

Оценочные материалы для текущего контроля и промежуточной аттестации по дисциплине

Иностранный язык в профессиональной сфере

Код, направление подготовки	35.05.01
Направленность (профиль)	Лечебное дело
Форма обучения	Очная
Кафедра-разработчик	Иностранных языков
Выпускающая кафедра	Внутренних болезней

Типовые задания для контрольной работы

Семестр 5

Контрольная работа №1

1. The ward section shall consist of:

- a) wards
- b) auxiliary rooms
- c) restrooms
- d) rooms for medical staff
- e) corridor and hallway

Choose correct variants.

2. All industrial poisons according to their predominant effect can be divided into compounds, mainly:

- a) low-toxic
- b) of neurotoxic and nephrotoxic action
- c) hepatotoxic and nephrotoxic action
- d) substances affecting respiratory organs
- e) highly toxic

Choose correct variants.

3. The study of the health status of the child population includes:

- a) Recording chronic diseases
- b) Establishing the functional status of the main body systems
- c) Examining the level and nature of morphological, functional and mental development
- d) Study of the "current" morbidity rate
- e) determination of the training load

Choose correct variants.

4. Physical development is assessed:

- a) by somatometric indices
- b) somatoscopic indices
- c) by physiometric indices

- d) the body's resistance to adverse environmental factors
 e) medical conditions

Choose correct variants.

5. Match the names of structural compensations with their definitions

1. Hypertrophy	a) is enlargement of an organ by increasing the number of its functional units. Lymphoid tissue, mucous membrane tissue are prone to hyperplasia.
2. Hyperplasia	b) a change in the location of thoracic organs in sharply pronounced scoliosis of the thoracic spine or kyphosis, as well as dilation of the esophagus above the site of narrowing in achalasia.
3. Regeneration	c) is an increase in the mass of an organ due to an increase in the volume of its constituent functional units. Examples are hypertrophy of the heart, skeletal muscles, kidneys, etc.
4. Compensatory deformity	d) is the process of recovery of an organ or tissue after damage, which is carried out by: a) restitution - replenishment of the defect by division of parenchymatous cells of the damaged tissue; b) substitution - healing of the damage occurs through division of connective tissue cells.

6. Choose the correct combination of answers Diseases associated with obesity include:

- 1) metabolic diseases;
 2) cardiovascular diseases;
 3) disorders of the respiratory system;
 4) diseases of the musculoskeletal system;
 5) sexual disorders.

a - 1, 2, 3, 5;

b - 2, 3, 4;

c - 1, 2, 3, 4, 5;

d - 2, 3, 5;

e - 2, 4, 5.

7. Translate phrases from Russian into English.

- Температура плавления, температура кипения, ковалентная связь, ионная связь, связь между атомами, общее число атомов, общая масса, химические свойства элемента, вокруг ядра, число известных элементов, упорядочить в соответствии с массой атомов.
- Самое распространенное вещество, существовать в природе в химически свободном виде, таблица химических элементов, упорядочить химические элементы, более 30 процентов, свойства химических элементов, существовать во вселенной, зависеть от атомной массы, включать азот, определять свойства, указывать на тип (type) связи.

8. Match the name of the reaction to its definition.

1. A synthesis reaction	a. is a series of reactions in which the product of each step is a reagent for the next step.
2. A decomposition reaction	b. is a reaction which is characterized by the transfer of oxygen or hydrogen atoms, or electrons, from one substance to another.

3. A polymerization reaction	c. is a reaction in which a compound loses one or more atoms and subsequently (впоследствии) gains one or more other atoms.
4. A chain reaction	d. is a reaction in which a compound just gains one or more atoms.
5. A substitution reaction	e. is a reaction, in which two reactants, that may be elements or compounds, form a compound (another compound) as the product
6. An elimination reaction	f. is a type of synthesis in which the product is formed from hundreds or thousands of simpler reagent species.
7. An addition reaction	g. neutralizes the acid and base properties, producing a salt.
8. An oxidation-reduction reaction	h. is a reaction in which a compound just (просто) loses one or more atoms
9. An acid-base reaction	i. is a reaction, in which a compound breaks up into at least two simpler parts.

9. Translate phrases from Russian into English: заказ на лекарство, точная информация, предписанное количество, пациенты не имели понятия, латинские сокращения, механизм общения, после еды, перед сном, этикетка лекарства, возможный риск, побочный эффект, вызвать аллергию, растворить в горячей воде, два раза в день.

10. Put the verb in brackets into Participle I or Participle II.

1. The prescription (to write) out by the doctor was forcough mixture.
2. The surgeon (to perform) the operation now is theassistant doctor of our group.
3. A (to develop) embryo can be affected by the diseaseof the mother.
4. The (to translate) document was unknown.
5. The women (to buy) the ointments didn't have aprescription.
6. It was a very (to excite) film.
7. Most cells can be seen only when greatly (to magnify).
8. Cancer is a group of diseases (to characterize) byabnormal growth of cells.
9. Fifty infants (to admit) to the hospital were determinedsigns of heart failure.
10. Surgical treatment is a life-saving measure when (toadminister) in due time.

11. Find 12 pairs of synonyms: to pulverize, to disintegrate, to hide, to sift, rarely, to sieve, blending, seldom, mixing, to triturate, to mask, to decompose, perforated, commonly, troches, sifter, sachet, to incorporate, bag, can, to add, jar, often, lozengers.

12. 1. Read the text "Antibiotics" and the questions after the text.

Antibiotics

Since the end of the twentieth century modern medicine has been making an extensive use of various antibiotics. It should be noted that antibiotics are powerful agents in combating infections. The problem of discovering new antibiotics can be most successfully solved at special research institutes which may have a small experimental plant producing preparations of new antibiotics.

Russia has several research institutes working in this field. Before new generation of antibiotics made its appearance Russianscience had produced a series of new effective drugs, such

as albomycin, etc. This practically non-toxic preparation has found wide application in the treatment of pneumonia in newborn and small children. It is also successfully used in obstetric and gynecological practice. Surgeons have to use it during the treatment of the septic processes caused by staphylococci which can resist other antibiotics. It has been established experimentally that the composition of its molecule includes iron and it has a peculiar mechanism of affecting the bacteria.

Mention must also be made of tetracyclines, such as chlortetracycline. It was introduced after chlorphenol had been discovered. Therefore, chlortetracycline was considered the second broad – spectrum antibiotic developed for therapeutic purposes. It was isolated in 1948 from biomycin. Because of its yellow colour it was marked as auremycin. Another antibiotic of this series is tetracycline. It has been found that it possesses great advantages over its sister compounds. It may produce less toxic effect and penetrate the cerebrospinal fluid to a much greater extent. It has been stated that in ordinary use the tetracyclines can be given orally in doses of 250 mg.

12.2 Answer the questions on the content of the text.

1. Where can the problem of discovering new antibiotics be solved?
2. What has been established experimentally?
3. When has modern medicine been making extensive use of various antibiotics?
4. What doses of tetracyclines can be given orally in ordinary use?
5. How many drugs had Russia produced before new generation of antibiotics made its appearance?
6. What are powerful agents of antibiotics in combating infections?
7. Which fields of medicine has non-toxic preparation found wide application in?
8. When was chlortetracycline isolated from biomycin?
9. Why was it marked as auremucin?
10. What advantages does tetracycline possess over its sister compounds?

13. From the list below choose the proper English equivalents of the italicized words in the text.

In pathology, damage or alteration (from the Latin alteratio - change) is understood as changes in the structure of cells, *межклеточного вещества*, tissues and organs, which *сопровождаются нарушением* of their vital functions.

Damage can be caused by a variety of reasons.

They can act on *клеточные и тканевые структуры* directly or indirectly (through humoral and reflex influences), and the nature and extent of damage depend on the strength and nature of the pathogenic factor, structural and functional characteristics of the organ or tissue, as well as the reactivity of the body.

Damage has different *морфологическое выражение* on cellular and tissue levels.

At the cellular level, it is represented by a variety of ultrastructural changes in the cell, which is the content of a large section of general pathology *патологии клетки*.

At the tissue level the damage is represented by two general pathological processes - *дистрофией и некрозом*, which are often consecutive stages of alteration.

