reduce</b> [rɪˈdju:s] послаблювати, знижувати, скорочувати, зменшувати
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збудження <b>inhibition</b> [ɪnhɪˈblɪʃ(ə)n] стримання, гальмування	<b>improve</b> [ɪmˈpruːv] поліпшувати <b>avoid</b> [əˈvɔɪd] уникати, застерігати <b>lack</b> [læk] брак, відсутність
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#### 4.2. Теоретичні питання до заняття:

1. What Modal Verbs do you know?
2. What is the function of Modal Verbs?

#### 4.3. Практичні завдання, які виконуються на занятті:

1. Вивчення лексико-фонетичного та граматичного матеріалу з теми.
2. Читання та переклад тексту.
3. Виконання лексичних вправ.
4. Відповіді на запитання з теми.
5. Анотування тексту з теми.
6. Складання діалогів за темою.
7. Надання інформації за темою, що вивчається.

### 5. ЗМІСТ ТЕМИ

#### WORD-BUILDING

##### WORD-BUILDING

##### Ex. 1. Familiarize yourself with the following material:

Suffix of Adverbs: -ly

quick *швидкий* – quickly *швидко*

slow *повільний* – slowly *повільно*

##### Ex. 2. Read and translate the following words:

Greatly; normally; partly; daily; really; weekly; primarily; usually; approximately; mainly; principally; structurally.

#### GRAMMAR

##### Ex. 1. Read the following grammar material:

##### MODAL VERBS

Present	Past	Future
<b>can</b>	<b>could</b>	-
<b>may</b>	<b>might</b>	-
<b>must</b>	-	-

##### Ex. 2. Read and translate the following sentences:

1. Taking the wrong medicines or inappropriate combinations of medicines can be dangerous. 2. All medicines you can buy at the chemist's shop. 3. The University has sport complex, where students can attend sections of tennis, volleyball, etc. 4. The health care system could not function without nurses or other professionals. 5. I couldn't come because I fell ill. 6. The patient may be treated in out-patient department. 7. They may be grouped into three categories. 8. The patient must be isolated. 9. The individual must continue this treatment for the rest of his or her life.

**Ex. 3. Complete what the doctor says using *must* and verbs *drink, take, stay, and continue*. Use each verb only once.**

Mrs. Woods, your temperature is a little high, so you \_ \_ in bed for the next few days. You can eat whatever you like, but you \_ \_ plenty of liquids. And I'll give you some medicine. You \_ \_ it three times a day after meals. And you \_ \_ to take it for the next ten days.

**Ex. 4. Put sentences negative as in a model.**

**MODEL:** You **must** be home by 10 o'clock. You **needn't be (mustn't be)** home by 10 o'clock. You **can** do it. You **can't** do it. He **may** smoke here. He **may not** smoke here.

1. I've got a terrible pain in my back. I must go and see a doctor.
2. You can borrow my camera if you want to.
3. He may be here at any moment.
4. They must work better to pass their exams.
5. My little niece Lizzie can already walk.
6. He may take any information available to make his report in time.
7. We can stay a bit longer.

**Ex. 5. Make the following sentences interrogative according to the following model:**

**MODEL:**

We **must** have deep knowledge of Anatomy and Physiology. **Must** we have deep knowledge of Anatomy and Physiology?

1. These students can continue their education.
2. The rest of the students can work as nurses.
3. Muscle names may also refer to the size of the muscle.
4. Certain factors may be mentioned as causes for perforation.
5. You must read clearly so that other students may understand you well.

