FEDERAL STATE BUDGET EDUCATIONAL INSTITUTION OF HIGHER EDUCATION
"ROSTOV STATE MEDICAL UNIVERSITY" OF THE MINISTRY OF HEALTH OF THE RUSSIAN FEDERATION

Faculty for training foreign students, residents and graduate students

Assessment materials for the discipline

"Pathological anatomy"

(appendix to the work program of the discipline)

Specialty 05/31/01 General Medicine

2023

1. **Scroll competencies, formed discipline (fully orpartially)***

general professional (OPK):

Code and name of general professional competence	General professional achievement indicator(s) competencies
OPK-5. Capable of assessing morphofunctional, physiological conditions and pathological processes in the human body to solve professional problems.	ID3 OPK-5. Can evaluate morphofunctional, physiological parameters and determine the presence of pathological processes in the human body based on clinical data laboratory, physical and instrumental research methods

2. **Kinds estimated materials V compliance With formed competencies**

Namecompetencies	Types of assessment materials	number of tasks **for 1 competency**
OPK-5. Capable evaluate morphofunctional, physiologically e states and pathological processes in body person for solutions professionals tasks.	Tasks closed type	25 standards Wi th answers
	Tasks open type: Tasks on additions Situational tasks Questions For interviews	75 standards Wi th answers

OPK-5:

Closed-type tasks: TOTAL 25 tasks.

Task 1. Instructions: Choose one correct answer.

An autopsy revealed multiple foci of bone tissue destruction in the vertebrae and skull. Histological examination revealed a pronounced proliferation of atypical plasma cells in the bone marrow, and deposits in the glomeruli and walls of renal vessels.

amyloid, in the lumens of the tubules there are multiple protein cylinders. The described changes made it possible to diagnose:
1) chronic myeloid leukemia; 2) chronic lymphocytic leukemia;
3) true polycythemia;
4) solitary plasmacytoma of bone;
5) multiple myeloma.
Response standard: 5) multiple myeloma.

Task 2. Instructions: Choose one correct answer.
Splenomegaly (weighing more than 3 kg) and liver enlargement are most pronounced with:
1) acute myeloblastic leukemia;
2) chronic lymphocytic leukemia;
3) chronic myeloid leukemia;
4) Hodgkin's lymphoma;
5) vera polycythemia.
Response standard: 3) chronic myeloid leukemia.

Task 3. Instructions: Choose one correct answer.
An increase in the lipid core, tears in the tire, hemorrhages, inflammatory infiltration correspond to:
1) atheromatous plaque;
2) unstable plaque;
3) atheromatous ulcer;
4) fibrous plaque;
5) liposclerosis.
Response standard: 2) unstable plaque.

Task 4. Instructions: Choose one correct answer. Hypertension affects:
1) only arteries of elastic type;
2) arteries of elastic and elasto-muscular type;
3) arterioles and small arteries of the muscular type;
4) capillaries and small veins;
5) veins and venules.
Response standard: 3) arterioles and small arteries of the muscular type.

Task 5. Instructions: Choose one correct answer.
When thrombosis of the main branch of the left coronary artery occurs, myocardial infarction occurs:
1) anterior wall of the left ventricle
2) posterior wall of the left ventricle
3) lateral wall of the left ventricle
4) circular
5) interventricular septum
Response standard: 4) circular.

Task 6. Instructions: Choose one correct answer.

Select most probable deadlines gap walls left ventricle attransmural myocardial infarction:
1) the first 6-8 hours;
2) 16-24 hours;
3) 4 - 6 days;
4) 2-3 weeks;
5) 2-3 months.
Response standard: 3) 4— 6 days.

Task 7. Instructions: Choose one correct answer.
Spasm of arterioles, plasmorrhagia, fibrinoid necrosis of the walls of small arteries, diapedetic hemorrhages around the vessels are observed with:
1) atherosclerosis;
2) hypertensive crisis;
3) arteriolosclerosis;
4) vasculitis;
5) vascular amyloidosis.
Response standard: 2) hypertensive crisis.

Task 8. Instructions: Choose one correct answer.
A persistent increase in blood pressure during arterial hypertension is due to:
1) spasm of arterioles;
2) plasmatic impregnation of the walls of large arteries;
3) hyalinosis of the walls of arterioles and small arteries;
4) focal fibrinoid necrosis of arterial walls;
5) atherosclerosis of the arteries.
Response standard: 3) hyalinosis of the walls of arterioles and small arteries.

Task 9. Instructions: Choose one correct answer. One of the forms of endocarditis in rheumatism:
1) acute polyposis-ulcerative;
2) recurrent verrucous;
3) subacute polyposis-ulcerative;
4) chronic polyposis-ulcerative;
5) infectious.
Response standard: 2) recurrent warty.

Task 10. Instructions: Choose one correct answer. Complication of acute warty endocarditis of the mitral valve:
1) pulmonary infarction;
2) pulmonary embolism;
3) brain abscess;
4) kidney infarction;
5) valve rupture.
Response standard: 4) kidney infarction.

Task 11. Instructions: Choose one correct answer. The outcome of rheumatic myocarditis is:
1) heart disease;
2) small focal cardiosclerosis;

3) brown atrophy of the heart;
4) obliteration of the pericardial cavity;
5) large-focal cardiosclerosis.
Response standard: 2) small focal cardiosclerosis.

Task 12. Instructions: Choose one correct answer. Abacterial warty Libman-
Sachs endocarditis occurs with: 1) rheumatism;
2)rheumatoid arthritis;
3)acute myocardial infarction;
4)syphilis;
5) systemic lupus erythematosus.
Response standard: 5) systemic lupus erythematosus.

Task 13. Instructions: Choose one correct answer.
With polyarteritis nodosa, fibrinoid necrosis and productive inflammation develop in the walls of:
1) arterioles, venules and
capillaries; 2) aorta and large
arteries; 3) medium and small
arteries; 4) small arteries and
veins;
5) arterioles and capillaries of the glomeruli of the kidneys
Response standard: 3) medium and small arteries.

Task 14. Instructions: Choose one correct answer.
Autoimmune chronic erosive destructive arthritis with symmetrical damage to small joints and systemic inflammatory changes in internal organs; signs: 1) rheumatism;
2)systemic lupus erythematosus;
3)psoriasis;
4) gout;
5) rheumatoid arthritis.
Response standard: 5) rheumatoid arthritis.

Task 15. Instructions: Choose one correct answer.
The development of an alveolar-capillary block in fibrosing alveolitis is associated with:
1) reduction of the capillary network of the lung stroma;
2) expansion of the alveoli and alveolar ducts;
3) fibrosis of the interalveolar septa;
4) atelectasis;
5) decrease in surfactant content.
Response standard:.3) fibrosis of the interalveolar septa.

Task 16. Instructions: Choose one correct answer. Chronic
hepatitis differs from acute hepatitis:
1) severity of dystrophic changes;
2) the presence of bridge-like necrosis;
3)penetration of the inflammatory infiltrate into the lobule;
4) cholestasis;
5) development of fibrosis.

Response standard: 5) development of fibrosis.

Task 17. Instructions: Choose one correct answer.