Dystrophy and necrosis, intercellular substance, are accompanied by disruption, cell pathology, cell and tissue structures, morphological expression

14. Match the translation of the sentences

<p>1. Воспаление – комплексная местная сосудисто-мезенхимальная реакция на повреждение ткани, вызванное действием различного рода агентов. Эта реакция направлена на</p>	<p>a) Chemical factors of inflammation can be various chemicals, toxins and poisons.</p>
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уничтожение агента, вызвавшего повреждение, и на восстановление поврежденной ткани.	
2. Воспаление – реакция, выработанная в ходе филогенеза, имеет защитно-приспособительный характер и несет в себе элементы не только патологии, но и физиологии.	b) Physical factors causing inflammation include radiation and electrical energy, high and low temperatures, various kinds of trauma.
3. Вызывающие воспаление факторы могут быть биологическими, физическими, химическими.	c) The biological causes of inflammation may include antibodies and immune complexes circulating in the blood, which consist of antigen, antibodies and complement components, and the antigen may be of non-microbial nature.
4. Среди биологических факторов наибольшее значение имеют вирусы, бактерии, грибы и животные паразиты.	d) Inflammatory factors can be biological, physical and chemical.
5. К биологическим причинам воспаления могут быть отнесены циркулирующие в крови антитела и иммунные комплексы, которые состоят из антигена, антител и компонентов комплемента, причем антиген может быть немикробной природы.	e) Inflammation is a complex local vascular-mesenchymal reaction to tissue damage caused by the action of various kinds of agents. This reaction is aimed at destroying the agent that caused the damage and at repairing the damaged tissue.
6. К физическим факторам, вызывающим воспаление, относят лучевую и электрическую энергию, высокие и низкие температуры, различного рода травмы.	f) Inflammation is a reaction developed in the course of phylogenesis, it has a protective and adaptive nature and contains elements not only of pathology but also of physiology.
7. Химическими факторами воспаления могут быть различные химические вещества, токсины и яды.	g) Among the biological factors of greatest importance are viruses, bacteria, fungi and animal parasites.

15. Signs of diseases include:

1. Etiological, which allows to divide diseases into hereditary (congenital)
2. and acquired, non-infectious and infectious.
3. Topographic, i.e. the localization of the main focus of the lesion - diseases of systems, organs and tissues.
4. Generality of pathogenetic mechanisms, on the basis of which we distinguish allergic diseases, autoimmune diseases, rheumatic diseases, etc.
5. Commonality of socially mediated effect of environmental factors on the human body is the basis of distinguishing occupational diseases, geographical pathology, military pathology, etc.
6. Generality of forms of development and course of diseases allows to distinguish acute, acute, subacute and chronic, cyclic and acyclic diseases.

7. Gender and age are used to distinguish women's diseases, children's diseases, and diseases of advanced age.

Choose the correct combination of answers.

16. Compose sentences using the following phrases:

1. *Compensated heart defect*, hypertrophy of cardiac compartments, concentric myocardial hypertrophy, dystrophic changes, myogenic dilatation of cardiac cavities.
2. *Decompensated heart defect*, cardiac activity disorder, cardiovascular insufficiency, protein and fatty dystrophy of muscle fibers, venous congestion.
3. *Atherosclerosis*, disorders of fat and protein metabolism, arteries of elastic and muscular-elastic type, deposits of lipids and proteins in the intima, connective tissue.

17. Fill in the gaps with the necessary words below the text.

Diseases of the respiratory organs (1) ----- are characterized by a variety of clinical and morphological manifestations, which (2) ----- is determined by a large number and variety of etiological factors, (3) ----- leading to the development of diseases of these organs, age features, the peculiarities of the lung structure. In the occurrence of respiratory diseases are important biological pathogens, primarily viruses and bacteria that (4) ----- cause inflammatory processes in the bronchi and lungs (bronchitis, tracheitis, bronchiolitis, pneumonia).

Variants: *cause, are characterized, leading, is determined*

18. Match the names of diseases of the gastrointestinal tract with their definitions.

1. Esophagitis	a) is an inflammatory disease of the mucous membrane of the stomach. A distinction is made between acute and chronic gastritis.
2. Gastritis	b) is an inflammation of the esophageal mucosa, usually develops secondary to many diseases, rarely primary. It can be acute or chronic.
3. Ulcer disease	c) is inflammation of the appendix of the cecum, giving a characteristic clinical syndrome.
4. Crohn's disease	d) is a chronic, cyclical disease, the main clinical and morphological expression of which is a recurrent ulcer of the stomach or duodenum.
5. Appendicitis	e) is a chronic recurrent disease of the gastrointestinal tract, characterized by nonspecific granulomatosis and necrosis.

19. Translate the text into Russian.

Glomerulonephritis

Glomerulonephritis is a disease of infectious-allergic or unspecified nature, based on bilateral diffuse or focal nonpulmonary inflammation of the glomerular kidney (glomerulitis) with characteristic renal and extrarenal symptoms. Renal symptoms include oliguria, proteinuria, hematuria, cylinduria; extrarenal symptoms include arterial hypertension, left heart hypertrophy, dysproteinemia, edema, hyperazotemia, and uremia. Combinations of these symptoms in

glomerulonephritis may be expressed in different ways, so the clinic distinguishes between hematuric, nephrotic (nephrotic syndrome), hypertensive and mixed forms of glomerulonephritis.

20. Make up a sentence using the following words: diseases of the central nervous system, hereditary and congenital, traumas, infections, metabolic disorders, cardiovascular diseases.

21. The means of cold sterilization include:

- 1)ultraviolet rays;
- 2)ionizing radiation;
- 3)ultrasonic waves;
- 4)formalin vapors;
- 5)autoclaving.

Choose the correct combination of answers:

- a - 1, 2, 4, 5;
- b - 2, 3, 4, 5;
- c - 1, 3, 4, 5;
- d -1, 2, 3, 4;
- e - 1, 2, 3, 5.

22. Methods of physical antisepsis include:

- 1)wound drainage;
- 2) washing of the wound with chlorhexidine solution;
- 3)neurectomy;
- 4)ultrasonic cavitation;
- 5)immunotherapy.

Choose the correct combination of answers:

- a - 1, 2;
- b - 2, 3;
- c - 1, 4;
- d - 2, 4;
- e - 3,5.

23. Put the Stages of narcosis in the right order:

- 1 –
- 2 –
- 3 –
- 4 –

Stages: surgical stage, divided into 4 levels, arousal, analgesia, recovery

24. Name the medications used in the process of blood circulation restoration:

- 1) aminophylline;
- 2) epinephrine;
- 3) calcium chloride;
- 4) atropine;
- 5) strophantine-K.

Choose the correct combination of answers:

- a - 1, 2;
- b - 2, 3;
- c - 3, 4, 5;
- d - 2, 3, 4;
- e - all answers are correct.

25. Specify methods of physical stopping of bleeding:

- 1) application of cold;
- 2) tamponization of the wound;
- 3) hemostatic sponge;
- 4) electrocoagulation;
- 5) vascular suture.

Choose the correct combination of answers:

- a - 1, 2;
- b - 2, 3;
- c - 3, 4, 5;
- d - 1, 4;
- e - 3, 4.

26. Professional situation. An ambulance brigade was called by police officers, who found a young woman unconscious in an apartment with transverse incised wounds on the front surfaces of both forearms. On examination: no consciousness, pronounced pallor of the skin, pulse rate of 130 per minute, pulse detected only on aa. caroticae, BP 60/20 mm Hg, scarce dark blood flowing from the wounds. There is a copious accumulation of dark blood on the floor next to the victim. 1. Your diagnosis? State the main pathogenetic aspects of this condition. 2. Main therapeutic measures on pre-hospital and hospital stages.

27. Symptoms of worsening of the patient's condition during transfusion of low-quality blood are:

- 1) increase in hematocrit;
- 2) chills;
- 3) hyperthermia;
- 4) pain in the lumbar region;
- 5) tachycardia.

Choose the correct combination of answers:

- a - 1, 2, 3, 4;
- b - 2, 3, 4;
- c - 1, 3, 4, 5;
- d - 2, 4, 5;
- e - 2, 3, 4, 5.

28. Protein blood substitutes are contraindicated in:

- 1) purulent inflammatory processes
- 2) thrombophlebitis
- 3) acute blood loss
- 4) renal insufficiency
- 5) oncological diseases.

Choose the correct combination of answers:

- a - 1, 2, 5;
- b - 2, 4;
- c - 3, 4;
- d - 2, 3, 4;
- e - 2, 4, 5.

Семестр 6

1. Specify the stages of the surgical procedure:

- 1) surgical access;
- 2) laying the patient on the operating table;
- 3) surgical intake;
- 4) stopping bleeding;
- 5) wound closure.

Choose the correct combination of answers:

- a - all answers are correct;
- b - 1, 2, 3;
- c - 1, 3,5;
- d - 1, 3, 4, 5.

2. At what point does the preoperative period begin?

- a) From the beginning of the disease.
- b) From the moment the diagnosis is made.
- c) From the moment of admission to the surgical hospital.
- d) From the moment the indications for surgery are established.

Choose the correct answer.