**Ex. 6. Familiarize yourself with the data of the following table:**

**EQUIVALENTS OF THE MODAL VERBS**

MODAL VERB	EQUIVALENTS		
	Present	Past	Future
<b>can</b>	<b>to be able to</b>		
	am able to is able to are able to	was able to were able to	shall be able to will be able to
<b>may</b>	<b>to be allowed to</b>		
	am allowed to is allowed to are allowed to	was allowed to were allowed to	shall be allowed to will be allowed to
<b>must</b>	<b>to have to (тряба)</b>		
	have to has to	had to	shall have to will have to
	<b>to be to (повинен)</b>		
	am to is to are to	was to were to	shall be to will be to

**Ex. 7. Read and translate the following sentences:**

1. The physician is able to perform a physical examination.
2. The hospitals will be able to provide services for all medical needs.
3. Certain chemicals and viruses were able to play a great role.
4. The person has to avoid lack of sleep or excess alcohol.
5. The surgeon had to perform on the operation.
6. This nurse was able to care for the patients well.
7. The surgeon is allowed to complete the operation.
8. The student has to attend all the lectures regularly.
9. You are allowed to take your temperature.
10. Persons with heart diseases are not to work hard.

**Ex. 8. Complete the sentences using modal verbs or their equivalents in proper tense forms.**

1. They were talking quite loudly. I \_ hear everything they said.
2. You'll \_ to go shopping later today.
3. You \_ get a visa to visit the United States.
4. I \_ stay in bed yesterday because I wasn't

very well. 5. Annie will \_ do her home work tomorrow. 6. \_ I invite you to the party? 7. You \_ buy this medicine. 8. They will \_ to come here later.

**Ex. 9. Translate the sentences into English:**

1. Містер Паркер – досить відомий фахівець, ви могли чути про нього раніше. 2. Мері повинна була краще підготуватися до іспиту. 3. Дзвенить дзвінок, ми можемо спізнитися. 4. Вона зможе допомогти вам купити усі необхідні ліки. 5. Ви повинні уважно вислухати усі скарги пацієнта. 6. Ви можете скористатися нашою базою даних. 7. Ці студенти зможуть бути присутніми (їм дозволили) на операції. 8. Ти можеш придбати бинт, вату та йод у будь-якій аптеці. 9. Ці ліки можуть викликати сонливість (drowsiness), нудоту. 11. Ці заходи зможуть попередити розвиток певних інфекційних захворювань.

## **READING AND DEVELOPING SPEAKING SKILLS**

**Ex. 10. Read the following words:**

Vulnerable; supply; degeneration; meningitis; encephalitis; poliomyelitis; viral; variety; neuralgia; seizure; partial; consciousness; impair; amount; excitation; disrupt; rigidity; convulsion; chemical; identify; hemorrhage; nevertheless; adequate.

**Ex. 11. Read the following text:**

### **DISORDERS OF NERVOUS SYSTEM**

The central nervous system is vulnerable to a wide variety of disorders. They are strokes, Alzheimer's disease, Parkinson's disease, meningitis, encephalitis, poliomyelitis (polio), neuralgias and seizure. The causes of these disorders include interruption of the blood supply to the brain, degeneration of nerve cells, head injury, tumor of the brain, viral infection and others.

Seizure (epilepsy) is actually a whole group of brain disorders. The seizure can be either partial or complete, depending on the amount of brain involved and whether or not consciousness is impaired. Normally there is a balance between excitation and inhibition in the brain. When this balance is disrupted by increased excitation or decreased inhibition, a seizure may result. There are some types of seizure. One of them is grand mal seizure.

A grand mal seizure starts with a loss of consciousness and falling down, followed by a 15- to 20-second period with muscle rigidity and then a 1- to 2-minute period of rhythmic convulsions. The seizure ends with a few minutes of deep, relaxed sleep before consciousness returns.

Grand mal seizures are due to abnormal electric activity throughout the brain. Research has shown that seizure can be produced in normal brain by various chemical and electrical stimulants. Sometimes seizures run in families. Other identified causes for seizures include scar tissue from brain disease or injury; brain infection, tumor, abscess, or hemorrhage; metabolic disturbances from kidney or liver disease. Nevertheless, the cause frequently is unknown when the disorder starts before age 25. Seizures that start after age 25 may be caused by slowly growing brain tumors.