Fatty degeneration of hepatocytes; Mallory bodies; infiltrates from neutrophilic leukocytes; compression of the branches of the portal vein; narrow fibrous layers are characteristic microscopic signs of liver cirrhosis:

1) post-necrotic viral;
2) primary biliary;
3) alcoholic;
4) heart;
5) medicinal.

Response standard: 3) alcoholic.

Task 18. Instructions: Choose one correct answer.

The most characteristic morphological sign of subacute (rapidly progressive) glomerulonephritis:

1) hyaline nodules on the periphery of glomerular capillaries;
2) thickening of the basement membrane of the glomerular capillaries;
3) formation of "crescents" from the proliferating epithelium of the glomerular capsule;
4) ischemic necrosis of glomerular arterioles;
5) interstitial fibrosis

Response standard: 3) formation of "crescents" from the proliferating epithelium of the glomerular capsule.

Task 19. Instructions: Choose one correct answer. A disease

often complicated by renal amyloidosis:

1) rheumatoid arthritis;
2) rheumatism;
3) atherosclerosis of the renal arteries;
4) hypertonic disease;
5) alcoholic cirrhosis of the liver

Response standard: 1) rheumatoid arthritis; .

Task 20. Instructions: Choose one correct answer.

Organs in which metastatic abscesses most often appear during septicopyemia:

1) heart, spleen;
2) brain, bone marrow;
3) lungs, kidneys;
4) skin, subcutaneous fatty tissue;
5) The lymph nodes.

Response standard: 3) lungs, kidneys.

Task 21. Instructions: Choose several correct answers.

Exposure to bacterial antigens causes the following changes in the organs of immunogenesis:
1) sinus histiocytosis; 2) hyperplasia of the paracortical zones of the lymph nodes; 3) hyperplasia of the reproductive centers of the follicles of the lymph nodes; 4) plasmacytic transformation of lymphocytes; 5) hyperplasia of the periarterial zones of the spleen pulp; 6) myeloid metaplasia;
7) reduction of lymphoid follicles in the spleen and lymph nodes.
*Sample answer:*1, 3, 4, 6

Task 22. Instructions: Choose several correct answers.

Morphological manifestations of immediate hypersensitivity reactions:
1) fibrinoid necrosis of vessel walls; 2) purulent inflammation; 3) productive inflammation; 4) infiltration by mast cells; 5) infiltration by eosinophils, 6) fibrinous inflammation; 7) formation of epithelioid cell granulomas
*Sample answer:*1, 4, 5, 6

Task 23. Instructions: Choose several correct answers. Macroscopic changes in the

thyroid gland during thyrotoxic goiter: 1)
increased in size; 2) reduced in size; 3) dense consistency; 4) on a section of a uniform type;
5) on a section of a heterogeneous appearance, with many nodes and cysts.
*Sample answer:*1, 3, 4

Task 24. Instructions: Choose several correct answers.

The main histological forms of thyroid cancer are: 1) papillary; 2) squamous; 3) follicular; 4) acinar; 5) medullary; 6) choroid carcinoma.
*Sample answer:*1, 3, 5

Task 25. Instructions: Choose several correct answers.

Insufficiency of the anterior lobe of the pituitary gland is manifested by: 1) obesity; 2) exhaustion; 3) hypothyroidism; 4) polyuria; 5) dwarf stature; 6) arterial hypertension; 7) arterial hypotension.
*Sample answer:*2, 3, 5, 7

Open type tasks: TOTAL 75 tasks.

Addition tasks: TOTAL 10 tasks.

Task 26.

IN basis modern classifications leukemia laid down following

signstumor cells:1)_____, 2)_____, 3)_____,

*Sample answer:*1) histogenesis; 2) degree of differentiation; 3) phenotype.

Task 27.

Depending on the location in the layers of the heart muscle, the following forms of myocardial infarction are distinguished: 1)_____, 2)_____, 3)_____, 4)_____.

*Sample answer:*1) subendocardial, 2) subepicardial, 3) intramural, 4) transmural.

Task 28.
In a 67-year-old man who died from transmural myocardial infarction, an autopsy revealed 300 ml of blood and blood clots in the cavity of the cardiac membrane. What complications developed? 1)_____, 2)_____, 3)_____, 4)_____.
*Sample answer:*1) myomalacia; 2) true heart rupture; 3) hemopericardium; 4) cardiac tamponade.

Task 29.
Increased heart size, hypertrophy of the left ventricular myocardium and interventricular septum, subaortic muscular stenosis with normal and or reduced cavities; signs____cardiomyopathy.
*Sample answer:*hypertrophic.

Task 30. Diabetic macroangiopathy is characterized by damage to: 1)
_____,2)_____, 3)_____.

Reference answer: 1) aorta; 2) arteries muscular-elastic type; 3) arterieselastic type.

Task 31. With viral hepatitis "A", liver cells develop _____
dystrophy

*Sample answer:*hydropic.

Task 32. List the stages of acute renal failure: 1)
_____,2)_____, 3)_____.

*Sample answer:*1) oligoanuric; 2) shock, 3) stage of diuresis restoration.

Task 33. Indicate the types of exudative inflammation developing in the glomeruli of the kidney during acute post-streptococcal glomerulonephritis: 1)_____, 2)_____, 3)_____.

*Sample answer:*1) serous; 2) fibrinous; 3) hemorrhagic.

Task 34. Complications of chronic Helicobacter gastritis (B), which can lead to death: 1)__, 2) _____, 3)_____.
*Sample answer:*1) gastric ulcer; 2) stomach cancer; 3) MALT lymphoma.

Task 35. An extracardiac complication of prolonged septic endocarditis is _____spleen.

*Sample answer:*ischemic (white) infarction.

Situational tasks. TOTAL 52 tasks.

Task 36.

A 42-year-old woman complains of severe pain in the left hypochondrium, weakness, sweating, and fever. A year ago, weakness, sweating, increased fatigue appeared, and leukocytosis appeared in the peripheral blood (leukocytes 24.0x109/l). Treatment was carried out. In the last month, weakness and sweating have increased, pain in the bones and left hypochondrium has appeared, and the temperature has increased. On examination: the skin is pale with isolated petechial hemorrhages, peripheral lymph nodes are not enlarged. The liver protrudes 2 cm from under the edge of the costal arch, an enlarged spleen is palpable. Blood test: erythrocytes 3x1012/l, hemoglobin 110 g/l, platelets 107x107/l, leukocytes 59x109/l (myeloblasts 43%, eosinophils 9%, myelocytes 10%, segmented
leukocytes 16%, lymphocytes 22%), ESR 30 mm/h.

1. Your diagnosis:
2. What phase of the disease does the patient have?
3. What causes pain in the left hypochondrium:

*Sample answer:*1) chronic myeloid leukemia, 2) accelerated phase, 3) splenomegaly.

Task 37.