3. Evaluate the accuracy of the clinical indicators of body activity that are used to determine the cause of the critical deterioration of the patient's condition:

- 1) pulse rate over 120 per minute,
- 2) BP decrease to 80 mm Hg.
- 3) number of breaths 20 per minute
- 4) cold sticky sweat
- 5) abdominal bloating and failure to pass gas during the day.

Choose the correct combination of answers:

- a - 1, 2, 3;
- b - 2, 3, 4;
- c -1, 3, 4;
- d - 1, 3, 5;
- e- 1, 2, 4.

4. Professional situation. Six days after surgery (appendectomy) the patient had pain in the wound area, redness, swelling, painfulness, body temperature increased to 38 °C. Determine the nature of the complication and specify the doctor's actions.

5. Professional situation. Eight hours after the surgery (cholecystectomy), the patient has sharp weakness, dizziness, thirst, pale skin, pulse is frequent, weak filling, BP 90/60 mm Hg. The drainage is haemorrhagic discharge. Determine the nature of the complication and specify the physician's actions.

6. The following muscles are most commonly torn:

- 1) biceps brachii
- 2) broadest muscle of back
- 3) rectus abdominis muscle
- 4) quadriceps femoris muscle
- 5) calf muscle.

Choose the correct combination of answers:

- a - 1, 2, 3;
- b - 1, 4, 5;
- c - 1, 3, 5;

d -1, 3, 4.

7. The clinical picture of a concussion is characterized by:

- 1) loss of consciousness at the time of injury
- 2) retrograde amnesia
- 3) loss of functions of particular brain structures
- 4) disorder of sensitivity, hemiparesis
- 5) dizziness.

Choose the correct combination of answers:

- a - 1, 2;
- b - 1, 3, 4;
- c - 1, 2, 4;
- d - 1, 4;
- e - 1, 2, 5.

8. Highlight the most effective instrumental methods of diagnosing closed abdominal injuries:

- 1) scintigraphy
- 2) esophagogastroduodenoscopy
- 3) thermography
- 4) laparoscopy
- 5) radiography.

Choose the correct combination of answers:

- a - 2, 4, 5;
- b - 1, 2, 4, 5;
- c - 3, 4, 5;
- d - 4, 5;
- e - 4, 5.

9. Define the basic principles of fracture treatment:

- 1) repositioning of bone fragments
- 2) fixation of bone fragments in the correct position by immobilization
- 3) removal of hematoma by puncture from the fracture area
- 4) acceleration of bone consolidation and recovery of organ functions.

Choose the correct combination of answers:

- a - 1, 2, 3;
- b - 2, 3, 4;
- c - 1, 3, 4;
- d - 1, 2, 4;
- e- all answers are correct.

10. Superficial burns include:

- 1) first-degree burns;
- 2) burns of II degree
- 3) burns of IIIa degree
- 4) burns of IIIb degree
- (5) burns of the IV degree.

Choose the correct combination of answers:

- a - 1;
- b - 1, 2;
- c - 1, 2, 3;
- d - 1, 2, 3, 4.

11. Professional situation. A pedestrian was hit by a vehicle with a sliding impact. In the fall, his head hit the curb of the sidewalk. His condition was moderate. There was general lethargy with preserved consciousness and orientation, hyperemia of the face, localized headache in the area of impact. The patient is lying on his side on the side of the blow. There is bradycardia, increased BP, rapid fatigability and decreased muscle strength, and difference in pupil response to light.

What is your presumptive diagnosis and action?

12. Professional situation. A 47-year-old patient underwent primary surgical treatment of an accidental wound on the back of the right hand 2 days ago, which resulted in primary suturing. Today, the patient noted increased pain in the area of surgery, swelling of the hand, increased body temperature, and therefore he went to the doctor again. The patient's condition is satisfactory. No peculiarities in organs. Locally: pronounced swelling of the back of the right hand was noted. The skin around the sutures is sharply tense, hyperemic. Palpation of this area is painful. Function of the hand is disturbed. **What complication are we talking about? What should the doctor do?**

13. Local fever is uncharacteristic of the following processes:

- a) abscess of the shoulder;
- b) phlegmon of the hip;
- c) tuberculosis of the knee joint (tuberculous gonitis);
- d) paronychia of the thumb of the hand;
- e) purulent bursitis of the elbow joint.

Choose the correct answer.

14. Chronic hematogenous osteomyelitis is characterized by:

- 1) frequent lesion of the diaphysis of the long tubular bones;
- 2) frequent lesion of metaphysis and epiphysis of tubular bones;
- 3) infrequent atrophy of muscles;
- 4) constantly observed muscle atrophy;
- 5) infrequent lesion of the nearest joints.

Choose the correct combination of answers:

- a - 1, 3, 5;
- b - 2, 3, 5;
- c - 1, 2, 5;
- d - 4, 5;
- e - 1, 4, 5.

15. What are the peculiarities of the pathogenesis of peritonitis?

- 1) Spread of the lesion.
- 2) Paralysis of the gastrointestinal tract.
- 3) Toxic damage to internal organs.
- 4) Absorption of bacterial toxins by the peritoneum.
- 5) Absorption of bacterial toxins from the intestine.

Choose the correct combination of answers:

- a - 1, 3, 4, 5;
- b - all answers are correct;
- c - 1, 3, 4;
- d - 1, 3, 5;
- e - 2, 3, 5.

16. Involvement of peritoneum in purulent inflammatory process occurs in:

- 1) direct transfer of inflammation from the serous cover of the organ;
- 2) penetrating wound of abdomen;

- 3)rupture of parenchymatous organ of abdominal cavity;
- 4)failure of sutures of hollow organ anastomoses;
- 5) increased permeability of intestinal wall.

Choose the correct combination of answers:

- a - 1, 2, 3, 4;
- b - 2, 3, 4, 5;
- c - 1, 2, 4, 5;
- d - 3, 4, 5;
- e - all answers are correct.

17. Professional situation. A 40-year-old patient was admitted to the surgical department with complaints of an infiltrate-like mass on the posterior surface of the neck, elevated body temperature up to 40°. On the surface of the infiltrate there are several purulent-necrotic pustules, creating the impression of a "sieve", which merge with each other in the center and form an extensive area of necrosis. There is marked tissue swelling around the infiltrate. The patient has no appetite, weakness is increasing. Antibiotics, bed rest, detoxification therapy were prescribed, but the next day the patient's condition did not improve, tissue swelling increased. State the diagnosis. **What is your treatment tactics for this disease? What other diseases should be differentiated with? What pathogenic microorganism is the most common pathogen? What predisposes to the occurrence of this disease? What method of treatment is used in case of facial abscesses?**

18. Professional situation. Chest radiologic examination is extremely important to clarify the diagnosis. It is clear that at the beginning of the disease fluid accumulates in the posterior-lower parts of the pleural cavity - rib-diaphragmatic sinus; as the exudate accumulates, the darkening of the lung field increases.

Fluid accumulation in pleural cavity is noted in exudative pleurisy, hydrothorax, pyopneumothorax. **What are their peculiarities?**

19. Bone and joint lesions in all localizations of tuberculosis are detected:

- a) in 5% of cases;
- b) in 10% of cases;
- c) in 20% of cases;
- d) in 25% of cases;
- e) in 30% of cases.

Choose the correct answer.

20. Clinical signs of tuberculosis of bones:

- 1) lesion of the diaphysis of the long tubular bones;
- 2) frequent lesion of adjacent joints;
- 3) lesion of the growth zone of the bone;
- 4) negative Alexandrov's symptom;
- 5) muscle atrophy.

Choose the correct combination of answers:

- a - 1, 2, 3;
- b - 2, 3, 4;
- c - 1, 4, 5;
- d - 1, 3, 5;
- e - 2, 3, 5.

21. Professional situation. A 6-year-old child complains of body temperature increase up to 37.6 °C, pain in the right hip joint when walking. Atrophy of the right lower extremity muscles,

smoothing of groin and gluteal folds are noted. X-ray examination reveals destruction of the femoral head. What disease should be suspected?

22. Professional situation. Examination of the patient revealed a conglomerate of enlarged cervical lymph nodes, palpation is painful. Past medical history was 2 months, the nodes gradually increased. Body temperature 37.8° C. The husband of the patient was examined by a phthisiatrician 6 months ago. **What is your presumptive diagnosis?**

23. Select the characteristic signs of limb arterial thromboembolism:

- 1) gradual increase in pain;
- 2) sudden onset of acute pain;
- 3) blueness of the skin;
- 4) pallor of the skin;
- 5) coldness of the limb.

Choose the correct combination of answers:

- a - 1, 2, 3;
- b - 2, 3, 4;
- c - 4, 5;
- b - 2, 4, 5;
- e-1, 3, 5.

