

№ 1	KPOK1 2023
Topic	Tuberculosis
task text	A 43-year-old patient, who had been suffering from tuberculosis for a long time, developed bleeding from the lungs, which resulted in the patient's death. Autopsy detected several oval and round cavities in the lungs. The walls of the cavities were formed by necrotic masses and lung tissue. What form of tuberculosis can be characterized by these pathological changes?
correct answer	Acute cavernous tuberculosis
B	Fibrocavitary tuberculosis
C	Acute focal tuberculosis
D	Tuberculoma
E	Gaseous pneumonia
№ 2	KPOK1 2023
Topic	Rheumatic diseases
task text	A patient with a suspected systemic disease underwent a biopsy of an area of increased density and immobility in the skin. In the dermis, the study detected all types of connective tissue disorganization with a weak cellular reaction, gross sclerosis, and hyalinosis. What disease can be characterized by these pathological changes?
correct answer	Scleroderma
B	Polyarteritis nodosa
C	Dermatofibroma
D	Psoriasis
E	Systemic lupus erythematosus
№ 3	KPOK1 2023
Topic	Acute nflammation
task text	Autopsy of the body of a man who died of croupous pneumonia revealed an opaque liquid in the pleural cavity and a grayish film on the visceral pleura. What type of inflammation is observed on the visceral pleura?
correct answer	Fibrinous
B	Purulent
C	Hemorrhagic
D	Catarrhal
E	Granulomatous
№ 4	KPOK1 2023
Topic	Chronic inflammation

MSQ Kpok 1 Medicine 2007-2021-PATHOMORPHOLOGY

task text	Microscopy of the kidney biopsy material detected foci with granular eosinophilic masses in their center, surrounded by an infiltrate consisting of lymphocytes, epithelioid cells, and isolated Langhans cells. What pathological process corresponds with the described changes?
correct answer	Granulomatous inflammation
B	Alterative inflammation
C	Coagulative necrosis
D	Proliferation and differentiation of macrophages
E	Caseous necrosis
№ 5	KPOK1 2023
Topic	Immunopathology
task text	A 10-year-old child underwent a Mantoux test (with tuberculin). After 48 hours, a papule up to 8 mm in diameter appeared at the site of tuberculin injection. What type of hypersensitivity reaction developed after administration of tuberculin?
correct answer	Type IV hypersensitivity reaction
B	Arthus reaction
C	Atopic reaction
D	Type II hypersensitivity reaction
E	Serum sickness
№ 6	KPOK1 2023
Topic	Tumors of bloods
task text	A 64-year-old woman has suffered a pathological fracture of the humerus. Biopsy detects atypical plasma cells. X-ray shows tumor-like formations at the fracture site. What disease is likely in this case?
correct answer	Myeloma disease
B	Chondrosarcoma
C	Fibrous dysplasia of bone
	Chronic osteomyelitis
D	Adenocarcinoma metastasis
E	Chronic osteomyelitis
№ 7	KPOK1 2023
Topic	Bacterial infection
task text	Five days after a diarrhea onset, colonoscopy detected gray-green filmy deposits tightly attached to the underlying tissue in the inflamed rectal mucosa of the patient. What disease can be characterized by these pathological changes?
correct answer	Dysentery

B	Crohn's disease
C	Salmonellosis
D	Nonspecific ulcerative colitis
E	Typhoid fever
№ 8	KPOK1 2023
Topic	Childhood infection
task text	Autopsy of the body of a 1.5-year- old child revealed a hemorrhagic skin rash, moderate hyperemia and edema of the nasopharyngeal mucosa, small hemorrhages in the mucosa and internal organs, markedly dystrophic changes in the liver and myocardium, acute necrotizing nephrosis, and massive hemorrhages in the adrenal glands. These changes are characteristic of the following disease:
correct answer	Meningococcal infection
B	Diphtheria
C	Scarlet fever
D	Epidemic typhus
E	Measles
№ 9	KPOK1 2023
Topic	Necrosis
task text	A patient diagnosed with essential hypertension died of an acute myocardial infarction. Autopsy revealed a cavity 2 cm in diameter in the right hemisphere of the brain. The cavity is flued with a transparent yellowish liquid. The wall of the cavity is rusty yellow and smooth. What pathology was detected in the brain of the deceased?
correct answer	Cyst
B	Echinococcus
C	Abscess
D	Tuberculosis
E	-
№ 10	KPOK1 2023
Topic	Tuberculosis
task text	The biopsy material obtained from the enlarged lymph node of a patient with a subfebrile temperature contains numerous granulomas with caseous necrosis in the center. The areas of necrosis are surrounded by epithelioid cells, Langhans giant multinucleated cells, and lymphocytes. What disease can be characterized by these pathohistological changes?
correct answer	Tuberculosis
B	-
C	Lymphosarcoma

D	Lymphogranulomatosis
E	Lymphocytic leukemia
№ 11	KPOK1 2023
Topic	Diseases of kidney
task text	Autopsy of the body of a man who died of ethylene glycol poisoning revealed slightly enlarged edematous kidneys with the capsule that could be very easily removed. The cortical substance is pale gray and wide. The medullary substance is dark red. What kidney pathology developed in the patient?
correct answer	Necrotic nephrosis
B	Lipoid nephrosis
C	Acute pyelonephritis
D	Acute tubulointerstitial nephritis
E	Acute glomerulonephrit
№ 12	KPOK1 2023
Topic	Regeneration
task text	In a 67-year-old patient, who has been suffering from chronic bronchitis for 17 years, bronchial biopsy detects cylindrical dilation of the bronchi, cystic changes in the mucous glands, and areas, where prismatic epithelium is replaced with stratified squamous epithelium. What pathological process was detected in the bronchial mucosa?
correct answer	Metaplasia
B	Hypertrophy
C	Hyperplasia
D	Dysplasia
E	Heterotopia
№ 13	KPOK1 2023
Topic	Mesenchymal tumors
task text	A 27-year-old woman has undergone a sector resection of mammary gland tissue. In the excised tissue, macroscopy detects a dense white node, 4 cm in diameter, with clear boundaries. Urgent histology shows that the tumor consists of a large amount of fibrous stroma with stromal proliferation around the small canaliculi. Canalicular epithelium overlays the basement membrane and retains its polarity. What disease can be characterized by these pathological changes?
correct answer	Pericanalicular fibroadenoma
B	Adenocarcinoma
C	Sarcoma
D	Cancer