A 53-year-old man was admitted to the clinic with complaints of weakness, sweating, sometimes an increase in temperature to 37.2-37.5 ° C, and enlarged cervical, axillary and inguinal lymph nodes. Over the past 5 years, I have often suffered from colds. On examination: soft, painless cervical, inguinal and axillary lymph nodes, enlarged to the size of a chicken egg, not fused to each other or to the subcutaneous tissue, are palpated. The liver protrudes 1.5-2 cm from under the edge of the costal arch, slightly painful on palpation. The spleen protrudes 4-5 cm from under the edge of the left costal arch, rather dense, painless on palpation. X-ray of the chest revealed an increase in mediastinal lymph nodes. Blood test: red blood cells 2.3x1012/l, hemoglobin 74 g/l, leukocytes 50x109/l (eosinophils 1%, band 2%, segmented 17%, lymphocytes 79%, monocytes 1% , platelets 100x109/l, ESR 60 mm/h.

1. Your diagnosis:
2. What pathological process led to enlargement of the lymph nodes, liver and spleen?
3. What research method is most informative in diagnosing this pathology? Sample answer: 1) chronic lymphocytic leukemia, 2) leukemic infiltration, 5) trepanobiopsy of the bone marrow of the ilium.

Task 38.

A 62-year-old woman complains of pain in the lumbar spine, legs, and right collarbone. She has been under observation by a neurologist for about 5 years for osteochondrosis of the lumbar spine and secondary radiculitis. On examination: the patient's condition is satisfactory, the peripheral lymph nodes are not enlarged, and the sternum, collarbone, and shins are painful on palpation. Blood test: erythrocytes 3.6X1012/l, hemoglobin 128 g/l, leukocytes 4.8X109/l (eosinophils 2%, band 3%, segmented 58%, lymphocytes 30%, monocytes 7%), ESR 58 mm/h , platelets 156X109/l, total blood protein 122 g/l. Bence-Jones protein was detected in the urine. X-ray examination revealed cavities in the body vertebrae, collarbone, and sternum.

1. Your diagnosis:

2.What cells does the tumor consist of? 3.
Hyperproteinemia and protein in the urine are caused
by:
*Sample answer:*1) multiple myeloma (myeloma disease);
2) from plasma cells; 3) synthesis of light chains of immunoglobulins.

Task 39.
A 24-year-old man 2 months ago discovered an enlarged lymph node on the left side of his neck; then weakness, itching of the skin appeared, a week ago - chills with an increase in body temperature up to 39 ° C. The use of antibacterial drugs did not give any effect,
During examination at the clinic, where the patient sought help, it was discovered: on the left side of the neck, two lymph nodes with a diameter of 1.5 and 2 cm, dense,
painless. Histological examination of the removed larger node revealed foci of caseous necrosis surrounded by lymphocytes, plasma cells, eosinophilic leukocytes, Hodgkin and Berezovsky-Sternberg-Reed cells.
1. Your diagnosis:
2.Specify the clinical stage of the disease
3.What histological variant of the tumor was identified?
Sample answer: 1) Hodgkin's lymphoma; 2) stage 1; 3) mixed-cell variant.

Task 40
In a 23-year-old woman, who had been ill for 1 month and died of a cerebral hemorrhage, an autopsy revealed an enlargement of all groups of lymph nodes and the spleen. Multiple hemorrhages in the mucous and serous membranes, ulcerative-necrotic foci in the gastrointestinal mucosa were noted. The bone marrow of spongy and tubular bones is juicy and red. An immunohistochemical study revealed 60% blasts containing myeloperoxidase in the bone marrow of the femoral diaphysis.
1. Your diagnosis:
2. What process caused the enlargement of the lymph nodes and spleen?
3. Hemorrhages and ulcerative-necrotic foci in the gastrointestinal tract are caused by:
Response standard: 1) acute myeloblastic leukemia; 2) leukemic infiltration; 3) DIC syndrome.

Task 41.
A 50-year-old man was admitted to the hematology department with complaints of weakness and shortness of breath when walking. These complaints grew gradually after his stomach was resected for a chronic ulcer 3 years ago. Upon admission, the skin and mucous membranes are pale, heart sounds are muffled. In the blood test: Er. 2.4x1012/l, hemoglobin 62 g/l.
Serum iron levels were unchanged. FGDS did not reveal any pathology in the gastric
stump.
1.Your diagnosis:
2.What type of hematopoiesis is observed in this disease?
3.What pathological process in the heart and liver caused the described symptoms?
*Sample answer:*1) B12 deficiency anemia; 2) megaloblastic type; 3) fatty degeneration

Task 42.

In a 64-year-old man, X-ray and ultrasound examinations revealed long-term atherosclerosis of the aorta with an expansion of the abdominal region over 8.0 cm. Suddenly the patient developed severe back pain, blood pressure dropped to 0 and death occurred.

1. What clinical and anatomical form of atherosclerosis did the patient have?
2. What complication of atherosclerosis was revealed by instrumental research methods?
3. What complication led to death?

Sample answer: 1) atherosclerosis of the aorta; 2) aneurysm; 3) rupture of an aneurysm.

Task 43.

A 73-year-old woman who had suffered from hypertension for a long time dies of renal failure.

1. Can renal failure be associated with arterial hypertension? 2. What complication develops in the kidneys with prolonged arterial hypertension? 3. What type of atrophy is observed in the kidney tissue?

Sample answer: 1) yes; 2) arteriolosclerotic nephrosclerosis; 3) atrophy from circulatory disorders.

Task 44.

During the autopsy of a deceased 68-year-old woman who had suffered from hypertension for a long time, a cavity measuring 3.0 x 2.5 cm filled with a blood clot was found in the temporal lobe of the left hemisphere of the brain; in the subcortical nodes of the right hemisphere a cyst 0.7 cm in diameter with smooth gray walls.

1. What process has developed in the left hemisphere of the brain?
2. His reason:
3. What process results in a cyst with gray walls?

Sample answer: 1) hemorrhage with the formation of a cavity (hematoma); 2) rupture of the middle cerebral artery; 3) ischemic infarction.

Task 45.

A 65-year-old patient who had suffered from atherosclerosis for a long time gradually developed abnormal behavior that led him to a psychiatric hospital. At autopsy, the brain is reduced in size, the cortex is thinned, the grooves are deepened, the convolutions of the frontal and occipital lobes are sharpened.

1. What clinical and morphological form of atherosclerosis is described?
2. What type of circulatory disorder occurred?
3. What pathological process in the brain is described?

Sample answer: 1) atherosclerosis of cerebral vessels; 2) chronic arterial anemia (ischemia); 3) atrophy from impaired blood supply.

Task 46.

A 40-year-old man developed pain in the area after stress.
hearts radiating to the left shoulder blade and arm, weakness, lethargy, lasting more than 1 hour. At

Upon admission to the hospital, the patient was observed to be in an extremely serious condition, the pulse was thready, blood pressure was 60/0 mmHg. Art. Heart sounds are muffled. Despite the resuscitation measures, biological death occurred 12 hours after the onset of the disease. The autopsy revealed general venous congestion of the internal organs and pulmonary edema. In the intima of the coronary arteries of the heart there is a large number of yellow-white plaques that stenose the lumen of the vessels. Myocardium of the anterior wall of the left ventricle and anterior

section of the interventricular septum is flabby, unevenly plethoric, edematous, grayish-brown in color.
1.What disease does the patient have?
2.Which coronary artery is affected?
3.What complication was the cause of death?
*Sample answer:*1) acute myocardial infarction; 2) anterior descending branch of the left coronary artery; 3) cardiogenic shock.