Medication controls or greatly reduces seizures for more than 75 percent of affected persons. Some medicines can improve management of epileptic seizures in 25 percent of people with seizure disorders. The person must avoid lack of sleep or excess alcohol. Regular and adequate rest is important. The person has to wear a bracelet stating who should be contacted if a seizure occurs.

**Ex. 12. Read and translate the following definitions:**

**Seizure** is a sudden attack often including convulsions; this symptom, if recurrent, often is referred to as a seizure disorder or as epilepsy.

**Grand mal** is generalized convulsion accompanied by loss of consciousness.

**Neuralgia** is sharp pain along the course of a nerve.

**Cognitive:** pertaining to the mental process of thought, including perception, reasoning, intuition, and memory.

**Convulsion** is a sudden attack usually characterized by loss of consciousness and severe, rhythmic contractions of some or all voluntary muscles. It is the most often a manifestation of a seizure disorder.

**Ex. 13. Answer the following questions:**

1. What causes strokes?
2. What diseases concerning degeneration of nerve cells do you know?
3. What are the causes of meningitis and encephalitis?
4. What is poliomyelitis?
5. What are cognitive disorders?
6. What is neuralgia?

**Ex. 14. Speak on the different causes of disorders of nervous system.**

**Ex. 15. Translate the following sentences into English:**

1. Існує величезна кількість захворювань центральної нервової системи.
2. Причинами захворювань можуть бути дегенерація нервових клітин, вірусна інфекція, метаболічне порушення функцій нирок, захворювання печінки, травма або пухлина мозку.
3. Епілепсія є результатом підвищеної активізації або надмірного стримування роботи мозку.
4. Ознаками епілепсії є втрата свідомості, конвульсії і короточасний глибокий сон.
5. Медичні препарати можуть зменшити ступінь захворювання, але не вилікувати його.
6. Людина, що страждає на епілепсію, повинна вести здоровий спосіб життя.

**Ex. 16. Read and translate the following text:**

**INFECTIONS**

**Encephalitis** is an inflammation of the brain most often caused by a virus and less often by bacteria or other agents. A large variety of symptoms may result, including fever, paralysis, come, or even death.

**Myelitis** is an inflammation of the spinal cord with causes and symptoms similar to those for encephalitis.

**Meningitis** is the inflammation of the meninges. It may be viral induced but is more often bacterial. Symptoms include neck stiffness, headache, and fever. In severe cases meningitis may cause paralysis, come, or death.

**Rabies** is a viral disease transmitted by the bite of an infected mammal. The rabies virus infects the brain, salivary glands, muscles, and connective tissue. The virus also infects the brain and results in abnormal excitability, aggression, and in later stages, paralysis and death.

**Ex. 17. Read and memorize the following words:**

<b>deterioration</b> [dl'tlqr'lq'rɛlʃn] погіршення	<b>psychotic</b> [səl'kɒtɪk] психотичний
<b>exposure</b> [eks'pəʒʊə] вплив	<b>interfere</b> ['ɪntə'fɪə] заважати, бути перешкодою
<b>gradual</b> ['grædʒuəl] поступовий	<b>numbness</b> ['nʌmnl̩s] нечутливість, оніміння
<b>disintegration</b> [dl'sɪntɪ'grɛlʃn] роздрібнення, роздвоєння	<b>sheath</b> [ʃi:t] оболонка
<b>irritability</b> ['ɪrɪtə'bɪlɪtɪ] роздратованість	<b>suspect</b> ['sʌspɛkt] вважати
<b>modify</b> ['mɒdɪfaɪ] зм'якшувати; ослаблювати	<b>recur</b> [rɪkɜ:] повторюватися, відбуватися знову
<b>behavior</b> [bɪ'hɛɪvjə] поведінка	<b>spasticity</b> ['spæstɪsɪtɪ] спастика, спастичність
<b>stiffness</b> ['stɪfn̩s] нерухливість; жорсткість	<b>make</b> [meɪk] змушувати
<b>hallucination</b> [hə'lʊ:sn̩eɪʃn] галюцинація	<b>control</b> [kən'trɒl] стримування; контролювання
	<b>tremor</b> ['trɛmə] треміння, тремор

**Ex. 18. Translate the following words into Ukrainian:**



Transmitter; malfunction; feature; cause; interfere; increasing; shake; degree; numbness; walking; disintegration; irritability; sheath; gradual; stiffness; suspect; hallucination; exposure; psychotic; deterioration; recur.