E	Dyshormonal disorders
№ 14	KPOK1 2023
Topic	Rheumatic diseases
task text	A 38-year-old patient died with multiple thromboembolisms of various organs. In the cardiac tissue, macrophage granulomas were detected in the valvular and parietal endocardium with endocardial damage and deposition of thrombotic masses. Macrophage granulomas were detected in the myocardium, as well. These pathological changes are characteristic of the following disease:
correct answer	Rheumatism
B	Essential hypertension
C	Infectious myocarditis
D	Systemic lupus erythematosus
E	Atherosclerosis
№ 15	KPOK1 2023
Topic	Disease of Respiratory organs
task text	Autopsy of the body of a patient who died with signs of cardiopulmonary failure shows deformed bronchi with sack-like protrusions of the bronchial wall and purulent inflammation. Hypertrophy of the right ventricle was detected in the heart. Amyloidosis can be observed in the kidneys. The patient's history indicates that for the last 8 years the patient complained of asphyxia and cough with purulent sputum, the patient's fingers resembled drumsticks. What disease can be characterized by these pathological changes?
correct answer	Bronchiectasis
B	Acute bronchitis
C	Abscess
D	Chronic bronchitis
E	Tuberculosis
№ 16	KPOK1 2023
Topic	Tuberculosis
task text	A 47-year-old woman has interphalangeal and metacarpophalangeal joints that can be easily dislocated or subluxated and a characteristic deviation of the fingers that resembles "walrus flippers". Microscopy reveals proliferation of synovial villi, cartilage destruction, and pannus formation. What disease causes these pathological changes?
correct answer	Rheumatoid arthritis
B	Ankylosing spondylitis (Bekhterev's disease)
C	Osteoarthritis
D	Rheumatic arthritis
E	Systemic lupus erythematosus

№ 17	KPOK1 2023
Topic	Immunopathology
task text	Examination detects lymphopenia in a patient, who has been taking glucocorticoids for a long time. How can the functional state of the patient's immune system be characterized in this case?
correct answer	Secondary immunodeficiency
B	Tolerance to autoantigens
C	Congenital immunodeficiency
D	Primary immunodeficiency
E	Anaphylaxis
№ 18	KPOK1 2023
Topic	Shock
task text	A 9-year-old child developed a severe case of purulent destructive pneumonia, for which the child was receiving a massive antibacterial therapy. The disease was rapidly progressing. Against the background of marked intoxication, a sharp drop in blood pressure was registered, the child went into a state of shock that resulted in the child's death. What etiopathogenetic type of shock developed in the child?
correct answer	Toxic shock syndrome
B	Hypovolemic shock
C	Anaphylactic shock
D	Hemolytic shock
E	Cardiogenic shock
№ 19	KPOK1 2023
Topic	Rheumatic diseases
task text	A patient died of secondary bacterial pneumonia. Autopsy revealed pale yellow muscles with numerous foci of calcinosis. In the muscles, microscopy shows dystrophic changes, absence of striations, and reduced glycogen levels. Edema and inflammation were detected in the stroma. The cellular infiltrate is represented by lymphocytes, macrophages, and plasma cells. Sclerotic changes were detected in the heart, lungs, and liver. These pathological changes are characteristic of the following disease:
correct answer	Dermatomyositis (Wagner-Unverricht- Hipp disease)
B	Myopathy
C	Myositis
D	Systemic scleroderma
E	Zenker's degeneration of muscles in typhoid fever
№ 20	KPOK1 2023

Topic	Rheumatic diseases
task text	A 47-year-old woman has interphalangeal and metacarpophalangeal joints that can be easily dislocated or subluxated and a characteristic deviation of the fingers that resembles "walrus flippers". Microscopy reveals proliferation of synovial villi, cartilage destruction, and pannus formation. What disease causes these pathological changes?
correct answer	Rheumatoid arthritis
B	Ankylosing spondylitis (Bekhterev's disease)
C	Osteoarthritis
D	Rheumatic arthritis
E	Systemic lupus erythematosus
№ 20	KPOK1 2023
Topic	Pre- & Perinatal pathology
task text	Postmortem examination of the fetus from the second pregnancy of an Rh-negative mother is being performed. The fetus died in utero at 7 months of pregnancy. Autopsy detects diffuse edema of the subcutaneous tissue and brain, ascites, enlarged liver and spleen, thymic atrophy, and myocardial hypertrophy. Microscopy reveals centers of extramedullary hematopoiesis, as well as dystrophic and necrobiotic changes in internal organs. What form of hemolytic disease corresponds with these pathological changes?
correct answer	Edematous form
B	Anemic form
C	-
D	Congenital icteric form
E	Postpartum icteric form
№ 21	KPOK1 2023
Topic	Immunopathology
task text	The mother complains that her 7-month-old child has recurrent bacterial infections, such as conjunctivitis, otitis, sinopulmonary infections, diarrhea, and skin infections. Examination detects reduced size of the child's tonsils and lymph nodes. In the blood, examination of serum immunoglobulins shows noticeably reduced levels of IgM, IgA, and IgE, IgG is less than 100 mg/dL. What disease can be characterized by these pathological changes?
correct answer	X-linked agammaglobulinemia (Bruton disease)
B	DiGeorge syndrome
C	Hereditary adenosine deaminase defect in T lymphocytes
D	Wiskott-Aldrich syndrome
E	Hypogammaglobulinemia
№	krok 2017

Topic	Diseases of the female and male reproductive system.
Task	Histological investigation of the uterine scrape of the 45-year-old woman with disturbed ovarian menstrual cycle revealed increased number of endometrial glands, some of which are serrated, while others are dilated and cyst-like. Make the diagnosis:
Correct answer	Endometrial cystic glandular hyperplasia
B	Placental polyp
C	Atypical endometrial hyperplasia
D	Glandular endometrial polyp
E	Endometrial adenocarcinoma
№	krok 2017
Topic	Violation of hemostasis. Thrombosis, disseminated intravascular coagulation. Embolism.
Task	A patient with chronic heart failure presents with increased blood viscosity. Capillaroscopy detected damage to the vessel walls of the microcirculation system. What disorder is possible in the given case?
Correct answer	Blood "sludge" phenomenon
B	Thrombosis
C	Embolism
D	Arterial hyperemia
E	Venous hyperemia
№	krok 2017, 2016, 2014
Topic	Nomenclature and morphological features of tumors from epithelium.
Task	A patient has hoarseness of voice. During laryngoscopy a gray-white larynx tumor with papillary surface has been detected. Microscopic investigation has shown the following: growth of connective tissue covered with multilayer, strongly keratinized pavement epithelium, no cellular atypia. What is the most likely diagnosis?
Correct answer	Papilloma
B	Fibroma
C	Polyp
D	Angioma
E	Angiofibroma
№	krok 2017
Topic	Nomenclature and morphological features of tumors from epithelium.
Task	A 67-year-old patient with clinical diagnosis of chronic bronchitis, pneumosclerosis, and cardiopulmonary decompensation has the biopsy material taken from the suspicious area in his right bronchus mucosa. Cellular and tissue atypism along with pearly bodies can be histologically detected. What pathologic process is characterized by the described histological changes?