Task 47.
An autopsy of a 67-year-old man who died of myocardial infarction revealed 300 ml of blood and blood clots in the cavity of the cardiac membrane.
1. Specify the mechanism of bleeding:
2. What is the accumulation of blood in the cardiac membrane called?
3. What kind of myocardial infarction, based on localization in the heart muscle, will cause such complications?
*Sample answer:*1) true heart rupture; 2) hemopericardium; 3) transmural infarction.

Task 48.
An autopsy of a 40-year-old patient revealed a saccular protrusion of the wall of the middle cerebral artery on the right.
1 cm in diameter, in the lumen of which there are dry, matte, crumbly red blood clots. On the outer surface of this formation there is a through defect 0.2 cm in diameter. The soft meninges are soaked in dark red blood and are dull.
1.Your diagnosis:
2.What changes were found in brain tissue?
3. Specify the mechanism of bleeding development.
*Sample answer:*1) saccular aneurysm of the right middle cerebral artery; 2) subarachnoid hemorrhage; 3) rupture of the aneurysm wall

Task 49.

A 50-year-old man, suffering from a severe form of hypertension, suddenly loses consciousness and falls on the street. He is taken to the neurological department, and there, when examination reveals right-sided hemiparesis, loss of speech (aphasia) and loss of sensitivity on the right. MRI revealed a 2.5 x 1.5 cm cavity with heterogeneous contents in the left hemisphere of the brain at the level of the subcortical nuclei.

1.What process has developed in the brain?

2.Which brain vessel is damaged? 3. Specify

the mechanism of damage:
Sample answer: 1) bleeding in the brain (hematoma); 2) left middle cerebral artery; 3) rupture of the vessel wall.

Task 50.

During an autopsy of the heart of a 49-year-old man, it was noted that the bicuspid valve was thickened along the closure line to 0.3 cm, whitish, opaque, the valves were shortened and fused together. The left venous opening is difficult for the tip of a gloved finger to pass through, the perimeter is 2.5 cm. Pinkish-yellow warty deposits with a diameter of 0.2-0.3 cm are densely scattered along the edge, easily removable.

1.What disease does the man have?

2.What process caused the valve to deform?
3.What heart defect was detected in the patient?

*Sample answer:*1) rheumatism, active phase; 2) recurrent warty endocarditis; 3) stenosis of the mitral valve opening.

Task 51.
A 60-year-old patient died in hospital due to symptoms of respiratory failure. At autopsy, the upper lobe of the right lung was sharply condensed, dark red in color with fibrinous deposits on the pleura. Regional lymph nodes are enlarged and full of blood.
1. Your diagnosis:
2. Indicate the stage of the disease.
3. Type of exudate accumulating in the alveoli at this stage.
*Sample answer:*1) lobar (lobar) pneumonia; 2) stage of red hepatitis; 3) fibrinous-hemorrhagic..

Task 52.
During the flu epidemic, a patient was admitted to the clinic with complaints of fever, shortness of breath, cough, and weakness for 3 days. During examination bilateral pneumonia was diagnosed. Despite the therapy, the patient died due to pulmonary heart failure. An autopsy revealed a picture of a "large mottled influenza lung", hemorrhages in the serous and mucous membranes, and the brain stem.
1. Your diagnosis:
2. What form of illness occurred? 3.Most probable cause of death:
*Sample answer:*1) influenza; 2) severe toxic form; 3) hemorrhage in the brain stem.

Task 53.
A 35-year-old man, an intravenous drug addict, infected with HIV, suddenly developed shortness of breath and a rapidly progressing cough with scanty sputum. With symptoms of increasing pulmonary-heart failure, the patient died. Microscopic examination of sectional material in the lungs revealed diffuse inflammatory infiltration of the alveolar septa with accumulation of foamy eosinophilic material with strands of unstained cysts in the lumen of the alveoli.
1. What diagnosis was made by the pathologist based on this microscopic picture: a), b)?
2. What was the factor that contributed to your development of this disease?
3. Which of the clinical and morphological forms should this pneumonia be classified as? Sample answer: 1) Pneumocystis pneumonia. 2) secondary immunodeficiency, 3) focal bronchopneumonia.

Task 54.
A 63-year-old man died from chronic renal failure. At autopsy, saccular and cylindrical dilatations of the bronchi, increased airiness and decreased elasticity of the lung tissue were found in the lungs. Heart weight 400 g, right its sections are enlarged. The kidneys are enlarged, dense in consistency, pale pink in color, and have a greasy sheen when cut.
1. What is your diagnosis?
2. What process caused the increase in heart mass?
3. What caused chronic renal failure?
*Sample answer:*1) COPD (bronchiectasis, emphysema). 2) right ventricular myocardial hypertrophy, 3) secondary renal amyloidosis.

Task 55.
During a pathological examination of the surgical material, in the upper lobe of the right lung, under the pleura, there is a cavity 10 cm in diameter, filled with dirty gray, foul-smelling contents. The walls of the cavity are gray-white and dense. The surrounding lung tissue within a radius of 3.5 cm is dense with whitish-gray layers, and then increased airiness, gray-pink, cut with a crunch.
1. What is your diagnosis?
2.What processes have developed in the surrounding lung tissue a), b)?
*Sample answer:*1) chronic lung abscess; 2) a) pneumosclerosis; b) pulmonary emphysema.

Task 56.
In a patient suffering from chronic bronchitis, bronchoscopy revealed a narrowing of the right lower lobe bronchus, its mucous membrane is tuberous, gray-red. Histological examination of a biopsy of the bronchial wall revealed nested accumulations of epithelial cells with polymorphism and a large number of mitoses. In the center of the accumulations of epithelial cells there are homogeneous masses of horny substance.
1. What localized macroscopic form of tumor is present in this case?
2. What histological type of tumor was detected?
3. What causes the red color of the bronchial mucosa
*Sample answer:*1) central lung cancer, 2) squamous cell carcinoma with keratinization, 3) hemorrhage into the tumor tissue.

Task 57.
A 48-year-old man underwent fibrogastroscopy of the stomach, which revealed thinning of the mucous membrane in all parts and smoothing of its folds. A biopsy of the fundus mucosa was performed. Histological examination revealed focal thinning of the mucous membrane, a decrease in the number of glands, pseudopyloric and intestinal metaplasia of the integumentary pitted and glandular epithelium, lymphoplasmacytic infiltration and focal sclerosis of the native layer.
1. During histological examination, the pathologist diagnosed: 1) chronic atrophic gastritis
2. According to the localization of the process, such gastritis is called:
3. What microorganism most often causes this disease?
Reference answer: 1) chronic atrophic gastritis; 2) diffuse gastritis; 3)Helicobacter pylori.

Task 58.
During an autopsy of the corpse of a deceased 56-year-old woman, a tumor in the form of an ulcer 7.0 x 5.0 cm with dense ridge-like edges and a flabby grayish-yellow bottom was discovered in the rectum. The tumor grew infiltratively, growing through the entire intestinal wall to the serous membrane. Histological examination revealed that the tumor consists of randomly located glands lined with atypical epithelium with a large number of mitoses.
1.Your diagnosis:
2. What form of tumor was revealed by histological examination? 3. The first hematogenous metastases should be looked for in:
*Sample answer:*1) rectal cancer; 2) adenocarcinoma; 3) lungs.