**Ex. 19. Read and translate the following text:**

**DEGENERATIVE DISORDERS**

The brain, spinal cord, and peripheral nerves consist of billions of nerve cells. Each of these cells is a complex electrical and chemical transmitter that carries signals to make the muscles move and to relay information throughout the nervous system. If a few cells die or malfunction, the person will notice any change. When there is progressive deterioration in any part of the nervous system, the person gradually will lose some ability to function. This loss can involve mental ability, muscular movement, muscular control, or impaired coordination. Compared with many other diseases, the degenerative disorders are less well understood.

**Alzheimer's Disease.** This disease is due to a degeneration of brain cells. It gradually produces abnormalities in certain areas of the brain. The brain cells of persons with Alzheimer's disease have characteristic features that were first described in 1907 by Alois Alzheimer. The cause of Alzheimer's disease, however, is unknown. Among the several possible causes are genetic factors, toxic exposures, abnormal protein production, viruses, and neurochemical abnormalities.

The symptoms of Alzheimer's disease are gradual loss of memory and inability to learn new information, growing tendency to repeat oneself, slow disintegration of personality, increasing irritability, and depression. No effective treatment exists. Some medications modify the symptoms of the disease. Occasionally, mild sedatives, antidepressants, or antipsychotic medications may be necessary to control behavior.

**Parkinson's disease** was first described by Englishman James Parkinson in 1817. It is progressive degeneration of nerve cells in the part of the brain that controls muscle movements. The signs and symptoms of Parkinson's disease are shaking at rest (rest tremor), stiffness or rigidity of limbs, slow, soft, monotone voice, and difficulty in maintaining balance.

The cause of this disease remains unknown. Parkinson's disease ordinarily starts in middle or late life and develops very slowly. Many individuals with Parkinson's disease have depression. Some degree of mental deterioration occurs in about one-third of those persons with Parkinson's disease. In the later stages, auditory and visual hallucinations may develop.

In early stages of the illness, the person may not require therapy. Medication normally is introduced at a time when Parkinson's disease interferes with daily activities. The main goal of treatment is to reverse the problems with walking, movement, and tremors.

**Multiple sclerosis** is characterized by numbness, weakness, or paralysis in one or more limbs, impaired vision with pain during movement in one eye, tremor, lack of coordination, and rapid, involuntary eye movement. Its cause is unknown, but medical research is very active. The presence of a virus, in either immune cells or sheath-producing cells, is one suspected cause. Attacks ordinarily recur and the symptoms may increase in severity. Many persons with multiple sclerosis are ambulatory, and many are employed even after having multiple sclerosis for 20 years.

There is no cure for multiple sclerosis. Medications vary depending on the symptoms. Baclofen is sometimes useful for suppressing muscle spasticity. For severe attacks, corticosteroid drugs may be prescribed to reduce inflammation and provide temporary relief.

**Ex. 20. Translate the following words and word-combinations into English:**

Погіршення; нечутливість, оніміння; психотичний; дія; заважати, стояти на заваді; припускати; галюцинація; спастика, спастичність; повторюватися, відбуватися знову; розділення, роздвоєння; поведінка; поступовий; пом'якшувати, послаблювати; дратувати.

**Ex. 21. Answer the following questions:**

1. What cases can the person lose some ability to function in? 2. What is Alzheimer's disease? 3. What are the causes of Alzheimer's disease? 4. What symptoms of this disease do you know? 5. What is the goal of medications in Alzheimer's disease? 6. When was Parkinson's disease described? 7. What is Parkinson's disease? 8. What are the signs of this disease? 9. What is the cause of Parkinson's disease? 10. When is medication normally introduced? 11. What is multiple sclerosis characterized by? 12. What are the suspected causes of multiple sclerosis?