Correct answer	Squamous cell carcinoma of bronchus with keratinization
B	Polypoid chronic bronchitis
C	Bronchiectasis
D	Acute bronchitis
E	Squamous cell metaplasia of bronchial mucosa
№	krok 2017
Topic	The subject and objectives of pathomorphology. Methods of pathological research. The main stages of development of pathology. the accumulation of proteins, carbohydrates and lipids. Morphology of reversible and irreversible damage of cells and tissues. Intracellular accumulation of proteins, carbohydrates and lipids.
Task	A child with point mutation presents with absence of glucose 6-phosphatase, hypoglycemia, and hepatomegaly. What pathology are these signs characteristic of?
Correct answer	Von Gierke's disease (Glycogen storage disease type I)
B	Cori's disease (Glycogen storage disease type III)
C	Addison's disease (Primary adrenal insufficiency)
D	Parkinson's disease
E	McArdle's disease (Glycogen storage disease type V)
№	krok 2017
Topic	Processes of adaptation and compensation.
Task	Section shows significant enlargement of the patient's right kidney. There is a nephrolith at the place of incision. Renal pelvic lumen is distended with accumulating urine. Renal parenchyma is acutely thinned out. What is the most correct diagnosis?
Correct answer	Hydronephrosis
B	Pyelectasis
C	Hydroureteronephrosis
D	Renal cyst
E	Nephroblastoma
№	krok 2017, 2016
Topic	Pre - & perinatal pathology.
Task	A patient demonstrates sharp decrease of pulmonary surfactant activity. This condition can result in:
Correct answer	Alveolar tendency to recede
B	Decreased airways resistance
C	Decreased work of expiratory muscles
D	Increased pulmonary ventilation

E	Hyperoxemia
№	krok 2017
Topic	Systemic connective tissue disease with autoimmunization.
Task	A 30-year-old woman first developed pain, swelling, and skin redness in the area of joints about a year ago. Provisional di-agnosis is rheumatoid arthritis. One of the likely causes of this disease is change in the structure of the following connective tissue protein:
Correct answer	Collagen
B	Mucin
C	Myosin
D	Ovalbumin
E	Troponin
№	krok 2017
Topic	Morphology of reversible and irreversible damage of cells and tissues. Extracellular accumulation of proteins, carbohydrates and lipids.
Task	On autopsy of a 40-year-old woman, who had been suffering from rheumatoid arthritis, her liver is found to be dense and enlarged. On dissection its tissue is red-brown colored, with enlarged follicles resembling semi-transparent grayish-white granules. What is the most likely pathological process?
Correct answer	Sago spleen
B	Sugar-coated spleen
C	Lardaceous spleen
D	Splenic hyalinosis
E	Porphyry spleen
№	krok 2017
Topic	Diseases of the respiratory system.
Task	On autopsy the dissector determined that the lungs are enlarged, pale, soft, do not deflate, crunch when cut. Microscopically there are dilated alveolar ducts, alveolar septa are thin, and signs of intracapillary sclerosis are observed. What pulmonary di-sorder are these presentations characteristic of?
Correct answer	Emphysema
B	Pneumosclerosis
C	Pneumothorax
D	Atelectasis
E	Pneumonia
№	krok 2017

Topic	The metabolic disorders and metabolism. The morphology of abnormal accumulation of endogenous and exogenous pigments. The morphology of disorders of mineral metabolism.
Task	During autopsy of a man, who had been suffering from mitral stenosis, the lungs are revealed to be dense and brown-colored. What pathologic process had occurred in the lungs?
Correct answer	Hemosiderosis
B	Hemochromatosis
C	Jaundice
D	Hemomelanosis
E	Lipofuscinosis
№	krok 2017
Topic	Atherosclerosis and arteriosclerosis. Coronary heart disease.
Task	Examination of the coronary arteries revealed atherosclerotic plaques with calcinosis that close the arterial opening by 1/3. In the muscle there are numerous whitish layers of connective tissue. Name the process detected in the myocardium:
Correct answer	Diffuse cardiosclerosis
B	Tiger heart
C	Postinfarction cardiosclerosis
D	Myocarditis
E	Myocardial infarction
№	krok 2017
Topic	Proliferative inflammation. Specific inflammation. Granulomatosis.
Task	A 40-year-old man developed skin redness and swelling in the neck area, where eventually a small abscess appeared. On section the focus is dense and yellow-green colored. In the purulent masses there are white granules. Histologically there are fungal druses, plasma and xanthome cells, and macrophages detected. Specify the most correct etiological name of this pathological process:
Correct answer	Actinomycosis
B	Furuncle
C	Carbuncle
D	Syphilis
E	Leprosy
№	krok 2017
Topic	For pituitary disease. Diabetes mellitus. Diseases of the thyroid gland. Diseases of the adrenal glands.

Task	A 40-year-old woman has undergone thyroidectomy. Histological study of thyroid gland found the follicles to be of different size and contain foamy colloid, follicle epi-thelium is high and forms papillae, there is focal lymphocytic infiltration in the stroma. Diagnose the thyroid gland disease:
Correct answer	Basedow's disease
B	Hashimoto's thyroiditis
C	Riedel's thyroiditis
D	De Quervain's disease
E	Nodular goiter
№	krok 2017
Topic	Systemic disease of connective tissue with immune system disturbances.
Task	A 38-year-old man, who has been suffering from systemic lupus erythematosus for 3 years, developed diffuse renal lesions accompanied by massive edemas, marked proteinuria, hyperlipidemia, and dysproteinemia. What is the most likely mechanism of proteinuria development in this case?
Correct answer	Autoimmune damage to the nephrons
B	Inflammatory damage to the nephrons
C	Ischemic damage to the tubules
D	Increased blood proteins
E	Morbid affection of the urinary tracts
№	krok 2017
Topic	Systemic disease of connective tissue with immune system disturbances.
Task	A woman with polyarticular rheumatoid arthritis was prescribed a non-steroidal antiinflammatory drug - diclofenac sodium. After the patient has been taking it for some time, her concomitant disease exacerbated, which forced the doctor to cancel the prescription of this drug. What concomitant disease could necessitate cancellation of this drug prescription?
Correct answer	Ulcer disease
B	Ischemic heart disease
C	Diabetes mellitus
D	Essential hypertension
E	Bronchial asthma
№	krok 2017
Topic	Tuberculosis