24. Prevention of deep vein thrombosis after surgery includes:

- 1) antibiotic therapy;
- 2) bandaging the limb before and after surgery;
- 3) long period of bed rest after operation;
- 4) early activation of patients after surgery;
- 5) use of vasodilators.

Choose the correct combination of answers:

- a - 1, 2;
- b - 4, 5;
- c - 2, 3, 5;
- d - 2, 4;
- e - 1, 3, 5.

25. Professional situation. After gastric surgery, a 58-year-old patient on the 4th day suddenly experienced sharp pain in the right lower extremity, coldness of the limb, palpation of the lower leg cold, no pulsation in the arteries of the foot and the popliteal artery with preserved pulsation in the femoral artery, reduced pain sensitivity in the shin and foot. Your diagnosis and actions?

26. Professional situation. A 76-year-old man came to you with complaints of persistent pain in the calf muscles that increases with walking, discoloration of the 1st toe of the right foot. His feet are pale, the right foot is colder than the left, no pulsation in the arteries of the foot. What is your diagnosis and action?

27. Name the malformations of the abdomen and digestive organs:

- 1) hernia of the umbilical cord;
- 2) umbilical fistula;
- 3) atresia of the rectum;
- 4) Hirschsprung's disease;
- 5) fallot triad.

Choose the correct combination of answers:

- a - 1, 2, 3;
- b - 1, 2, 3, 4;

- c - 2, 3, 5;
- d - 1, 2, 3, 5;
- e - all answers are correct.

28. The following types of transplantation are distinguished:

- 1. autogenous;
- 2. isogenic;
- 3. syngeneic;
- 4. allogenic;
- 5. xenogenic.

Choose the correct combination of answers:

- a - 1, 2, 3;
- b - 1, 2, 4, 5;
- c - 1, 3, 4, 5;
- d - 1, 4, 5;
- e - all answers are correct.

29. Methods to increase the effectiveness of allotransplantation:

- 1. immunological typing;
- 2. replacement of the recipient's haematolymphoid system;
- 3. non-specific immunosuppression;
- 4. selective elimination.

Choose the correct combination of answers:

- a - 1, 2, 3;
- b - 2, 3, 4;
- c - 1, 3, 4;
- d - all answers are correct.

30. Professional situation. An able-bodied patient has suffered a soft-tissue crush injury to the foot. After surgical treatment of the foot amputation, a large wound surface measuring 1012 cm was formed at the level of the tarsal bones. After treatment, the wound process entered phase II with subsiding inflammatory phenomena and development of bright granulation tissue. The size of the wound and its location in the functionally significant zone determines the necessity to perform reconstructive-plastic surgery. However, local tissue is insufficient for this. Which type of plastic surgery is appropriate?

31. Professional situation. A 24-year-old woman presented with a CBRN burn on 40% of her scalp as a result of hair inflammation. Necrectomy and autodermoplasty of the wound with a split flap resulted in an extensive hairless skin area.

Is surgical correction of post-burn alopecia possible? If yes, how?

32. The superior side of the subpectoral triangle of the anterior wall of axillary fossa is:

- 1) the inferior border of the clavicle;
- 2) the superior border of the pectoralis major;
- 3) the inferior border of the pectoralis major;
- 4) the superior border of the pectoralis minor;
- 5) the inferior border of the pectoralis minor.

33. In the middle third of the posterior fascial compartment of the arm, there lie:

- 1) the deep artery of arm;
- 2) the triceps brachii;
- 3) the median nerve;

- 4) the brachial artery;
- 5) the radial nerve;
- 6) the biceps brachii.

34. The cruropopliteal canal has the following openings:

- 1) two inlets and two outlets;
- 2) two inlets and three outlets;
- 3) one inlet and three outlets;
- 4) one inlet and two outlets;
- 5) one inlet and one outlet.

35. Professional situation. A rheumatic patient had a thrombus part detachment that had formed in the left atrium; it resulted in a thromboembolism of the femoral artery at the level of the vascular space. **Is it possible to restore the lower limb blood supply without operative intervention?**

36. Most of the arteries in the frontal-parietal-occipital region are situated in:

- 1) the skin;
- 2) the musculo-aponeurotic layer;
- 3) the periosteum;
- 4) the subpericranial tissue;
- 5) the subcutaneous tissue;
- 6) the subaponeurotic tissue.

37. In the pleural cavity the following sinuses are marked:

- 1) costodiaphragmatic;
- 2) costomediastinal;
- 3) vertebromediastinal;
- 4) phrenicomediastinal;
- 5) all of the enumerated.

38. Under the lateral umbilical fold there is the peritoneum of:

- 1) the deferent duct;
- 2) the obliterated umbilical vein;
- 3) the obliterated urinary duct;
- 4) the obliterated umbilical artery;
- 5) the inferior epigastric artery and vein.

39. Professional situation. A patient with high bowel obstruction symptoms was brought to hospital. The anamnesis reported the patient having eaten too much indigestible food after a long fasting. However, during examination and care all the symptoms were gone. In which part of the intestines the obstruction took place? Give a topographoanatomic ground for its pathogenesis and the “self-healing”.

40. All the mentioned structures are anterior of the right ureter except for:

- 1) the descending duodenum;
- 2) the parietal peritoneum of the right mesenteric sinus;
- 3) the genitofemoral nerve;
- 4) the testicular vessels;
- 5) the root of the mesentery

41. Anatomic structures going through the supra-piriform foramen:

- 1) the superior gluteal nerve;

- 2) the inferior epigastric artery;
- 3) the ilio-inguinal nerve;
- 4) the superior gluteal artery and vein;
- 5) the posterior cutaneous nerve of thigh.

42. The osseous lesser pelvic walls contain all the following structures except for:

- 1) the sacrum;
- 2) the lumbar part of the spinal column;
- 3) the iliac bones;
- 4) the ischial bones;
- 5) the pubic bones;
- 6) the coccyx.

43. Professional situation. During a surgery on an ovarian carcinoma a surgeon has to ligate the ovarian artery. **What internal landmark is used for it? What structure is to be kept safe from casual ligating?**

44. Match the description of the following rheumatic diagnoses:

1. Osteoarthritis	a) Affection of distal interphalangeal joints, spindle-shaped swelling of fingers, skin and nail changes characteristic of psoriasis.
2. Gout.	b) Periarticular deposition of amyloid. Congo red staining of aspirated articular fluid.
3. Psoriatic arthritis.	c) Enlargement of bone structures of the 2nd and 3rd metacarpophalangeal joints; increased serum iron and ferritin levels with decreased transferrin-binding capacity; chondrocalcinosis may appear on radiographs.
4. Lyme disease.	d) Slight swelling of soft tissues, involvement of the distal interphalangeal joints, no pronounced morning stiffness, increased severity of pain by the end of the day.
5. Amyloidosis.	e) Presence of crystals in synovial fluid or tophuses with characteristic negative double ray refraction on polarization microscopy.
6. Hemochromatosis.	f) Early stages have erythema migrans and cardiovascular pathology; later stages have intermittent mono- or oligoarthritis (may be chronic and erosive in 15% of patients), encephalopathy, and neuropathy; 5% of healthy individuals are positive for Lyme borreliosis.
7. Sarcoidosis.	g) Widespread musculoskeletal pain and stiffness, paresthesias, unproductive sleep, fatigue, multiple symmetrical trigger points.
8. Fibromyalgia	h) Chronic granulomatous disease, accompanied by chronic symmetrical polyarthritis in 10-15%.

45. Match the names of heart diseases with their definitions

1. Angina pectoris	a) necrosis (necrosis) of the heart muscle as a result of acute occlusion of a coronary artery, due to thrombosis, developing when unstable atherosclerotic plaque is damaged (ruptured).
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2. Coronary heart disease (CHD)	b) is a chronic disease, the main manifestation of which is arterial hypertension (AH), not associated with the presence of pathological processes, in which the increase in BP is due to known, in modern conditions often eliminated causes (symptomatic AH).
3. Myocardial infarction (MI)	c) is a clinical syndrome manifested by a feeling of discomfort or pain in the chest of a compressive, pressing nature, which is localized most often behind the sternum and may irradiate to the left arm, neck, lower jaw, epigastric region.
4. Hypertension (HD)	d) is a disease caused by insufficient supply of oxygen and nutrients to the heart (myocardium), which occurs due to impaired blood supply to the myocardium due to coronary artery disease.