**Ex. 22. Do you agree or disagree with the following statements:**

1. The particular behavioral characteristics of Alzheimer's disease depend on which area of the brain is most affected by the disease process. 2. Alzheimer's disease is extremely rare in middle age. 3. Alzheimer's disease is generally an acute condition and often requires emergency treatment. 4. Parkinson's disease ordinarily starts in young people and develops very quickly. 5. Although much research has been done on Parkinson's disease, the cause remains unknown. 6. Multiple sclerosis is a disease of the central nervous system. 7. Multiple sclerosis has a wide variety of symptoms because of the way it affect the central nervous system.

**Ex. 23. Translate the following sentences into English:**

1. Якщо велика кількість клітин головного мозку або периферичної нервової системи відмирають, то людина може помітити суттєві зміни в стані свого здоров'я. 2. У порівнянні з іншими захворюваннями, дегенеративні захворювання вивчені менше. 3. При захворюванні Альцгеймера виникає дегенерація клітин мозку. 4. Причинами цього захворювання можуть бути генетичні чинники, патологічне продукування протеїнів та інфекційні захворювання. 5. Поступова втрата пам'яті, нездатність запам'ятовувати нову інформацію, депресія і підвищена дратівливість є ознаками цього захворювання. 6. Захворювання Паркінсона – це дегенерація нервових клітин в будь-якій частині головного мозку. 7. Це захворювання, як правило, починається в середньому або літньому віці. 8. Розсіяний склероз характеризується паралічем кінцівок, погіршенням зору і слуху, тремором і частим кліпанням очима.

**Ex. 24. Speak on causes, symptoms and signs, and treatment of:**

Alzheimer's Disease;

Parkinson's Disease;

Multiple Sclerosis.

**Ex. 25. Read and translate the following text:**

**STROKE**

Stroke is a disease that affects the blood vessels that supply blood to the brain.

A stroke occurs when a blood vessel that brings oxygen and nutrients to the brain bursts or is clogged by a blood clot or some other mass. Because of this rupture or blockage, part of the brain doesn't get the blood and oxygen it needs. Deprived of oxygen, nerve cells in the affected area of the brain can't work and die within minutes. And when nerve cells can't work, the part of the body they control can't work either. The devastating effects of a severe stroke are often permanent because dead brain cells aren't replaced.

There are two main types of stroke. One (ischemic stroke) is caused by blockage of a blood vessel; the other (hemorrhagic stroke) is caused by bleeding. Bleeding strokes have a much higher fatality rate than strokes caused by clots.

The symptoms of stroke can be quite heterogeneous, and patients with the same cause of stroke can have widely differing handicaps. Conversely, patients with the same clinical handicap can in fact have different underlying causes.

Risk factors for stroke include advanced age, hypertension (high blood pressure), previous stroke or TIA (transient ischaemic attack), diabetes mellitus, high cholesterol, cigarette

smoking, atrial fibrillation, migraine with aura, and thrombophilia. In clinical practice, blood pressure is the most important modifiable risk factor of stroke; however many other risk factors, such as cigarette smoking cessation and treatment of atrial fibrillation with anticoagulant drugs, are important.

The traditional definition of stroke, devised by the World Health Organisation in the 1970s, is of a neurological deficit of cerebrovascular cause that persists beyond 24 hours or is interrupted by death within 24 hours'. This definition was largely devised for the purpose of research and the time frame of 24 hours appears purely arbitrarily chosen as a cut-off point. It divides stroke from TIA (or mini-stroke), which is the same as above but completely resolves clinically within 24 hours. The division of stroke and TIA into separate clinical entities is considered impractical and even unhelpful in practice by many stroke doctors. The main reason for this is the fact that stroke and TIA are caused by the same disease process, and both persons with a stroke or a TIA are at a higher risk of a subsequent stroke.