Task	A 40-year-old prisoner died of tuberculosis in the corrective labor camp. Autopsy of the body revealed deformation and diminishing of both lung apices; in the both upper lobes there are multiple cavi-ties with dense walls 2-3 mm thick; in the lower lung lobes there are disseminated foci of caseous necrosis varying from 5 mm to 2 cm in diameter. Diagnose the type of tuberculosis:
Correct answer	Secondary fibro-cavitary tuberculosis
B	Secondary fibrous-focal tuberculosis
C	Hematogenous macrofocal pulmonary tuberculosis
D	Primary tuberculosis, primary affect development
E	Secondary cirrhotic tuberculosis
№	krok 2017
Topic	Leukemias (leukemia) and lymphomas.
Task	A 7-year-old boy died of acute posthemorrhagic anemia caused by profuse hemorrhage in the gastrointestinal tract. Postmortem study revealed the followi-ng: macroscopically there were acutely enlarged various groups of the lymph nodes, thymomegaly, hepatosplenomegaly, and bright red bone marrow; microscopically there was hypercellular bone marrow wi-th monomorphic infiltrations composed of blasts and diffuse-focal tumor infiltrations in the liver, spleen, lymph nodes, brain substance and tunics. Make the diagnosis:
Correct answer	Acute lymphoblastic leukemia
B	Acute myeloblastic leukemia
C	Acute undifferentiated leukemia
D	Acute monoblastic leukemia
E	Acute plasmablastic leukemia
№	krok 2017
Topic	Leukemias (leukemia) and lymphomas.
Task	Autopsy of a man, who served on a nuclear submarine, revealed the followi-ng pathologies: bone marrow atrophy (panmyelophthisis), anemia, leukopenia, thrombocytopenia, lymphocytes disi-ntegration in the lymph nodes, spleen, gastrointestinal lymphatic system, and hemorrhages into the adrenal glands. What disease had developed in this case?
Correct answer	Acute radiation sickness
B	Decompression sickness
C	Acute leukemia
D	Acute anemia
E	Vibration disease
№	krok 2017

Topic	Pathomorphology of the immune system. Reactions and mechanisms of hypersensitivity. The autoimmune disease. Immunodeficiency States.
Task	After sensitization a test animal received subcutaneously a dose of antigen. At the site of injection a fibrinous inflammation developed with alteration of vessel walls, basal substance, and fibrous structures of connective tissue. The inflammation took form of mucoid and fibrinoid degeneration, fibrinoid necrosis. What immune response occurred in the test animal?
Correct answer	Immediate hypersensitivity
B	Delayed hypersensitivity
C	Transplantation immune reaction
D	Normergic reaction
E	Granulomatosis
№	krok 2017
Topic	Viral airborne infection. HIV infection. Rabies.
Task	Brain autopsy revealed an edema, hyperemia, and small hemorrhages in the medulla oblongata. Microscopically chromatolysis, hydropia and nerve cell necrosis are observed; within the cytoplasm of hippocampal nerve cells there are eosinophilic structures (Negri bodies) detected. What diagnosis corresponds with the described morphological signs?
Correct answer	Rabies
B	Meningococcal meningitis
C	Encephalitis
D	Encephalomyelitis
E	Brucellosis
№	krok 2017
Topic	Viral airborne infection. HIV infection. Rabies.
Task	A worker of an agricultural enterprise had been suffering from an acute disease with aggravating intoxication signs, which resulted in his death. On autopsy: the spleen is enlarged, flaccid, dark cherry-red on section, yields excessive pulp scrape. Soft meninges of the fornix and base of the brain are edematous and saturated with blood ("cardinal's cap"). Microscopically: serous-hemorrhagic inflammation of meninges and cerebral tissues. Make the diagnosis:
Correct answer	Anthrax
B	Tularemia
C	Plague
D	Cholera
E	Brucellosis
№	krok 2017

Topic	Pathomorphology of the immune system. Reactions and mechanisms of hypersensitivity. The autoimmune disease. Immunodeficiency States.
Task	A 5-year-old child is diagnosed with Bruton syndrome (X-linked agammaglobulinemia) that manifests itself in severe clinical course of bacterial infections and absence of B lymphocytes and plasma cells. What changes of immunoglobulin content can be observed in blood serum of the child with immunodeficiency?
Correct answer	Decreased IgA, IgM
B	Increased IgA, IgM
C	Decreased IgD, IgE
D	Increased IgD, IgE
E	No changes
№	krok 2017
Topic	Cerebro - vascular diseases.
Task	A 37-year-old man, who was working in a caisson, after being lifted to the surface suddenly developed signs of acute cerebral circulation disturbance and loss of consciousness. Several days later he died. On autopsy in the left cerebral hemisphere there was detected a gray soft irregular focus 5x6x3,5 cm in size. What process had occurred in the brain?
Correct answer	Ischemic stroke
B	Hemorrhagic infarction
C	Abscess
D	Cyst
E	Tumor
№	krok 2017
Topic	The subject and objectives of pathomorphology. Methods of pathological research. The main stages of development of pathology. the accumulation of proteins, carbohydrates and lipids. Morphology of reversible and irreversible damage of cells and tissues. Intracellular accumulation of proteins, carbohydrates and lipids.
Task	A 2-year-old child presents with acute psychomotor retardation, vision and hearing impairment, sharp enlargement of the liver and spleen. The child is diagnosed with hereditary Niemann-Pick disease. What genetic defect is the cause of this disease?
Correct answer	Sphingomyelinase deficiency
B	Glucose 6-phosphatase deficiency
C	Amylo-1,6-glucosidase deficiency
D	Acid lipase deficiency
E	Xanthine oxidase deficiency
№	krok 2017

Topic	Liver Disease
Task	After mushroom poisoning the patient developed signs of acute hepatic failure leading to his death. On autopsy the liver is diminished, flaccid; the capsule is wrinkled; the tissue is ochre-yellow on section. Microscopically: fatty degeneration of hepatocytes, necrotic central segments of the hepatic lobes. These changes are characteristic of:
Correct answer	Massive progressive necrosis
B	Fatty hepatosis
C	Acute exudative hepatitis
D	Acute productive hepatitis
E	Hepatolenticular degeneration
№	krok 2017
Topic	Diseases of the respiratory system.
Task	Autopsy of a patient, who died of bi-lateral bronchopneumonia, shows in the left lung lower lobe a cavity 5 cm in diameter, filled with liquid yellowish-white substance. What complication of the patient's pneumonia had developed?
Correct answer	Abscess
B	Gangrene
C	Granuloma
D	Sequestrum
E	Tuberculoma
№	krok 2017, 2016, 2013
Topic	Diseases of the esophagus, stomach and intestines.
Task	At the post-mortem examination the stomach of a patient with renal failure was found to have a yellow-brown coating on the thickened mucosa. The coating was firmly adhering to its surface and had significant thickness. Microscopy revealed congestion and necrosis of mucosal and submucosal layers, fibrin presence. What is the most likely diagnosis?
Correct answer	Fibrinous gastritis
B	Croupous gastritis
C	Phlegmonous gastritis
D	Catarrhal gastritis
E	Corrosive gastritis
№	krok 2017
Topic	Nomenclature and morphological features of tumors from epithelium.