46. Drugs used to treat stable angina include:

- 1) Antiplatelet drugs
- 2) statins
- 3) Fibrates (fibric acid derivatives)
- 4) Beta-adrenoblockers
- 5) Calcium antagonists

47. Sideropenic symptoms of iron deficiency anemia include:

1. dry skin, cracked skin on hands and feet
2. brittle and flaky nails
3. crumbling of the ends of the hair
4. taste perversion (picachlorotica) in the form of an irrepressible desire to eat chalk, toothpaste, ashes, paint, earth, etc. (pathophagia)
5. burning sensation of the tongue, signs of glossitis (pain and redness of the tongue, atrophy of the papillae)

Variants: a) 2,4,5; b) 1,2,3,4,5; c) 2,3,5; d) 2,3,4,5

48. Make up sentences from the words bellow:

- 1) chronic glomerulonephritis, inflammatory kidney disease, immune origin, renal structures, renal failure.
- 2) chronic pyelonephritis, bacterial inflammation, irreversible changes, renal parenchyma and shrinkage.
- 3) Amyloidosis, deposition, fibrillar protein, organs, congophilia, ray refraction, amyloid fibril.

49. The treatment program for chronic pyelonephritis includes:

1. Etiological treatment (antibiotics and uroantiseptics)
2. Phytotherapy.
3. Antibacterial treatment
4. Physiotherapeutic treatment.
5. Symptomatic treatment of arterial hypertension.

Variants: a) 1, 2, 4,5; b) 2,3,5; c) 1,4,5; d) 2,3,4,5

50. Match kinds of pneumonia with their translations:

1. common interstitial pneumonia	a) десквамативная интерстициальная пневмония
2. nonspecific interstitial pneumonia	b) респираторный бронхиолит
3. lymphoid interstitial pneumonia	c) обычная интерстициальная пневмония
4. diffuse alveolar damage	d) неспецифическая интерстициальная пневмония
5. organizing pneumonia	e) лимфоидная интерстициальная пневмония
6. desquamative interstitial pneumonia	f) диффузное альвеолярное повреждение
7. respiratory bronchiolitis	g) организирующаяся пневмония

Семестр 7

Контрольная работа № 3

1. 1. Read the text and answer the text-based questions.

Nervous system

The nervous system is one of the major regulatory systems of the body maintaining homeostasis. Its functions are to: 1) monitor the body's internal and external environments; 2) integrate sensory information; and 3) direct or coordinate the responses of other organ systems to the sensory input.

The nervous system is divided into the CNS and the peripheral nervous system. The CNS consists of the brain and spinal cord, while the peripheral nervous system consists of all the nerve tissue in the body, excluding the brain and spinal cord. Communication between the CNS and the rest of the body is via the peripheral nervous system. Specialized cells of the peripheral nervous system allow communication between the two systems.

Neurons have a very limited capacity for regeneration. In general, they neither replicate themselves nor repair themselves. Axons and dendrites in the peripheral nervous system may undergo repair if the cell body is intact and if the Schwann cells are functional. In the CNS, however, a damaged or cut axon is usually not repaired even when the cell body is intact and undamaged. Scientists have discovered that there are a few small concentrations of neuronal stem cells that remain in adults that can produce a limited number of new neurons.

The peripheral nervous system is divided into the somatic nervous system and autonomic nervous system. The somatic nervous system has afferent and efferent divisions to receive and process sensory input from the skin, voluntary skeletal (striated) muscles, tendons, joints, eyes, tongue, nose, and ears. The autonomic, or visceral, nervous system innervates smooth muscle and glands.

The autonomic nervous system is divided into three parts: 1) the sympathetic nervous system; 2) the parasympathetic nervous system; and 3) the enteric nervous system. The parasympathetic and sympathetic nervous systems usually have opposing actions. For example, while the sympathetic nervous system controls the "fight or flight" responses, which increase the heart rate under stress, the parasympathetic nervous system will slow the heart rate. The enteric nervous system consists of nerve cells in the gastrointestinal tract.

1.2. Answer the following text-based questions:

1. What are the functions of the nervous system?

2. What are the two subsystems of the nervous system?
3. What are the two types of cells found in the peripheral nervous system?
4. What are the divisions of the peripheral nervous system?
5. What are the divisions of the autonomic nervous system?

2. Choose the appropriate word in the blanks to fill in the sentence.

1. The nervous (part, item, system) is one of the major regulatory systems of the body maintaining homeostasis.
2. The nervous system (is divided, comprises, includes) into the CNS and the peripheral nervous system. Communication (between, under, on) the CNS and the rest of the body is via the peripheral nervous system.
3. Neurons have a very (limited, wide, a few) capacity for regeneration. In general, they neither replicate themselves nor repair themselves.
4. The peripheral nervous system (consists, divide, include) of afferent or sensory neurons and efferent or motor neurons.
5. The (neuron, cell, membrane) is the structural unit of the nervous system.
6. The nervous system (has, stimulates, controls) the actions and functions of the body.
7. A nerve cell (gives, has, receives) many synapses from other neurons and sometimes from itself.

3. Match functions to each area of the brain.

1. Medulla oblongata	a) Center for conscious thought processes and intellectual functions, memory, sensory perception, and emotions
2. Pons	b) Relays messages between spinal cord and brain and to cerebrum; center for control and regulation of cardiac, respiratory, and digestive activities
3. Midbrain	c) Relay and processing center for sensory information
4. Cerebellum	d) Regulates body temperature, water balance, sleep-wake cycles, appetite, emotions, and hormone production
5. Cerebrum	e) Processing center involved with coordination of movements, balance and equilibrium, posture; processes sensory information used by motor systems
6. Thalamus	f) Involved with the processing of visual information, including visual reflexes, movement of eyes, focusing of lens, and dilation of pupils
7. Hypothalamus	g) Relays information from medulla and other areas of the brain; controls certain respiratory functions

4. Translate the text into Russian.

The spinal cord

The spinal cord (medulla spinalis) is located in the spinal canal. At the level of the I cervical vertebra and occipital bone, the spinal cord passes into the medulla oblongata and extends downward to the I-II lumbar vertebra, where it thins and turns into a thin terminal filament. The spinal cord is 40-45 cm long and 1 cm thick. The spinal cord has cervical and lumbosacral thickening, where nerve cells providing innervation of the upper and lower extremities are localized. The spinal cord consists of 31-32 segments. A segment is an area of the spinal cord that belongs to one pair of spinal roots (anterior and posterior). The anterior spinal cord root contains

motor fibers, the posterior spinal cord contains sensory fibers. Connecting in the area of the intervertebral node, they form a mixed spinal nerve.

5. Make up sentences:

1. Spinal, divide, in, nerves, the, canal, into, vertebral, branches, two, the, and, the, dorsal, root, root, ventral.
2. Each, is, a, spinal, nerve, considered, with, mixed, nerve, and, both, sensory, motor, neurons.
3. Both, the, and, division, sympathetic, parasympathetic, of, many, organs, innervates, the, nervous, system, autonomic.
4. Gray, of, and, and, matter, consists, neurons, axons, unmyelinated, dendrites.
5. White, of, myelinated, matter, consists, nerve, tissue.
6. The, nervous, system, autonomic, "involuntary", regulates, activity, is, which, not, on, a, controlled, conscious level.
7. Most, that, is, a, to, their, it, and, researchers, agree, intelligence, person's, ability, comprehend, environment, evaluate, rationally, form, appropriate, responses.

6. From the list below choose the proper English equivalents of the italicized words in the text.

Forms of dementia

The term «*слабоумие*» describes a group of symptoms that are caused by changes in brain function. The two most common forms of dementia in older people are *болезнь Альцгеймера* and *мультиинфаркт dementia* (sometimes called vascular dementia).

There is no *лечения* for these types of dementia. In Alzheimer's disease *изменения нервных клеток* in certain parts of the brain *в результате приводят к (результат)* in the death of a large number of cells. Some researchers believe there is a *генетическое происхождение* to Alzheimer's disease. The symptoms of Alzheimer's disease *ранжируются (диапазон) от легкой забывчивости* to *серious нарушениях в мышлении, суждениях*, and the ability to perform *повседневной деятельности*. In multi-infarct dementia a series of *небольшие инсульты* or changes in the brain's blood supply may result in the death of *мозговой ткани*. The location in the brain where the small strokes *происходят* determines the seriousness of the problem and the symptoms that *возникают*. Symptoms that begin *внезапно* may be a *знаком* of this kind of dementia. People with multi-infarct dementia are *вероятно* to show signs of *улучшения* or *остаются стабильными* for long periods of time, then quickly develop new symptoms if more strokes occur. In many people with multi-infarct dementia, high blood pressure is *виноваты*.

Occur, arise, suddenly, sign, likely, improvement, remain stable, to blame, "dementia", Alzheimer's disease, multi-infarct, cure, nerve-cell changes, result, genetic origin, range from, mild forgetfulness, impairments in thinking, judgment, daily activities, small strokes, brain tissue.

7. Professional situation. Spinal cord injuries may lead to several distinct syndromes. Which of the following incorrectly describes the syndrome listed?