Task 59.
An autopsy of a 45-year-old man revealed liquid blood in the stomach and a chronic ulcer in the pyloric region, pallor of the skin, mucous and serous membranes,

fatty degeneration of the liver and myocardium. The bone marrow of spongy and tubular bones is bright red.

1. What type of anemia did the patient develop?
2. Liquid blood in the lumen of the stomach sign:
3. Cause of bleeding?

*Sample answer:*1) chronic posthemorrhagic anemia; 2) gastric bleeding; 3) vascular erosion at the bottom of the ulcer.

Task 60.

A 50-year-old woman suffering from obesity and hypertension suddenly developed pain in the right hypochondrium and girdling pain, nausea, and vomiting. The next day, during examination, the doctor noted icterus of the sclera, pain in the right hypochondrium, and blood α-amylase. 400 units/l, Alt-1.7; Ast-1.25 mmol/l. On ultrasound: the gallbladder is enlarged, 6x4 cm, many stones, 0.5 cm in D; dilatation of the extrahepatic bile ducts and a 0.5 cm calculus in D at the mouth of the common bile duct. Endoscopic cholecystectomy and papilotomy were performed with removal of the stone from the bile duct in the papilla of Vater. A histological examination of the bladder wall on the serous membrane revealed fibrinous deposits and the mucosa was full-blooded, edematous with hemorrhages, and in the wall there was diffuse leukocyte infiltration with foci of purulent melting.

1. Changes in the gallbladder correspond to:
2. Type of jaundice developed in the patient: what
3. What process in the pancreas complicated the course of the disease?

*Sample answer:*1) acute phlegmonous calculous cholecystitis; 2) subhepatic (mechanical); 3) pancreatitis.

Task 61.

A 45-year-old man consulted a physician with complaints of nausea, periodic vomiting, heaviness in the right hypochondrium, and jaundice. These symptoms have been bothering him 2 years after he suffered from hepatitis, which developed in him 4 months after dental surgery. During examination, HbsAg was detected in the patient's blood, and the pathologist found in the liver punctate hydropic degeneration and bridge-like necrosis of hepatocytes, focal proliferation of hepatic and Kupffer cells, cholestasis, lymphocytic infiltrates and fibrosis inside the lobules and along the portal tracts. No regenerated nodes or false lobules were found.

1. Changes in the liver correspond to:
2. The most important sign of process activity:
3. Probable outcome of the disease:

*Sample answer:*1) chronic active viral hepatitis B; 2) necrosis of liver cells; 3) development of large-nodular (postnecrotic) cirrhosis of the liver.

Task 62.

A 40-year-old man with a history of alcoholism suddenly began vomiting dark blood. During examination in the hospital, the doctor noted ascites, dilation of the veins of the anterior abdominal wall, and splenomegaly. On ultrasound, the liver is enlarged in size, with diffuse changes. In the blood test, Hb is 70 g/l, Er is 2.3*1012/l. Despite resuscitation measures, the patient died 3 hours after the onset of vomiting. An autopsy revealed that the liver was enlarged in size, with a finely lumpy surface, yellow in color. On section, its tissue consisted of small nodules 0.3 cm in diameter separated by thin layers of whitish tissue.

1.What disease is found in the liver? 2.Cause of death of the patient:
3.Source of bleeding:

*Sample answer:*1) alcoholic cirrhosis of the liver; 2) cause of death - acute posthemorrhagic anemia; 3) the source of bleeding is varicose veins of the esophagus, as evidenced by vomiting dark blood.

Task 63.
A 10-year-old girl, 3 weeks after suffering from scarlet fever, began to complain of headaches, lower back pain, and puffiness of the face. An increase in blood pressure of 150/90 mm Hg was noted. Art. Urine became dark red. Urinalysis: Daily urine output 450 ml, protein 500 mg/day, hyaline casts, a large number of leached red blood cells.
1. Your diagnosis:
2. What syndrome did the patient develop?
3. What histological form of the disease occurs?
*Sample answer:*1) acute post-streptococcal glomerulonephritis, 2) nephritic syndrome, 3) intracapillary proliferative glomerulonephritis.

Task 64.
In a 40-year-old man who died from sublimate poisoning, the following changes were found at autopsy: the kidneys are enlarged in size, flabby, the capsule is easily removed, the surface of the kidneys is smooth, pale pink, the border of the layers is emphasized in the section, the bark is pale pink 1.0 cm thick, pyramids dark red, swollen.
1. What process has been identified in the kidneys? 2. What changes in the tubular epithelium?
3. What determines the emphasized border of the layers and the color of the pyramids?
*Sample answer:*1) acute tubular necrosis of the kidneys, 2) coagulative necrosis of the convoluted tubule epithelium, 3) discharge of blood through arteriovenous shunts.

Task 65.
In a 55-year-old man who had been suffering from type 2 diabetes for 15 years, oliguria began to increase, anasarca appeared, and the level of urea and creatinine in the blood increased.
1. What complication developed in the patient?
2. What changes in the glomeruli of the kidneys could lead to it?
3. What changes could develop in the tubular epithelium?
*Reference answer:*1) chronic renal failure; 2) diabeticglomerulosclerosis; 3) hyaline droplet dystrophy, glycogen accumulation.

Task 66.
A 70-year-old woman who had suffered from type 2 diabetes mellitus for 20 years developed pain in the 1st and 2nd toes of her left foot, the skin of the toes gradually turned black, and sensitivity in the toes disappeared. After 2 days, the foot became swollen, bluish-red in color, in some places with foci of black necrosis without clear boundaries with the surrounding tissues.
1. What process has developed in the patient's lower limb?:
2. What complication was manifested by loss of sensitivity?
3. What pigment is responsible for the black color of necrosis foci?
*Sample answer:*1) wet gangrene; 2) diabetic neuropathy; 3) iron sulfide (pseudomelanin).

Task 67.
A 45-year-old woman consulted a doctor with complaints of fatigue, weakness, facial pastiness, swelling of the hands, legs and feet, constipation, and enlarged thyroid gland. A cytological examination of the gland puncture material revealed a large number of lymphocytes of varying degrees of maturity, plasma cells, macrophages,

which were located between thyrocytes, forming “felt-like” structures, epithelial cells with eosinophilic, granular cytoplasm (Ashkinazi-Hurthle cells) predominated. Clusters of fibroblasts and fibrocytes were observed. No atypical cells were found.
1. Your diagnosis:
2. What change in gland function was detected in the patient?
3. What type of immunopathological reaction is caused by damage to thyrocytes in this disease?

Reference answer: 1) Hashimoto's thyroiditis; 2) hypofunction (hypothyroidism); 3)immunopathological reaction type 2.

Task 68.

In a 25-year-old woman, an ultrasound examination during a medical examination revealed a dense nodule with blood flow in the left lobe of the thyroid gland. A cytological examination of the material from the puncture of the formation in the smear revealed papillary structures of atypical, polymorphic thyrocytes. Their nuclei are hyperchromic with indistinguishable nucleoli. In some cells, the nuclei have grooves, intranuclear cytoplasmic inclusions, or are light (optically empty).