In recognition of this, and improved methods for the treatment of stroke, the term "brain attack" is being promoted in the Western World as a substitute for stroke or TIA. The new term makes an analogy with "heart attack" (myocardial infarction), because in both conditions, an interruption of blood supply causes death of tissue that is highly time dependent ('time is brain') and potentially life-threatening. Many hospitals have "brain attack" teams within their neurology departments specifically for swift treatment of stroke.

**Ex. 26. Read and translate into Ukrainian the tests for licensing examination “KROK 1”.**

1. During the operation on the small intestine the surgeon revealed an area of the mucous membrane with a single longitudinal fold among the circular folds. Which portion of the small intestine is this structure typical for?

A. Pars descendens duodeni B. Pars horizontalis duodeni C. Pars ascendens duodeni D. jejunum  
E. Distal ileum

2. 14 days after quinsy a 15-year-old child presented with morning facial swelling, high blood pressure, "meat slops" urine. Immunohistological study of a renal biopsy sample revealed deposition of immune complexes on the basement membranes of the capillaries and in the glomerular mesangium. What disease developed in the patient?

A. Acute glomerulonephritis B. Acute interstitial nephritis C. Lipoid nephrosis D. Acute pyelonephritis E. Necrotizing nephrosis

3. A diseased child has a high fever, sore throat, swelling of submandibular lymph nodes. Objectively: pharyngeal mucosa is edematous, moderately hyperemic, the tonsils are enlarged, covered with grayish membrane tightly adhering to the tissues above. Attempts to remove the membrane produce the bleeding defects. What disease are these presentations typical for?

A. Diphtheria B. Catarrhal tonsillitis C. Scarlet fever D. Meningococcal disease E. Measles

4. Study of the biopsy material of an embryo revealed a zone of developmental abnormality in a somite. The zone was located close to the endoderm and the notochord. What formations may have abnormal development in case of pregnancy continuation?

A. Skeletal tissues B. Genito-urinary system C. Skeletal striated muscle tissue D. Cardiac striated muscle tissue E. Fibrous connective tissue of skin

5. A smear of sputum from the patient with suspected lobar pneumonia was stained with the use of the following stains and reagents: solution of gentian violet, Lugol's solution, 96% alcohol, watermagenta. What staining method was applied in this case?

A. Gram B. Ziehl-Nielsen C. Romanovsky D. Neisser E. Leffler

6. A patient has normally coloured stool including a large amount of free fatty acids. The reason for this is a disturbance of the following process:

A. Fat absorption B. Fat hydrolysis C. Biliary excretion D. Choleresis E. Lipase secretion

7. Examination of the removed stomach revealed a deep roundish defect with regular edges at the lesser curvature of the antrum. The defect reached the muscular tunic and was 1,5 cm in diameter. Within the defect floor there was a translucent dense area resembling of a hyaline cartilage. What process had developed in the floor of the stomach defect?

A. Local hyalinosi B. Amyloidosis C. Mucoïd swelling D. Fibrinoid alterations E. General hyalinosi

8. By the decarboxylation of glutamate in the CNS an inhibitory mediator is formed. Name it:

A. GABA B. Glutathione C. Histamine D. Serotonin E. Asparagine

9. Thermometry revealed that the temperature of the exposed skin is by 1- 1,5o lower than the temperature of the adjacent areas covered with clothing from natural fabrics. The reason for this is that the clothes reduce the heat loss through:

A. Convection B. Radiation C. Conduction D. Evaporation E. -

10. A specimen of pia mater includes a vessel whose wall doesn't have the tunica media, the tunica externa is adherent to the surrounding tissues, the intima is composed of a basement membrane and endothelium. What vessel is it?

A. Nonmuscular vein B. Muscular vein with underdeveloped muscular elements C. Muscular artery D. Arteriole E. Artery of mixed type

11. A patient with extensive burns of torso skin exhibits signs of severe intoxication. What stage of the burn disease is this typical for?