Task	On bronchoscopy there is a polypoid growth 1,0 cm in diameter with ulcer in its center in the upper lobe of the right lung. Histological investigation revealed a tumor composed of lymphocyte-like cells with hyperchromic nuclei, the cells form layers and bands. What is the most likely tumor type?
Correct answer	Undifferentiated small cell carcinoma
B	Undifferentiated large cell carcinoma
C	Squamous cell carcinoma
D	Adenocarcinoma
E	Glandular squamous cell carcinoma
№	krok 2017
Topic	Pathomorphology of the immune system. Reactions and mechanisms of hypersensitivity. The autoimmune disease. Immunodeficiency States.
Task	A 22-year-old woman ate some seafood. 5 hours later her torso and distal parts of her limbs developed small itchy papules which were partially fused together. One day later the rash disappeared spontaneously. Specify the hypersensitivity mechanism underlying these changes:
Correct answer	Atopy (local anaphylaxis)
B	Systemic anaphylaxis
C	Cellular cytotoxicity
D	Immune complex hypersensitivity
E	Antibody-dependent cell-mediated cytotoxicity
№	krok 2017
Topic	Sepsis. Syphilis.
Task	In a body of a 37-year-old woman, who died with signs of pulmonary edema, there was detected acute deformation of the aortic valve: it is shortened, thickened, ulcerated, has areas of stone-like density. On its external surface there are large, up to 2 cm in diameter, thrombotic plaques. Left ventricle wall is 2,2 cm thick. Cardiac muscle is dull, matt, and flaccid. What type of endocarditis corresponds with described alterations of the aortic valve?
Correct answer	Ulcerative polypoid endocarditis
B	Diffuse endocarditis
C	Acute verrucous endocarditis
D	Recurrent verrucous endocarditis
E	Fibroplastic endocarditis
№	krok 2016
Topic	Diseases of the respiratory system.

Task	A patient suffers from high fever, apnoea, pain in the thorax on the right. Pleurocentesis yielded 700 ml of yellow-green viscous liquid. Make the diagnosis:
Correct answer	Pleural empyema
B	Bronchial pneumonia
C	Serous pleurisy
D	Hemorrhagic pleurisy
E	Pleural carcinomatosis
№	krok 2016
Topic	Diseases of the esophagus, stomach and intestines.
Task	During autopsy approximately 2,0 liters of pus have been found in the abdominal cavity of the body. Peritoneum is dull and of grayish shade, serous tunic of intestines has grayish-colored coating that is easily removable. Specify the most likely type of peritonitis in the patient:
Correct answer	Fibrinopurulent peritonitis
B	Hemorrhagic peritonitis
C	Serous peritonitis
D	Tuberculous peritonitis
E	-
№	krok 2016, 2014, 2013
Topic	topic: Leukemias (leukemia) and lymphomas.
Task	Autopsy of a body revealed bone marrow hyperplasia of tubular and flat bones (pyoid marrow), splenomegaly (6 kg) and hepatomegaly (5 kg), enlargement of all lymph node groups. What disease are the identified changes typical of?
Correct answer	Chronic myelogenous leukemia
B	Chronic lymphocytic leukemia
C	Multiple myeloma
D	Polycythemia vera
E	Hodgkin's disease
№	krok 2016, 2013
Topic	Atherosclerosis and arteriosclerosis. Coronary heart disease.
Task	A 60-year-old patient with a long hi-story of atherosclerosis and a previous myocardial infarction developed an attack of retrosternal pain. 3 days later the patient was hospitalized and then died of progressive cardiovascular insufficiency. During autopsy a white fibrous depressed area about 3 cm in diameter with clear margins was found within the area of posterior wall of the left ventricle and interventricular septum. The dissector considered these changes to be:

Correct answer	Focal cardiosclerosis
B	Myocardial ischemia
C	Myocardial infarction
D	Myocarditis
E	Myocardial degeneration
№	krok 2016
Topic	Tuberculosis.
Task	A man is 28 years old. Histological investigation of the cervical lymph node revealed a change of its pattern due to proliferation of epithelioid, lymphoid cells and macrophages with horseshoe-shaped nuclei. In the center of some cell clusters there were non-structured light-pink areas with fragments of nuclei. What disease are these changes typical of?
Correct answer	Tuberculosis
B	Hodgkin's disease
C	Actinomycosis
D	Tumor metastasis
E	Syphilis
№	krok 2016
Topic	General doctrine of inflammation. Exudative inflammation. The morphology of exudative inflammation
Task	A patient, having suffered a thermal burn, developed painful boils filled with turbid liquid in the skin. What morphological type of inflammation has developed in the patient?
Correct answer	Serous
B	Proliferative
C	Croupous
D	Granulomatous
E	Diphtheritic
№	krok 2016, 2015, 2012
Topic	Tuberculosis
Task	Autopsy of a man with tuberculosis revealed a 3x2 cm large cavity in the superior lobe of the right lung. The cavity was interconnected with a bronchus, its wall was dense and consisted of three layers: the internal layer was pyogenic, the middle layer was made of tuberculous granulation tissue and the external one was made of connective tissue. What is the most likely diagnosis?
Correct answer	Fibrous cavernous tuberculosis
B	Fibrous focal tuberculosis
C	Tuberculoma

D	Acute focal tuberculosis
E	Acute cavernous tuberculosis
№	krok 2016
Topic	General doctrine of inflammation. Exudative inflammation. The morphology of exudative inflammation
Task	A 7-year-old child has acute onset of disease: temperature rise up to 38° C, rhinitis, cough, lacrimation, and large-spot rash on the skin. Pharyngeal mucosa is edematous, hyperemic, with whitish spots in the buccal area. What kind of inflammation caused the changes in the buccal mucosa?
Correct answer	Catarrhal inflammation
B	Suppurative inflammation
C	Fibrinous inflammation
D	Hemorrhagic inflammation
E	Serous inflammation
№	krok 2016
Topic	General doctrine of inflammation. Exudative inflammation. The morphology of exudative inflammation
Task	During autopsy of a man, who died of acute transmural cardiac infarction, the following has been detected on the pericardium surface: fibrous whitish-brown deposit connecting parietal and visceral pericardial layers. What kind of inflammation occurred in the pericardium?
Correct answer	Croupous
B	Diphtheritic
C	Serous
D	Suppurative
E	Granulomatous
№	krok 2016
Topic	Morphology of reversible and irreversible damage of cells and tissues. Extracellular accumulation of proteins, carbohydrates and lipids.
Task	A 63-year-old man, who has been suffering from chronic fibrous-cavernous pulmonary tuberculosis for 24 years, has been delivered to a nephrology department with uremia. Intravital diagnostic test for amyloid in the kidneys was positive. What amyloidosis is it in this case?
Correct answer	Secondary systemic
B	Primary systemic
C	Localized (focal)