1. Your diagnosis:
2. Further tactics of examination and treatment of the patient:
3. Indicate the location of the first tumor metastases:

*Sample answer:*1) papillary thyroid cancer; 2) hemithyroidectomy with mandatory histological examination of the material; 3) lymph nodes of the neck.

Task 69.

A 46-year-old man suffering from diabetes mellitus complains of headaches, dizziness, weight gain and periodic rises in blood pressure to 180/90 mm Hg. Art. The examination revealed bitemporal hemianopsia.

1. What process in the brain is diagnosed in the patient?
2. What hormonal disorders caused it?
3. What is this disease called?

Reference answer: 1) adenoma front shares pituitary gland (corticotropinoma);hyperproduction of ACTH; 3) Itsenko-Cushinoga disease.

Task 70.

In a 40-year-old patient, the thyroid gland began to increase in size, weight decreased, irritability, tremors, interruptions in heart function appeared, sleep was disturbed, and exophthalmos began to be noted. Ultrasound examination of the thyroid gland revealed an increase in both lobes and the isthmus; no focal changes were detected. Left ventricular myocardial hypertrophy and dilatation of its cavity were detected in the heart
1. What changes in thyroid function have been identified?
2. What thyroid disease caused the described changes? 3.What complication of the disease caused changes in the heart?

Sample answer: 1) hyperthyroidism (thyrotoxicosis); 2) diffuse toxic goiter; 3) thyrotoxic cardiomyopathy.

Task 71.

A 26-year-old woman, several months after childbirth, complicated by severe blood loss, developed progressive exhaustion, melasma, and hypotension—Sheehan's syndrome.
1. Damage to which organ caused the development of the syndrome?
2. What bleeding complication was the trigger?

3.What is the name of the type of cachexia that developed in the patient?
*Sample answer:*1) pituitary gland; 2) DIC syndrome; 3) pituitary cachexia.

Task 72.
A 35-year-old patient had attacks for 2 years, accompanied by a sharp increase in blood pressure, headache, tremor, severe sweating, and nausea. During one of the attacks, the patient developed acute cerebrovascular accident. The patient died. At the autopsy, a node with a diameter of 4 cm was found in the medulla of the left adrenal gland; on the section, it was brown in color with areas of hemorrhage.
1.What tumor was found in the adrenal medulla? 2.What causes the brown color of the tumor at the site of hemorrhage? 3.What changes in the heart did arterial hypertension cause?
*Sample answer:*1) pheochromocytoma; 2) formation of hemosiderin; 3) hypertrophy of the left ventricular myocardium.

Task 73.
A 45-year-old woman who consulted a gynecologist about uterine bleeding was found to have an enlarged, dense, tuberous uterus during examination. Supravaginal amputation of the uterus was performed. The uterus is large, in its wall, under the mucous membrane, there are multiple, clearly defined dense tumor nodes with a diameter of 1.5-7 cm, layered in section, whitish in color. Histologically, the tumor is composed of bundles of smooth muscle cells running in different directions.
1.Your diagnosis:
2.Tumor growth form:
3.Which node arrangement will definitely cause uterine bleeding?
*Sample answer:*1) leiomyoma; 2) expansive growth; 3) submucous location of the nodes.

Task 74.
A 60-year-old woman in menopause, suffering from obesity, diabetes mellitus and arterial hypertension, developed metrorrhagia. A diagnostic curettage was performed. When examining endometrial scrapings, the pathologist discovered proliferation of randomly located glands, lined with multirow epithelium with pronounced cellular atypia, giant hyperchromic nuclei, and numerous figures of pathological mitoses. Basement membranes in parts glandular passages are destroyed. Foci of necrosis and ulceration were noted.
1. What disease did the pathologist diagnose?
2. What are the causes of metrorrhagia?
3. Specify the complication of bleeding:
*Sample answer:*1) endometrial adenocarcinoma, 2) necrosis and ulceration of the tumor, 3) posthemorrhagic anemia.

Task 75.
A 30-year-old woman with a 4-week delay in menstruation suddenly developed sharp abdominal pain, spotting vaginal discharge, cold sweat, and blood pressure dropped to 60/10 mm Hg. During puncture of the posterior fornix, blood (unchanged red blood cells) was found in the pelvic cavity. Ultrasound revealed an enlargement of the right fallopian tube.
1.What process has developed in the abdominal cavity? 2.What is the most likely cause of bleeding?
3. Indicate the fatal complications of this condition:

*Sample answer:*1) ectopic tubal pregnancy, 2) rupture of the fallopian tube, 3) acute posthemorrhagic anemia, peritonitis.

Task 76.

A 65-year-old man began to notice difficulty urinating, then lower back pain appeared, the temperature rose, and the urine became cloudy with an admixture of pus. During a digital examination of the rectum, the doctor discovered that the prostate gland was enlarged in size, dense with a bumpy surface.

1.What pathological processes in the prostate gland could cause this clinical picture?
2. What complications of prostatopathy caused the increase in temperature, lower back pain, and changes in urine?
3. What research method will allow us to clarify the diagnosis with maximum certainty?
*Sample answer:*1) dyshormonal hyperplasia, prostate cancer, 2) cystitis, ascending tubulointerstitial nephritis (pyelonephritis), 3) puncture biopsy of the prostate gland.

Task 77.

A 28-year-old woman, 3 weeks after a mini-abortion, developed bleeding from the genital tract. During the examination, the gynecologist noted an enlargement of the uterus and the presence of a red node in the vagina. A diagnostic curettage was performed and a biopsy was taken from the node. The pathologist, examining the biopsy material, noted the similarity of changes in the body of the uterus and in the vagina. A tissue consisting of proliferating cytotrophoblast cells and polymorphic syncytiotrophoblast giant cells with many normal and pathological mitoses. There was no stroma, and the cavity-like vessels were lined with atypical trophoblast cells.

1.What is your diagnosis?
2.What changes are found in the cervix? 3.Name the complications of bleeding:
*Sample answer:*1) chorioepithelioma of the uterus, 2) lymphogenous tumor metastasis, 3) acute posthemorrhagic anemia, DIC syndrome.

Task 78.

A 48-year-old woman noted a gradual enlargement of her abdomen. The gynecologist, through manual and ultrasound examinations, revealed ascites and enlarged uterine appendages on both sides, filling the pelvic cavity. During the operation it was found that both ovaries are cysts measuring 15 x 12 x 10 cm, containing thick jelly-like mucus. On the inner surface of the cysts and on the peritoneum there are whitish-gray papillary growths that look like cauliflower with yellow areas of necrosis and hemorrhages.

1.What disease was diagnosed in the patient? 2.
Ascites and changes in the peritoneum are caused by:
3. What tissues should be taken for pathological examination in order to establish a final diagnosis?
*Sample answer:*1) mucinous papillary cystadenocarcinoma of the ovaries; 2) implantation tumor metastases; 3) cyst wall with papillae.

Task 79.