- A. In anterior spinal artery syndrome, a bilateral loss of motor and pain sensation occurs with preservation of position and vibratory sensation.
- B. In posterior spinal artery syndrome, a bilateral loss of position and vibration sensation occurs with preservation of motor and pain sensation.
- C. In central cord syndrome, bilateral motor and pain sensation is lost, worse in the lower extremities than in the upper extremities and worse in the proximal ends of extremities than in the distal ends of extremities.
- D. In Brown-Sequard syndrome, ipsilateral motor and position sensation is lost along with contralateral pain and temperature sensation

- E. In cauda equina syndrome, a unilateral or bilateral loss of motor and sensory function occurs in the distribution of multiple nerve roots, including bladder areflexia and stool incontinence.

8. 1. Read and translate the text and answer the text-based questions.

Infectious diseases

Infectious diseases are diseases caused by infectious agents - viruses, bacteria, fungi. When introducing protozoa and worms into the body we speak of invasive diseases. Some infectious diseases have now been eliminated, but many, especially viral ones, still pose a significant threat to the population. In addition, there are still endemic foci of a number of infectious diseases, which, with the speed of modern means of transport, can easily be transported to other countries. The infectious process is very complex, and its development is determined by both the characteristics of the pathogen and the reactive state of the macroorganism. The characteristics of the microorganism-the causative agent of an infectious disease-are determined not only by its structure, chemical structure, antigenic properties, but also by the nature of its interaction with the host organism. The result of this interaction largely depends on the state of the body's defense systems: phagocytic (neutrophils and monocytic phagocytes) and immune, especially humoral immunity systems.

8.2. Text-based questions.

1. What causes infectious diseases?
2. What are the dangers of infectious diseases?
3. What determines the development of infectious diseases?
4. What are the body's defense systems for?

9. Match the first part of the sentence with the second one.

1. Different infectious agents cause	a) inflammation.
2. Bacteria, having penetrated the tissues, usually cause	b) proliferation and transformation; the inflammatory reaction is largely secondary.
3. Viruses, subjecting the host cells to their reproduction mechanism, can lead to cell dystrophy and necrosis, as well as cell ...	c) different tissue reactions, which is particularly evident in bacterial and viral infections.
4. Antibodies circulating in the blood are formed ...	d) produce antimicrobial and antitoxic effects providing post-infection humoral immunity.
5. Antigen-antibody combinations in the presence of complement ...	e) to xensitization of the organism, the appearance of hypersensitivity reactions of both immediate and delayed (allergic reactions) type.
6. Prolonged antigenic exposure during an infectious disease leads ...	f) in response to antigenic stimulation of the immune system.

10. Relate the classification of infectious diseases according to their features.

1. According to biological attribute:	a) 1) intestinal infections occurring when an infectious agent enters the digestive tract through the mouth; 2) respiratory infections transmitted by airborne; 3) "blood infections" (transmissible) transmitted through blood-sucking arthropods; 4) infections of the outer skin, body fiber and muscles (infection occurs through exposure to any infected environmental factors; injury by infected object); 5) infections with different transmission mechanisms.
2. According to aetiology:	b) 1) anthroponoses - infectious diseases occurring only in humans; 2) anthrozoonoses - infectious diseases occurring in humans and animals; 3) biocenoses - a group of anthroponoses and anthrozoonoses transmitted through insect bites, which are places of reproduction of the pathogen.
3. By mechanism of transmission:	c) 1) viral infections; 2) rickettsioses; 3) bacterial infections; 4) fungal; 5) protozoal; 6) parasitic. Infections can be exogenous or endogenous. In the following, all infectious diseases will be described by etiology.

11. Fill in the blanks with the necessary words from the box below:

Immunotherapy

Immunotherapy is one of the important (1) ----- for infectious patients which is divided into specific and (2) ----- immunotherapy. Specific immunotherapies include antitoxic sera (antitetanic, antitubercular, anti-diphtheria, etc.) and (3) ----- (antitetanic) as well as (4) ----- immunoglobulins (influenza, measles, tick-borne encephalitis, pertussis, antistaphylococcal, etc.). Plasma from immunized (5) ----- is also used (anti-staphylococcal, anti-Syngene etc.). These preparations contain ready (6) ----- to toxins and the causative (7) ----- itself, i.e. create passive immunity, which lasts for 2-3 weeks. When prescribing immunoglobulins it should be borne in mind that their excess blocks the (8) ----- of immunocompetent cells and disrupts the synthesis of own antibodies. (9) ----- (anatoxins, corpuscular killed vaccines) are also used for therapeutic purposes.

immunoglobulins, donors, receptors, vaccine preparations, non-specific, treatment, antimicrobial, agent, antibodies

12. Translate sentences from Russian into English.

1. Для лечения и профилактики вирусных инфекций широко применяют препараты интерферонов и индукторы интерферонов.

2. При тяжелых формах инфекционных болезней используют патогенетическую синдромальную терапию, включая методы интенсивной терапии и реанимации.

3. Комплексная патогенетическая терапия показана при развитии инфекционно-токсического шока, тромбгеморрагического синдрома, отека головного мозга, судорожного синдрома, острой дыхательной недостаточности, сердечно-сосудистой недостаточности, тяжелой органной недостаточности.

13. Match the viral hepatitis to their definitions.

1. Hepatitis A (HA)	a) is a viral hepatitis with parenteral mechanism of transmission
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2. Hepatitis E (HA)	b) is a viral hepatitis with parenteral transmission of the pathogen, which requires HbsAg of HB virus for replication, characterized by more severe course than other viral hepatitis
3. Hepatitis B (HB)	c) is a viral hepatitis with parenteral transmission, characterized by frequent subclinical course, chronicity of the process, presence of extrahepatic lesions and unfavorable long-term consequences
4. Hepatitis D	d) is an acute viral anthroponotic disease with fecal-oral mechanism of transmission of the pathogen, characterized by the development of parenchymatous hepatitis and benign cyclic course
5. Hepatitis C (HC)	e) is anthroponous viral infectious disease transmitted mainly by parenteral and sexual routes, characterized by the development of cyclic parenchymatous hepatitis
6. Hepatitis G	f) is an acute viral anthroponotic infectious disease with fecal-oral mechanism of transmission, characterized by predominantly waterborne transmission of the pathogen, acute cyclic course and frequent development of PE in pregnant women

14. Fill in the blanks with the necessary words and phrases from the box below:

Acute respiratory diseases (ARI)

Acute respiratory diseases (ARI) is a group of acute, massively spread (1) -----, which are characterized by involvement of different parts of the (2) -----.

The causative (3) ----- of ARI can be influenza viruses, parainfluenza, rhinoviruses, respiratory syncytial (4) -----, coronaviruses, reoviruses, adenoviruses, herpes simplex viruses, (5) ----- virus, (6) ----- (rhinitis), (7) ----- (nasopharyngitis), Haemophilus influenzae (rhinopharyngitis), chlamydia and mycoplasmas. Often ARI is caused by associations of microorganisms (viral-viral, viral-bacterial, etc.).

Cell damage in different parts of the respiratory tract, inflammation with (8) -----, intoxication, immunosuppression, secondary (9) ----- and cold factors play an important role in the pathogenesis of acute respiratory diseases.

The clinical picture is characterized by acute development, short course of the disease, the presence of catarrhal phenomena, (10) -----, a favorable outcome of the disease.

The diagnosis is made on the basis of clinical and epidemiological data, which allow to differentiate (11) -----, with less accuracy common acute respiratory viral infections (ARI). In other cases, acute respiratory infections are diagnosed clinically. Specific laboratory diagnostic methods are used only for scientific purposes and for (12) ----- of the circulation of different strains of pathogens, such as influenza. This is necessary for (13) ----- and vaccine production.

epidemiological monitoring, disease prediction, airborne diseases, respiratory tract, agents, flora activation, fever and intoxication, influenza, virus, Epstein-Barr, pneumococcus, meningococcus, catarrhal respiratory syndrome

15. Match the viral hepatitis to their definitions.

7. Hepatitis A (HA)	g) is a viral hepatitis with parenteral mechanism of transmission
8. Hepatitis E (HA)	h) is a viral hepatitis with parenteral transmission of the pathogen, which requires HbsAg of HB virus for replication, characterized by more severe course than other viral hepatitis

9. Hepatitis B (HB)	i) is a viral hepatitis with parenteral transmission, characterized by frequent subclinical course, chronicity of the process, presence of extrahepatic lesions and unfavorable long-term consequences
10. Hepatitis D	j) is an acute viral anthroponotic disease with fecal-oral mechanism of transmission of the pathogen, characterized by the development of parenchymatous hepatitis and benign cyclic course
11. Hepatitis C (HC)	k) is anthroponous viral infectious disease transmitted mainly by parenteral and sexual routes, characterized by the development of cyclic parenchymatous hepatitis
12. Hepatitis G	l) is an acute viral anthroponotic infectious disease with fecal-oral mechanism of transmission, characterized by predominantly waterborne transmission of the pathogen, acute cyclic course and frequent development of PE in pregnant women

16. Read the text and translate it.

Definition of “adaptive immunity”

Adaptive immunity is a specific biological property of multicellular organisms. At normal state its natural function is to protect the organism against genetically foreign factors, such as infectious agents and other external pathogens capable of entering the internal medium and making strong bonds with cells and/or intercellular substance. Specialized cells (lymphocytes) provide this protection. The unique and distinctive capacity of lymphocytes as a cell type is to recognize a multitude (~ 10¹⁸) of molecular objects – antigens.