D	Hereditary (genetic)
E	Senile
№	krok 2016
Topic	Pre - & perinatal pathology.
Task	A woman gave birth to a stillborn baby with numerous malformations. What protozoan disease could cause intrauterine death?
Correct answer	Toxoplasmosis
B	Leishmaniasis
C	Malaria
D	Amebiasis
E	Lambliasis
№	krok 2016
Topic	Diseases of the female and male reproductive system.
Task	On histological examination of uterine mucosa the following is detected: sinuous glands, serratiform and corkscrew-shaped elongated growths of stroma with cell proli-feration. Make the diagnosis:
Correct answer	Glandular endometrial hyperplasia
B	Acute endometritis
C	Leiomyoma
D	Vesicular mole
E	Placental polyp
№	krok 2016
Topic	For pituitary disease. Diabetes mellitus. Diseases of the thyroid gland. Diseases of the adrenal glands.
Task	Autopsy of a 40-year-old woman, who died of cerebral hemorrhage duri-ng hypertensic crisis, revealed: upper-body obesity, hypertrichosis, hirsutism, stretchmarks on the skin of thighs and abdomen. Pituitary basophil adenoma is detected in the anterior lobe. What di-agnosis is the most likely?
Correct answer	Cushing's disease
B	Essential hypertension
C	Alimentary obesity
D	Simmonds' disease
E	Hypothalamic obesity
№	krok 2016
Topic	Infectious and parasitic diseases. Characterization of the infectious process. Intestinal infectious diseases.

Task	A worker of an agricultural enterprise had been suffering from an acute disease with aggravating intoxication signs, which resulted in his death. On autopsy: the spleen is enlarged, flaccid, dark cherry-red in the section, yields excessive pulp scrape. Soft meninges of fornix and base of the brain are edematous and saturated with blood ("cardinal's cap"). Microscopically: serous-hemorrhagic inflammation of meninges and cerebral tissues. Make the diagnosis:
Correct answer	Anthrax
B	Tularemia
C	Plague
D	Cholera
E	Brucellosis
№	krok 2016
Topic	Pathomorphology of the immune system. Reactions and mechanisms of hypersensitivity. The autoimmune disease. Immunodeficiency States.
Task	Autopsy of an 8-month-old boy, who di-ed of severe pneumonia complicated with sepsis, revealed absence of thymus. Lymph nodes have no lymphoid follicles and corti-cal substance. In the spleen the follicles are decreased in size and have no light centers. What is the cause of such changes?
Correct answer	Thymus agenesis
B	Thymus aplasia
C	Thymus atrophy
D	Thymus hypoplasia
E	Accidental thymic involution
№	krok 2016
Topic	The General doctrine about the tumors. Morphological features of tumor tissues derived mesenchyme.
Task	Vestibular receptors of semicircular canals of an animal have been destroyed. What reflexes will disappear as a result?
Correct answer	Statokinetic reflex during movements with angular acceleration
B	Statokinetic reflex during movements with linear acceleration
C	Head-righting reflex
D	Body-righting reflex
E	Primary orienting reflex
№	krok 2016
Topic	Tumors.

Task	A patient died of cancerous cachexia with primary localization of cancer in the stomach. Autopsy revealed acutely enlarged liver with uneven surface and numerous protruding nodes; the nodes had clear margins in the section, rounded shape, gray-pink color, varying density, sometimes contained necrotic foci. Histologically: there are atypical cells in the nodes. What pathologic process occurred in the liver?
Correct answer	Cancer metastases
B	Abscesses
C	Regenerative nodes
D	Infarction
E	Hepatic cancer
№	krok 2016, 2015, 2014
Topic	Pathomorphology of the immune system. Reactions and mechanisms of hypersensitivity. The autoimmune disease. Immunodeficiency States.
Task	Parents of a 5-year-old child report him to have frequent colds that develop into pneumonias, presence of purulent rashes on the skin. Laboratory tests have revealed the following: absence of immunoglobulins of any type; naked cells are absent from the lymph nodes punctate. What kind of immune disorder is it?
Correct answer	X-linked hypogammaglobulinemia (Bruton type agammaglobulinemia)
B	Autosomal recessive agammaglobulinemia (Swiss type)
C	Hypoplastic anemia
D	Agranulocytosis
E	Louis-Barr syndrome
№	krok 2016, 2015
Topic	Nomenclature and morphological features of tumors of the nervous tissue. Features of tumours of the Central nervous system.
Task	Autopsy of a 5-year-old child revealed in the area of the vermis of cerebellum a soft grayish-pink node 2 cm in diameter with blurred margins and areas of haemorrhage. Histologically this tumour consisted of atypical monomorphous small round cells with large polymorphous nuclei. What tumour is it?
Correct answer	Medulloblastoma
B	Meningioma
C	Glioblastoma
D	Astrocytoma
E	Oligodendroglioma
№	krok 2016
Topic	Violation of hemostasis. Thrombosis, disseminated intravascular coagulation. Embolism.

Task	A man has suffered multiple bone fractures of his lower extremities during a traffic accident. During transportation to a hospital his condition was further aggravated: blood pressure decreased, there were signs of pulmonary artery embolism. What kind of embolism is the most likely in the given case?
Correct answer	Fat embolism
B	Air embolism
C	Gas embolism
D	Tissue embolism
E	Thromboembolism
№	krok 2016
Topic	Systemic connective tissue disease with autoimmunization.
Task	Autopsy of a 28-year-old patient, who had been suffering from rheumatism and died of heart failure, revealed pancarditis. Histological investigation of myocardium of the left ventricle posterior wall and interventricular septum detected peri-vascular cellular focal infiltrates composed of macrophages and creating palisade structures surrounding areas of fibrinoid necrosis. Determine the type of myocarditis:
Correct answer	Granulomatous
B	Diffuse interstitial productive
C	Diffuse interstitial exudative
D	Focal interstitial exudative
E	-
№	krok 2016, 2013
Topic	Pathomorphology of the immune system. Reactions and mechanisms of hypersensitivity. The autoimmune disease. Immunodeficiency States.
Task	What condition may develop 15-30 minutes after re-administration of an antigen as a result of the increased level of antibodies, mainly IgE, that are adsorbed on the surface of target cells, namely tissue basophils (mast cells) and blood basophils?
Correct answer	Anaphylaxis
B	Antibody-dependent cytotoxicity
C	Delayed-type hypersensitivity
D	Immune complex hyperresponsiveness
E	Serum sickness
№	krok 2016
Topic	Morphology of reversible and irreversible damage of cells and tissues. Extracellular accumulation of proteins, carbohydrates and lipids.