During a histological examination of a biopsy specimen from a plaque-like formation of the vaginal part of the cervix (0.7 cm in greatest dimension), a pathologist

discovered a thickening of the layer of squamous epithelium, a violation of its division into layers, loss of polarity and complexity, pronounced cell atypia, koilocytosis, keratinization, a large number of mitoses, including pathological ones. Atypical cells surrounded by a lymphocytic infiltrate penetrated the subepithelial layer to a depth of 3 mm.
1. What disease did the pathologist diagnose?
2. Specify the stage of the disease:
3. Koilocytosis and lymphocytic infiltration signs:
*Sample answer:*1) squamous cell carcinoma of the cervix; 2) first stage of tumor; 3) HPV infections.

Task 80.
A 26-year-old woman experienced severe gestosis in the pre- and postpartum period. On the 4th day after birth, she lost consciousness and, with increasing symptoms of liver-renal failure, died.
1.What is your diagnosis?
2.Which organ lesions caused the clinical picture? 3.Name the pathological processes that have developed in these organs:
*Sample answer:*1) eclampsia; 2) brain, liver, kidneys; 3) necrosis, hemorrhages caused by DIC syndrome.

Task 81.
On the second day after childbirth, the woman's body temperature suddenly increased to 41 C, chills developed, and pinpoint hemorrhages appeared on the skin and mucous membranes, jaundice. Two days later the patient died. At the autopsy, in addition to the described changes, pronounced changes in the internal organs were discovered. The spleen is enlarged, flabby, with abundant scraping of the pulp. The uterus is enlarged in size, flabby, the mucous membrane is dirty gray in color with a purulent coating. Foci of purulent inflammation in the lungs and kidneys.
1. What pathological process has developed in the uterus?
2. What clinical and morphological form of sepsis can you think about?
3. What changes in the vessels of the uterus contributed to the spread of the infectious agent?
*Sample answer:*1) purulent endometritis has developed in the uterus; 2) septicopyemia, what about indicates the presence of metastatic purulent foci in the lungs and kidneys; 3) purulent thrombophlebitis of the uterine veins contributed to the spread of the process.

Task 82.
A premature baby developed purulent-necrotic omphalitis after treatment of the umbilical cord. The patient's condition began to progressively deteriorate, and death occurred on the 4th day. At autopsy, blood clots were found in the lumen of the umbilical vessels. The skin and sclera are icteric. Multiple hemorrhages on the skin, mucous and serous membranes.
The spleen is enlarged and produces abundant pulp scraping.
1. Diagnose the disease.
2. Specify the clinical and anatomical form of the disease.
3. What is associated with the development of hemorrhagic syndrome?
*Sample answer:*1) umbilical sepsis; 2) septicemia; 3) multiple hemorrhages on the skin and mucous membranes are caused by DIC syndrome.

Task 83.
A 3-year-old child has an increase in body temperature to 38°C, malaise, and decreased appetite. Hoarseness of voice appeared, the cough acquired a rough, barking character, breathing was difficult, and signs of asphyxia were increasing. Bronchoscopy revealed

yellow films lining the larynx and the upper third of the trachea. The films in some places freely separate from the mucous membrane, closing the lumen of the respiratory tract. A tracheotomy cannula is inserted. A few days later, moist rales began to be heard in the lungs. Pneumonia was diagnosed.

1. Specify the underlying disease.
2. What type of inflammation has developed in the larynx and trachea?
3. Explain the mechanism of development of asphyxia.

*Sample answer:*1) diphtheria of the larynx and trachea; 2) fibrinous (lobar) inflammation; 3) obstruction of the larynx and trachea by rejected fibrin films led to asphyxia.

Task 84.

A 5-year-old child developed headache, agitation, restlessness, vomiting, and body temperature increased to 39°C. After 3 days the child died. At the autopsy, it was found that the pia mater was significantly thickened, with full-blooded vessels, and saturated with a thick greenish-yellow exudate throughout. The pattern of furrows and convolutions of the brain is smoothed. In a smear from the surface of the meninges, grammatical diplococci were found in the cytoplasm of neutrophilic leukocytes.

1. Determine the clinical and morphological form of the disease.
2. What is the etiology of the disease?
3. What pathological process has developed in the meninges?

*Sample answer:*1) meningococcal meningitis; 2) meningococcal infection; 3) acute purulent inflammation.

Task 85.

A 5-year-old child was admitted to the children's infectious diseases hospital on the second day from the moment of illness. On admission, high fever and lethargy were noted. An examination of the oral cavity revealed bright hyperemia of the mucous membrane of the soft palate, uvula, palatine arches, and root of the tongue. The tonsils are enlarged and bright red. The lymph nodes of the neck are enlarged, dense, painful on palpation. The skin is hyperemic, with a pinpoint rash. On the 5th day of illness, dirty-gray, dull-looking deposits appeared on the surface of the tonsils.

1. What is your diagnosis?
2. Name the causative agent of the disease:
3. Specify the nature of inflammation of the tonsils and mucous membranes:

*Sample answer:*1) scarlet fever; 2) group A streptococci; 3) catarrh.

Task 86.

A 36-year-old man was found to have enlarged lymph nodes in the groin area, up to 1 cm in diameter, one of them was removed for pathological examination. Histological examination revealed: hyperplastic lymphoid follicles, lymph node tissue infiltrated with plasma cells, clusters of epithelioid cells, sinus histiocytosis is pronounced; signs of endo- and perivasculitis.

1.What disease can you think about?
2.What stage of the disease occurs?
3.What else can be found in the patient’s groin area?

*Sample answer: 1)*syphilitic lymphadenitis; 2) primary; 3) chancre.

Task 87.

In a 40-year-old man who had suffered from tuberculosis for a long time, autopsy revealed 2 cavities with a diameter of 6.0 cm and 3.2 cm, filled with liquid blood, in the 2nd, 3rd and 8th segments of the right lung. The inner surface of the larger cavity, in the upper lobe, is uneven with intersecting dense cords, covered with whitish-yellow crumbling masses, under which there is dense whitish tissue 0.5 cm thick. A smaller cavity in the lower lobe with a thin wall 0.3 cm thick represented by whitish-yellow crumbling masses. Throughout the rest of the tissue of both lungs, foci 0.5 - 1.0 in diameter are represented by similar masses. The lumens of the bronchi and trachea are filled with liquid blood.

1. Determine the clinical and morphological form of the disease.
2. What complication developed due to the progression of the disease?
3. State the immediate cause of death.

*Sample answer:*1) fibrous-cavernous pulmonary tuberculosis; 2) pulmonary hemorrhage; 3) asphyxia.

Questions for an interview. There are 13 questions in total.

Task 88. Name the macroscopic changes in the walls of arteries during atherosclerosis, reflecting the dynamics of the process (stages).
*Sample answer:*with atherosclerosis, the following changes consistently develop in the walls of the arteries, reflecting the dynamics of the process: fatty spots or stripes, fibrous plaques, complicated lesions (atheromatosis, hemorrhages, ulceration, thrombosis), calcification (atherocalcinosis).