Семестр 8

Контрольная работа № 4

1. Match the names of the diseases with their definitions.

A	B
1. Dacryocystics	a) is a chronic inflammation of the pharyngeal mucosa which develops as a consequence of acute inflammation conditioned by inadequate treatment and continued exposure to etiologic factors.
2. Tonsillitis	b) is an acute infectious disease where causative agent is typically transmitted by airborne contact.
3. Diphtheria	c) is inflammation of the lacrimal sac and nasolacrimal duct of acute or chronic nature, leading to narrowing of tear drainage pathways and disruption of tear removal.
4. Measles	d) is an acute systemic allergic infectious disease characterized by acute inflammatory changes in the lymphoid tissue of the pharynx, most frequently – in the palatine tonsils, manifesting in throat ache and general intoxication.
5. Glandular Fever	e) is inflammation of the palatine tonsils mucosa caused by yeast-like fungi, often <i>Candida albicans</i> .
6. Mycotic Angina	f) is an acute infectious disease which manifests by general intoxication and development of inflammation in the tonsils,

	accompanied by formation of fibrinous (croupous) patches on their surface and on the oropharyngeal mucosa.
7. Chronic pharyngitis	g) is an highly contagious infectious disease typically occurring in children. It is caused by a virus transmitted by airborne contact.

2.1. Read the text and answer text-based questions. Translate the text.

Urinary system

The functions of the urinary system include regulation of body fluids, removal of metabolic waste products, regulation of volume and chemical make-up of blood plasma, and excretion of toxins. The major parts of the urinary system are the kidneys, the urinary bladder, two ureters, and the urethra. Each component of the urinary system has a unique function. Urine is manufactured in the kidneys. The urinary bladder serves as a temporary storage reservoir for urine. The ureters transport urine from the kidney to the bladder, while the urethra transports urine from the bladder to the outside of the body. The main sources of water gain are drinking and ingesting fluids, such as water contained in food, and water produced as a byproduct of metabolic processes. The main sources of water loss are urine formation, evaporation from the lungs (breathing), evaporation from the skin (sweating), and through the feces. Only about 47 percent of a person's daily water intake comes from drinking. Nearly 39 percent of water intake comes from eating solid food, since water is a major component of many foods. For example, fruits and vegetables may contain more than 90 percent water. Cosmetic dehydration is the practice of taking large doses of diuretics to cause temporary weight loss. It has been used by fashion models and body builders, but it is a dangerous practice because it can cause electrolyte imbalance and cardiac arrest.

2.2. Answer the following text-based questions.

1. What are the functions of the urinary system?
2. What are the major parts of the urinary system?
3. What are the sources of water gain and loss per day?
4. What percent of a person's intake of water comes from drinking water?
5. What is cosmetic dehydration?
6. What is the vasa recta?
7. What is urea and where is it produced?

3. From the list below choose the proper Russian equivalents of the italicized words in the text.

Urine and its formation

Normally, *dilute urine* is nearly colorless. *Concentrated urine* is a deep yellow; colors other than yellow are not normal. Food pigments can make the urine red, and drugs can produce colors such as brown, black, blue, green, or red. Urine may also be brown, black, or red due to *disorders or diseases* such as *severe muscle injury* or *melanoma*. Cloudy urine suggest the presence of *pus*, due to a *urinary tract infection* (UTI), or *salt crystals* from uric acid or *phosphoric acid*. *Urinalysis* is the chemical and physical analysis of a urine sample. It involves the color and appearance of urine, plus a detailed list of specific *compounds* and their concentration found in the *sample*. Substances that should not be found in urine are proteins, glucose, *acetone*, blood, and pus. The presence of any of these substances may *indicate* a disease. The main parts of urine production are *glomerular filtration*, *tubular reabsorption*, and *tubular secretion*. In filtration, blood pressure in the glomerular capillaries *forces* water and other *solutes* across the glomerular membrane. The process is similar to what happens in a coffee maker, where water *passes through* a filter and it *carries with* it some *dissolved compounds* (coffee). Usually, the coffee grinds never reach the pot, unless there is a hole in the filter. *Reabsorption* involves the return of water and *major nutrients* to the blood. Secretion is the *removal* of harmful or excess substances from the blood and their transport into the urine.

Канальцевая секреция, силы, растворенные вещества, проходит, проносит, растворенные соединения, Реабсорбция, основные питательные вещества, удаление, разбавленная моча, концентрированная моча, расстройства или заболевания, тяжелые мышечные травмы, меланома, гной, инфекция мочевыводящих путей, кристаллы соли, фосфорная кислота, анализ мочи, соединения, образец, ацетон, указание, клубочковая фильтрация, канальцевая реабсорбция.

4. Make up sentences from the words bellow:

1. Colorless, dilute, Normally, is, urine.
2. Yellow, Concentrated, is, a, urine, deep.
3. Cloudy, acid, or, phosphoric, or, crystals, salt, from, uric, suggest, urine, of, pus, presence, the, due, to, tract, a, urinary, infection, acid.
4. In, filtration, membrane, solutes, the, glomerular, across, pressure, blood, the, in, capillaries, glomerular, forces, and, water, other.
5. Blood, Reabsorption, to, the, involves, the, return, and, of, water, nutrients, major.

5. Internal genitals include:

- 1) ovaries;
- 2) uterus;
- 3) labia minora;
- 4) clitoris;
- 5) hymen.

6. Surgery for AUB include:

- 1) colposcopy;
- 2) hysterectomy;
- 3) endometrial ablation;
- 4) laparoscopy;
- 5) curettage of uterine mucosa.

7. Hyperprolactinemia causes:

- 1) pregnancy;
- 2) stress;
- 3) neuroleptic intake;
- 4) pituitary adenoma;
- 5) all of the above;
- 6) none of the above

8. Prolaction level is normalized with:

- 1) antibiotics;
- 2) neuroleptics;
- 3) dopamine agonists;
- 4) phytoestrogens

9. Signs of endocrine infertility:

- 1) irregular periods;
- 2) dysmenorrhea;
- 3) periods with an interval of more than 40 days in combination with galactorrhea, hirsutism and obesity;
- 4) menorrhagia or periods with an interval of less than 21 days;
- 5) increased appetite.

10. Workup of an infertile couple begins with:

- 1) the woman;
- 2) the man;
- 3) does not matter;
- 4) the man if female infertility has been ruled out.

11. Ectopic pregnancy can be localized at:

- 1) Cervix;
- 2) Rudimentary horn of uterus;
- 3) Ovary;
- 4) Abdominal cavity;
- 5) Vagina

12. From the list below choose the proper Russian equivalents of the italicized words in the text.

Amenorrhea

Amenorrhea is the absence of a *menstrual period* not due to *pregnancy, breastfeeding, or menopause*. Primary amenorrhea is diagnosed when girls have not had their first menstrual period by age 16. It may be caused by an *endocrine, genetic, or developmental disorder*. Secondary amenorrhea is diagnosed in *previously* menstruating women who have not had a menstrual period for six months or more. It may be caused by physical or emotional stress, including *excessive weight loss, anorexia nervosa, depression, or grief*. Many female athletes have secondary amenorrhea *due to decreased levels* of body fat.

Ранее чрезмерная потеря веса, нервная анорексия, депрессия, горе, должный, пониженный уровень, аменорея, менструальный период, беременность, грудное вскармливание, менопауза, эндокринные заболевания, нарушения развития.