Task	During pathomorphological renal investigation of a patient, who for a long time had been suffering from osteomyelitis and died of progressing renal failure, the following was revealed: deposits of homogeneous eosinophilic masses in glomerular mesangium, arterial and arteriolar walls, and stroma, which colored red when stained with Congo red. What pathological process is this?
Correct answer	Amyloidosis
B	Mucoid swelling
C	Calcinosis
D	Carbohydrate degeneration
E	Hyalinosis
№	krok 2016, 2015
Topic	Damage and death of cells and tissues. Necrosis and apoptosis. Pathological anatomy organ failure. Foundations of thanatology. Death, definition, signs of death.
Task	A patient with femoral neck fracture, who for a long time had to remain in bed in a forced (supine) position, has developed dark-brown lesions along the backbone; soft tissues are swollen, in the areas of maceration there is a foul-smelling liquid. Name the clinicopathologic type of necrosis:
Correct answer	Bedsore
B	Infarction
C	Sequestrum
D	Coagulation necrosis
E	Dry gangrene
№	krok 2015
Topic	Nomenclature and morphological features of tumors from epithelium.
Task	A 67-year-old patient with clinical diagnosis of chronic bronchitis, pneumosclerosis, and cardiopulmonary decompensation has the biopsy material taken from the suspicious area in his right bronchus mucosa. Cellular and tissue atypism along with pearly bodies can be histologically detected. What pathologic process is characterized by the described histological changes?
Correct answer	Squamous cell carcinoma of bronchus with keratinization
B	Polypoid chronic bronchitis
C	Bronchiectasis
D	Acute bronchitis
E	Squamous cell metaplasia of bronchial mucosa
№	krok 2015
Topic	The metabolic disorders and metabolism. The morphology of abnormal accumulation of endogenous and exogenous pigments. The morphology of disorders of mineral metabolism.

Task	A 12-year-old patient has white non-pigmented spots on the skin. The spots appeared after the patient became 10 years old, and they constantly grow. This spots appeared due to the lack of the following skin cells:
Correct answer	Melanocytes
B	Adipocytes
C	Fibrocytes
D	Plasmocytes
E	Labrocytes
№	krok 2015
Topic	General doctrine of inflammation. Exudative inflammation. The morphology of exudative inflammation
Task	A 7-year-old child has acute onset of di-sease: temperature rise up to 38° C , rhinitis, cough, lacrimation, and large-spot rash on the skin. Pharyngeal mucosa is edematous, hyperemic, with whitish spots in the buccal area. What kind of inflammation causes the changes in the buccal mucosa?
Correct answer	Catarrhal inflammation
B	Suppurative inflammation
C	Fibrinous inflammation
D	Hemorrhagic inflammation
E	Serous inflammation
№	krok 2015
Topic	Pathomorphology of the immune system. Reactions and mechanisms of hypersensitivity. The autoimmune disease. Immunodeficiency States.
Task	A 12-year-old child has developed nephritic syndrome (proteinuria, hematuria, cylindruria) 2 weeks after the case of tonsillitis, which is a sign of affected glomerular basement membrane in the kidneys. What mechanism is the most likely to cause the basement membrane damage?
Correct answer	Immune complex
B	Granulomatous
C	Antibody-mediated
D	Reaginic
E	Cytotoxic
№	krok 2015
Topic	Pathomorphology of the immune system. Reactions and mechanisms of hypersensitivity. The autoimmune disease. Immunodeficiency States.

Task	Several minutes after a dentist administered novocaine for local anaesthesia of a patient's tooth, the following symptoms sharply developed in the patient: fatigue, skin itching. Objectively the following can be observed: skin hyperemia, tachycardia, BP dropped down to 70/40 mm Hg. What kind of allergic reaction is this pathology?
Correct answer	Anaphylactic
B	Cytotoxic
C	Stimulating
D	Cell-mediated immune reaction
E	Immune complex
№	krok 2015
Topic	Pre - & perinatal pathology.
Task	On examination of a newborn boy's external genitalia a fissure in the urethra opening on the inferior surface of his penis is detected. What maldevelopment is it?
Correct answer	Hypospadias
B	Hermaphroditism
C	Epispadia
D	Monorchism
E	Cryptorchidism
№	krok 2015
Topic	Viral airborne infection. HIV infection. Rabies.
Task	A child is 10 years old. The following presentations have developed: sharp pain during swallowing, swollen neck, body temperature rise up to 39, 0° C , bright-red finely papular rash all over the body. Pharynx and tonsils are sharply hyperemic ("flaming pharynx"), "crimson tongue". On the tonsils surface there are isolated greyish necrosis foci. What disease it might be?
Correct answer	Scarlet fever
B	Meningococcal nasopharyngitis
C	Diphtheria
D	Influenza
E	Measles
№	krok 2015
Topic	Leukemias (leukemia) and lymphomas.

Task	During hystological analysis of the lymph node situated in the posterior neck triangle of an 18-year-old patient a morphologist detected a cluster of cells including the following: isolated multinucleate Reed-Sternberg cells, large and small Hodgkin's cells and numerous lymphocytes, isolated plasma cells, eosinophils. What disease has developed in the patient?
Correct answer	Lymphogranulomatosis
B	Nodular lymphoma
C	Burkitt's lymphoma
D	Lymphocytic lymphoma
E	Chronic lymphocytic leukemia
№	krok 2015, 2012
Topic	Diseases of the esophagus, stomach and intestines.
Task	A 39-year-old man who had been operated for the stomach ulcer died 7 days after the surgery. Autopsy revealed that peritoneal leaves were dull, plephoric, covered with massive yellow-greenish films, the peritoneal cavity contained about 300 ml of thick yellow-greenish liquid. What pathologic process was revealed in the peri-toneal cavity?
Correct answer	Fibrinous suppurative peritonitis
B	Serous peritonitis
C	Fibrinous serous peritonitis
D	Peritoneal commissures
E	Fibrinous haemorrhagic peritonitis
№	krok 2015
Topic	Kidney Disease.
Task	Acute renal impairment caused death of a patient with hemorrhage. Autopsy revealed enlarged kidneys with broad pale-pink cortical layer expressively demarcated from dark-red renal pyramids. Macroscopic examination revealed lack of epithelial nuclei of convoluted tubules, tubulorrhaxis, phlebostasis. The cell nuclei of choroid glomus and straight tubules were present. What pathology is it?
Correct answer	Necronephrosis
B	Infarction
C	Glomerulonephritis
D	Pyelonephritis
E	Nephrosis
№	krok 2015, 2014
Topic	Tuberculosis