Task 89. The development of the alveolar-capillary block in pulmonary emphysema is caused by the following pathological processes:
*Sample answer:*we destroy the elastic framework of the alveoli and rupture the interalveolar septa; expansion of the alveoli and alveolar ducts; fibrosis of the interalveolar spaces, reduction of the capillary network of the lung stroma

Task 90. What changes in the lungs are observed in chronic left ventricular failure?
*Sample answer:*With chronic left ventricular failure, brown induration develops in the lungs: chronic venous congestion, stasis, sludge of erythrocytes, edema, diapedetic hemorrhages, hemosiderosis and sclerosis of the interalveolar septa.

Task 91. Name the successive changes in organs patient with chronic right ventricular failure:
*Sample answer:*With chronic right ventricular failure, chronic venous congestion develops in the organs. Edema of the lower extremities, nutmeg liver, cyanotic induration of the kidneys and spleen, ascites, hydrothorax, hydropericardium, anosarca, and cerebral edema consistently develop.

Task 92. What changes in the lungs are observed during acute left ventricular failure?
*Sample answer: When*Acute left ventricular failure in the lungs develops: acute venous congestion, stasis, sludge of red blood cells, edema, diapedetic hemorrhages.

Task 93. Name the components of the primary septic focus.

*Sample answer:*primary septic hearth consists of a focus of purulent inflammation with tissue melting, purulent thrombophlebitis and lymphangitis.

Task 94. Major signs of portal hypertension:
*Sample answer:*ascites, splenomegaly, varicose veins of portacaval anastomoses.

Task 95. Describe macro- and microscopic changes in the spleen in chronic myeloid leukemia:
*Sample answer:*The spleen is enlarged, weighing more than 3 kg, dense, with white foci of infarction. Histological examination reveals the replacement of lymphoid follicles with leukemic infiltrates mainly from promyelocytes, myelocytes, and a few blasts.

Task 96. When scarring and replacing a defect, first with granulation and then with dense fibrous connective tissue, the following changes occur sequentially: Sample answer:
1. angiogenesis;
2. migration and proliferation of fibroblasts;
3. production of extracellular (extracellular) matrix;
4. maturation granulation fabrics And transformation her V dense fibrousconnective tissue (scar).

Task 97. What cells are affected by the human immunodeficiency virus (HIV)?
*Sample answer:*The human immunodeficiency virus (HIV) infects cells with CD4 receptors: helper T lymphocytes (CD4+), monocytes, macrophages, dendritic cells, microglial cells, intestinal epithelial cells.

Task 98. Indicate the components of the primary tuberculosis complex and its unfavorable outcomes:
*Sample answer:*primary tuberculous affect, lymphangitis, lymphadenitis; growth of the primary focus, lymphogenous and hematogenous spread with generalization, chronic course.

Task 99. Specify pathological signs hematogenousdisseminated pulmonary tuberculosis:
*Sample answer:*predominantly corticopleural localization of lesions in both lungs; productive tissue reaction; development of reticular pneumosclerosis and emphysema; hypertrophy of the right ventricle of the heart (cor pulmonale); extrapulmonary tuberculosis foci.

Task 100. List the complications that arise in the 2nd period of scarlet fever: Sample answer:
In the 2nd period of scarlet fever the following may develop: rheumatism, acute and chronic post-streptococcal glomerulonephritis, warty endocarditis, serous arthritis, vasculitis.

CRITERIA for assessing competencies and rating scales

Grade "unsatisfactory"(not accepted) or absence competence development	**Grade "satisfactorily"(passed) or satisfactory (threshold) level of competence development**	**Grade “good” (passed) or sufficient level mastering competence**	**Grade “excellent” (passed) or high level of mastery of competence**
The student’s inability to independently demonstrate knowledge when solving tasks, lack of independence in applying skills. Lack of confirmation of the availability of competence indicates negative results in mastering the academic discipline	The student demonstrates independence in applying knowledge, skills and abilities to solve educational tasks in full accordance with the model given by the teacher; for tasks the solution of which was shown by the teacher, it should be considered that competence formed at a satisfactory level.	The student demonstrates independentappli cation of knowledge, skills and abilities in solving tasks similar to the samples, which confirms the presence formed competence at a higher level. The presence of such competence at a sufficient level testifiesabout a stable practical skill	The student demonstrates the ability to fully independencein choosing a solution non-standard tasks within the discipline using knowledge, skills and abilities acquired both during the development given disciplines and related disciplines, competence should be considered formed at a high level.

Criteria for assessing test control:

percentage of correct answers	Marks
91-100	Great
81-90	Fine
70-80	satisfactorily
Less than 70	unsatisfactory

When grading tasks with multiple correct answers, one error is allowed.

Evaluation criteria for individual forms of control must be selected based on those prescribed in paragraph 2.

Interview assessment criteria:

Mark	Descriptors		
	strength of knowledge	**The ability to explain (represent) the essence of phenomena, processes, draw conclusions**	**Logical and consistent response**
Great	strength of knowledge, knowledge of the basic processes of the subject area being studied, the answer is distinguished by the depth and completeness of the topic; mastery of terminology; logic and followflatness of answer	high ability to explain the essence, phenomena, processes, events, draw conclusions and generalizations, give reasoned answers, give examples	high logic and followflatness of answer
Fine	strong knowledge of the basic processes of the subject area being studied, distinguished by the depth and completeness of the topic; mastery of terminology; fluency in monologue speech, however	the ability to explain the essence of phenomena, processes, events, draw conclusions and generalizations, give reasoned answers, give examples; however one or two inaccuracies in the answer are allowed	logic and followflatness of answer

	one or two inaccuracies are allowed in answer		
Satisfac tory	satisfactory knowledge of the processes of the subject area being studied, the answer differs insufficient depth and completeness of the topic; knowledge of the basic issues of the theory. There are several errors in content of the answer	satisfactory ability to give reasoned answers and give examples; well-developed analytical skills phenomena, processes. There may be several errors in the content of the answer	satisfactory logic and followflatnes s of answer
unsatisfa ctory	poor knowledge of the subject area being studied, shallow coverage of the topic; poor knowledge of basic theoretical issues, weak skills in analyzin g phenome na, processes. Serious errors in the content of the answer are allowed	inability to give reasoned answers	lack of logic and followlenity of answer

Criteria for assessing situational tasks:

Mark	**Descriptors**			
	understanding the problem	**analysis of the situation**	**situation solving skills**	**professional thinking**
Great	full understanding of the problem. All requirements for task completed	high ability to analyze a situation and draw conclusions	high ability to choose a method to solve a problem, confident solution skills situations	high level of professionalism I'm thinking
good O	complete understanding Problems. All requirements, present washed to task, completed	ability analyze b the situation, do conclusions	ability choose method solutions Problems confident skills solutions situations	enough ny level profession onalnog O think I. Allowed I'm alone - two inaccurate you're in answer
Satisfied creates really	partial understanding Problems. Most O requirements, present we go to task, completed	will satisfy spruce ability analyze b the situation, do conclusions	will satisfy spruce skills solutions situations, difficulties with choice method solutions tasks	enough ny level profession onalnog O think I. Allowed there are more two inaccurate tey in answer or a mistake in afterbirth telnost And

				solutions
unsatisf actory letvor ital O	misunderstand ing e problems. Many requirements, present washed to task, not completed. No answer. Did not have attempts decide task	low ability analyze b the situation	insufficient e skills solutions situations	absence no