13. Professional situation. A 65-year-old woman undergoes a routine abdominal hysterectomy and bilateral salpingo-oophorectomy for uterine prolapse. Intraoperatively, the surgeon notes ascites, a 3-cm adnexal mass, and lesions in the omentum, spleen, and small bowel. A gynecologic oncologist is not available for consultation. A biopsy of an accessible omental lesion is read as adenocarcinoma, most likely of gynecologic origin, on frozen section. **What is the most appropriate surgical strategy? Give your commentary.**

- A. Abdominal hysterectomy and bilateral salpingo-oophorectomy as planned
- B. Abdominal hysterectomy, bilateral salpingo-oophorectomy, omentectomy, small bowel resection, and splenectomy
- C. Abdominal hysterectomy, bilateral salpingo-oophorectomy, pelvic and para-aortic lymph node dissection, omentectomy, splenectomy, and small bowel resection
- D. Terminate the procedure; arrange for palliative care consultation for metastatic adenocarcinoma
- E. Terminate the procedure; arrange gynecologic oncologist consultation for further surgical evaluation

14. Match types of massage techniques used in children

Types	Characteristics
1. Stroking	a) The main action is an increase in metabolism, prescribed mainly for obesity

2. Friction	b) Light strokes on the skin with the back surface of I-IV fingers; the main action is to intensify trophism in deep muscles
3. Kneading	c) Low-intensity pressure on the skin, capturing not only the skin, but also the joints
4. Light strokes	d) Smooth movements with the back and palm of the hand on the skin of the child
5. Vibration	e) More intense pressure on the skin, capturing not only the skin, but also the joints

15. Fill in the blanks with the necessary words and phrases from the box below:

Pneumonia

Pneumonia is an acute infection of the (1) ----- *pulmonary parenchyma* of predominant (2) ----- *bacterial origin*, diagnosed by respiratory distress syndrome and physical signs, as well as by (3) ----- *infiltrative* or focal changes in the chest radiograph. Pneumonia can (4) ----- *occur* as a primary disease or complicate other diseases.

Pneumonia commonly (5) ----- *affects* children under 3 years. With age, the (6) ----- *incidence* of pneumonia decreases 3-4 times. Over the year, the incidence of community-acquired pneumonia is minimal in the summer while it (7) ----- *increases* in October-December, reaching its maximum in January-April, and (8) ----- *decreases* again in May-June.

There are community-acquired (home) and nosocomial types of pneumonia in children. Among hospital pneumonias, a group of pneumonias developing after (9) ----- *mechanical lung ventilation*, or ventilator-associated pneumonia, is considered separately.

mechanical lung ventilation, infiltrative, occur, affects, pulmonary parenchyma of predominant, bacterial origin, infiltrative, incidence, increases, decreases

16. Match the first part of the sentence with the second one.

1. The medical histories of children with arrhythmia....	a) ... not specific for pediatric patients, particularly for young children.
2. Heart arrhythmia in children is ...	b) ... appear only on the second day and progress rapidly
3. Cardiac arrhythmia is identified accidentally (by ECG) or ...	c) ... often report about unfavorable course of the perinatal period, family history of cardiovascular disease, recurrent acute infectious diseases and recurrent infections.
4. Fast or irregular heartbeat is not ...	d) ... often asymptomatic.
5. However, arrhythmia occurring in puberty can be caused by psychological factors or autonomic dysfunction and often have remarkable emotional coloring.	e) In children of the first year of life, anxiety, lethargy, refusal to feed, and pallor can be distinguished.
6. In children of the first year of life, anxiety, lethargy, refusal to feed, and pallor can be distinguished.	f) However, arrhythmia occurring in puberty can be caused by psychological factors or autonomic

	dysfunction and often have remarkable emotional coloring.
7. Hemodynamic disorders often ...	g) ... during diagnostic workup due to prior acute infection in almost half of the cases.

17. Match the first part of the sentence with the second one.

1. Biliary tract dysfunction (BTD) is a clinical condition caused by dysfunction of motility in the gallbladder, bile ducts and their sphincters, persisting for more than 12 weeks over the past 12 months.	a) BTD is divided into two types: gallbladder dysfunction and Oddi sphincter dysfunction.
2. BTD is divided into two types: gallbladder dysfunction and Oddi sphincter dysfunction.	b) The main cause of BTD is a violation of the peripheral nervous system coordination function and neurohumoral control due to improper diet and a disturbance in organization of the day and rest regimen.
3. The prevalence of BTD is high, especially in preschool children, significantly exceeding the prevalence of biliary tract organic diseases.	c) The incidence rate of primary gallbladder dyskinesia in children is more than 60%.
4. The incidence rate of primary gallbladder dyskinesia in children is more than 60%.	d) Biliary tract dysfunction (BTD) is a clinical condition caused by dysfunction of motility in the gallbladder, bile ducts and their sphincters, persisting for more than 12 weeks over the past 12 months.
5. Biliary motility disorders are detected in 70-90% of cases of diseases of the gastroduodenal zone.	e) The prevalence of BTD is high, especially in preschool children, significantly exceeding the prevalence of biliary tract organic diseases.
6. The main cause of BTD is a violation of the peripheral nervous system coordination function and neurohumoral control due to improper diet and a disturbance in organization of the day and rest regimen.	f) Biliary motility disorders are detected in 70-90% of cases of diseases of the gastroduodenal zone.

18. Read the text and translate the words and phrases in italics

Biliary tract dysfunction (BTD)

Biliary tract dysfunction (BTD) is a clinical condition caused by dysfunction of *motility in the gallbladder*, bile ducts and their sphincters, persisting for more than 12 weeks over the past 12 months. BTD *is divided into* two types: gallbladder dysfunction and Oddi sphincter dysfunction. The prevalence of BTD is high, especially in preschool children, significantly exceeding the *prevalence* of biliary tract organic diseases. *The incidence rate* of primary gallbladder dyskinesia in children is more than 60%. Biliary motility *disorders* are detected in 70-90% of cases of diseases of the gastroduodenal zone. The main cause of BTD is a *violation* of the peripheral nervous system

coordination function and neurohumoral control due to improper diet and a *disturbance* in organization of the day and rest regimen.

19. Match the first part of the sentence with the second one.

1. Leukocyturia occurs ...	a) ... a tubulointerstitial component of immune inflammation.
2. It is usually mild (up to 20-25 cells in the field of view) and is ...	b) ... is lymphocytes, it is abacterial in nature.
3. In glomerulonephritis leukocyturia is ...	c) ... noted in the first weeks of the disease.
4. Eosinophils are ...	d) ... in approximately 50% of patients, lasting for 1-2 weeks.
5. Leukocyturia in glomerulonephritis indicates ...	e) ... detected in urine.

20. Match the first part of the sentence with the second one.

1. Rotavirus gastroenteritis is an acute intestinal infection that is associated with moderate intoxication, vomiting, watery stools, and catarrhal phemonema in the upper respiratory tract.	a) Rotaviruses cause direct damage to the intestinal epithelium, disrupting the enzymatic system of enterocytes, which break down carbohydrates, primarily lactose, which leads to the development of secondary lactose intolerance.
2. Human rotavirus belongs to the genus Rotavirus of the Reoviridae family.	b) Accumulation of undigested carbohydrates is accompanied by an increase in osmotic pressure in the colon, impaired reabsorption of water and electrolytes.
3. Rotavirus virion contains RNA four serotypes are distinguished.	c) Rotavirus gastroenteritis is an acute intestinal infection that is associated with moderate intoxication, vomiting, watery stools, and catarrhal phemonema in the upper respiratory tract.
4. Rotaviruses cause direct damage to the intestinal epithelium, disrupting the enzymatic system of enterocytes, which break down carbohydrates, primarily lactose, which leads to the development of secondary lactose intolerance.	d) Human rotavirus belongs to the genus Rotavirus of the Reoviridae family.
5. Accumulation of undigested carbohydrates is accompanied by an increase in osmotic pressure in the colon, impaired reabsorption of water and electrolytes.	e) Rotavirus virion contains RNA four serotypes are distinguished.

Типовые вопросы к зачету:

Устные вопросы к зачету (1 семестр):

Speak on one of these themes:

1. Hygiene
2. Pathophysiology
3. Pharmacology
4. Pathological anatomy
5. General surgery

Устные вопросы к зачету (2 семестр):

Speak on one of these themes:

6. Surgery
7. Topographic anatomy
8. Departmental therapy

Устные вопросы к зачету (3 семестр):

Speak on one of these themes:

9. Neurology
10. Infectious diseases
11. Immunology and allergology

Устные вопросы к зачету (4 семестр):

Speak on one of these themes:

12. Otorhinolaryngology
13. Urology
14. Gynecology
15. Pediatrics

Типовые вопросы к зачету с оценкой:

1. Темы для подготовки монологического высказывания на зачете с оценкой:

1. Hygiene
2. Pathophysiology
3. Pharmacology
4. Pathological anatomy
5. General surgery
6. Surgery
7. Topographic anatomy
8. Departmental therapy
9. Neurology
10. Infectious diseases
11. Immunology and allergology
12. Otorhinolaryngology
13. Urology
14. Gynecology
15. Pediatrics