A. Burn toxemia B. Burn shock C. Burn infection D. Burn emaciation E. Terminal

12. As a result of a craniocerebral injury a patient has a decreased skin sensitivity. What area of the cerebral cortex may be damaged?

A. Posterior central gyrus B. Occipital region C. Cingulate gyrus D. Frontal cortex E. Anterior central gyrus

13. A histological specimen of the eyeball shows a biconvex structure connected to the ciliary body by the fibers of the Zinn's zonule and covered with a transparent capsule. Name this structure:

A. Crystalline lens B. Vitreous body C. Ciliary body D. Cornea E. Sclera

14. A comatose patient was taken to the hospital. He has a history of diabetes mellitus. Objectively: Kussmaul breathing, low blood pressure, acetone odor of breath. After the emergency treatment the patient's condition improved. What drug had been administered to the patient?

A. Insulin B. Adrenaline C. Isadrinum D. Glibenclamide E. Furosemide

15. In order to stimulate breathing in a child born with asphyxia, the doctor gave him a drug injection into the umbilical vein. What drug might have been injected?

A. Aethimizolum B. Corazolum C. Cordiaminum D. Sulfocamphocainum E. Coffeinum

16. A patient complains of pain in the right lateral abdomen. Palpation revealed a dense, immobile, tumor-like formation. A tumor is likely to be found in the following part of the digestive tube:

A. Colon ascendens B. Colon transversum C. Colon descendens D. Colon sigmoideum E. Caecum

17. A patient underwent biopsy of the soft palate arches for a suspected tumor (macroscopy revealed an ulcer with a dense floor). Study of the biopsy material revealed mucosal necrosis with infiltration of lymphocytes, epithelioid cells, plasma cells, single neutrophils in the submucosa. There were also apparent signs of endovasculitis and perivasculitis. The described changes are typical for:

A. Primary syphilis B. Aphthous stomatitis C. Ulcerative stomatitis D. Necrotizing ulcerative Vincent stomatitis E. Pharyngeal diphtheria

18. Healthy parents with unremarkable family history have the child with multiple developmental defects. Cytogenetic analysis revealed the trisomy 13 in the somatic cells (Patau syndrome). What phenomenon has caused the defects?

A. Abnormal gametogenesis B. Somatic mutation C. Recessive mutation D. Dominant mutation E. Chromosomal mutation

19. A specimen shows an organ covered with the connective tissue capsule with trabeculae radiating inward the organ. There is also cortex containing some lymph nodules, and medullary cords made of lymphoid cells. What organ is under study?

A. Lymph node B. Thymus C. Spleen D. Red bone marrow E. Tonsils

20. A 25-year-old patient consulted a doctor about dysmenorrhea and infertility. Examination revealed that the patient was 145 cm high and had underdeveloped secondary sex characteristics, alar folds on the neck. Cytological study didn't reveal any Barr bodies in the somatic cells. What diagnosis was made?

A. Turner's syndrome B. Klinefelter syndrome C. Morris syndrome D. Trisomy X syndrome E.

## **МАТЕРІАЛИ ДЛЯ САМОКОНТРОЛЮ**

### **А. Запитання для самоконтролю**

1. What causes strokes? 2. What diseases concerning degeneration of nerve cells do you know? 3. What are the causes of meningitis and encephalitis? 4. What is poliomyelitis? 5. What are cognitive disorders? 6. What is neuralgia?

### **Б. Тестові завдання**

Insert the missing letters:

1. v\_lnerable;
2. s\_pply;
3. degene\_ation;
4. menin\_itis;
5. encep\_alitis;
6. \_oliomyelitis;
7. vir\_l;
8. variet\_;
9. neu\_algia;
10. seiz\_re;
11. pa\_tial;
12. im\_air.

- a) u  
b) r

- c) g
- d) h
- e) p
- f) a

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<http://www.ucl.ac.uk/internet-grammar/home.htm>

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Good tests and exercises in English Grammar. – Режим доступу :

<http://www.usingenglish.com/online-tests.html>

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