Task	A 3-year-old child with meningeal symptoms died. Postmortem macroscopy of the pia matter revealed miliary nodules which were microscopically represented by a focus of caseous necrosis with masses of epithelioid and lymphoid cells with large cells containing crescent-shaped peripheral nuclei situated between them. Specify the type of meningitis in the child:
Correct answer	Tuberculous
B	Syphilitic
C	Brucellar
D	Grippal
E	Meningococcal
№	krok 2015, 2012, 2011
Topic	Pre - & perinatal pathology.
Task	2 days after labour a woman developed shock along with DIC syndrome that caused her death. Autopsy revealed purulent endomyometritis, regional purulent lymphangitis, lymphadenitis and purulent thrombophlebitis. There were also dystrophic alterations and interstitial inflammation of parenchymal organs. What is the most likely diagnosis?
Correct answer	Septicemia
B	Syphilis
C	Tuberculosis of genital organs
D	Chorioadenoma destruens
E	Hydatid mole
№	krok 2015, 2012, 2011
Topic	Systemic connective tissue disease with autoimmunization.
Task	A patient with high-titer antinuclear antibodies died from progressing renal impairment. Autopsy revealed mesangi-oproliferative glomerulonephritis and abacterial polypous endocarditis. Periarterial bulbar sclerosis was detected in spleen and productive proliferative vasculitis in skin. What is the most likely diagnosis?
Correct answer	Systemic lupus erythematosus
B	Nephrotic syndrome
C	Rheumatism
D	Dermatomyositis
E	Periarthritis nodosa
№	krok 2015
Topic	Violation of hemostasis. Thrombosis, disseminated intravascular coagulation. Embolism.

Task	During intravenous saline transfusion a patient's condition deteriorated drastically, and the patient died from asphyxiation. Autopsy revealed acute venous congestion of internal organs with sharp right heart dilatation. When the right ventricle was punctured underwater, the bubbles escaped. What pathological process occurred in the patient?
Correct answer	Air embolism
B	Gaseous embolism
C	Adipose embolism
D	Tissue embolism
E	Thromboembolism
№	krok 2015, 2014
Topic	Pathomorphology of the immune system. Reactions and mechanisms of hypersensitivity. The autoimmune disease. Immunodeficiency States.
Task	During blood transfusion a patient has developed intravascular erythrocyte hemolysis. What kind of hypersensitivity does the patient have?
Correct answer	II type (antibody-dependent)
B	I type (anaphylactic)
C	III type (immune complex)
D	IV type (cellular cytotoxicity)
E	IV type (granulomatosis)
№	krok 2015
Topic	Nomenclature and morphological features of tumors from melanocyte tissue.
Task	A 65-year-old man suddenly lost vision in one eye due to the retinal detachment. The patient underwent enucleation. Histological examination of the removed eye retina and choroid revealed clusters of atypical cells with marked polymorphism of cells and nuclei, with a moderate number of mitoses including the pathological ones. The cell cytoplasm and intercellular medium contained brown pigment resulting in positive DOPA reaction. Perls' reaction was negative. What is the most likely diagnosis?
Correct answer	Melanoma
B	Pigmented mole
C	Hemorrhage
D	Cysticercosis
E	Wilson's disease
№	krok 2015, 2014
Topic	Viral airborne infection. HIV infection. Rabies.

Task	An HIV-positive patient's cause of death is acute pulmonary insufficiency resulting from pneumonia. Pathohistological investigation of lungs has revealed interstitial pneumonia, alveolocyte desquamation and metamorphoses: alveolocyte enlargement, large intranuclear inclusions surrounded by lightly-coloured areas. Transformed cells resemble owl's eye. Name the causative agent of pneumonia:
Correct answer	Cytomegalovirus
B	Pneumococcus
C	Influenza virus
D	<i>Candida</i> fungi
E	Toxoplasma
№	krok 2015, 2014
Topic	General doctrine of inflammation. Exudative inflammation. The morphology of exudative inflammation
Task	A patient has undergone surgical removal of a cavitory liver lesion 2 cm in diameter. It was revealed that the cavity wall was formed by dense fibrous connective tissue; the cavity contained murky thick yellowish-green fluid with an unpleasant odor. Microscopically the fluid consisted mainly of polymorphonuclear leukocytes. What pathological process are these morphological changes typical for?
Correct answer	Chronic abscess
B	Acute abscess
C	Phlegmon
D	Empyema
E	-
№	krok 2015
Topic	Anemia. Thrombocytopenia and thrombocytopathy. Coagulopathy.
Task	A patient is diagnosed with chronic atrophic gastritis attended by deficiency of Castle's intrinsic factor. What type of anemia does the patient have?
Correct answer	B_{12} -deficiency anemia
B	Iron refractory anemia
C	Hemolytic anemia
D	Iron-deficiency anemia
E	Protein-deficiency anemia
№	krok 2015
Topic	General doctrine of inflammation. Exudative inflammation. The morphology of exudative inflammation
Task	A 53-year-old man suffering from diabetes mellitus has developed a painful conical induration, bluishred with yellow center, on the skin of his neck. Such changes are characteristic of:

Correct answer	Furuncle
B	Abscess
C	Carbuncle
D	Phlegmon
E	Empyema
№	krok 2015
Topic	Cerebro - vascular diseases.
Task	Parkinson's disease is caused by disruption of dopamine synthesis. What brain structure synthesizes this neurotransmitter?
Correct answer	Substantia nigra
B	Globus pallidus
C	Corpora quadrigemina
D	Red nucleus
E	Hypothalamus
№	krok 2015
Topic	Morphology of reversible and irreversible damage of cells and tissues. Extracellular accumulation of proteins, carbohydrates and lipids.
Task	During pathomorphological kidney investigation of a patient, who for a long time had been suffering from osteomyelitis and died from progressing renal failure, the following was revealed: deposits of homogeneous eosinophilic masses in glomerular mesangium, arterial and arteriolar walls, and stroma, which became red when stained with Congo red. What pathological process is this?
Correct answer	Amyloidosis
B	Mucoid swelling
C	Calcinosis
D	Carbohydrate degeneration
E	Hyalinosis
№	krok 2015
Topic	Children infections.
Task	A 9-year-old boy has acute onset of disease: sore throat, body temperature rise up to 39, 5° C ; on the second day diffuse skin rash was detected all over his skin except for nasolabial triangle. On examination of oral cavity: crimson tongue, "flaming pharynx", necrotic tonsillitis. What diagnosis is the most likely?
Correct answer	Scarlet fever
B	Measles

C	Diphtheria
D	Influenza
E	Meningococemia
№	krok 2015
Topic	Systemic connective tissue disease with autoimmunization.
Task	A 49-year-old man complains of pain in his metatarsophalangeal joints and joint deformation. In blood hyperuricemia can be observed. X-ray has revealed metatarsophalangeal joint space narrowing, erosion, periarticular calcification of the both joints, osteoporosis. Microscopy has revealed inflammatory granulomatous reaction surrounding necrotizing masses in the area of the first metatarsophalangeal joint. Choose the most likely diagnosis:
Correct answer	Gout (podagra)
B	Pyrophosphate arthropathy
C	Rheumatoid arthritis
D	Hyperparathyroidism
E	Urolithiasis
№	krok 2015
Topic	Proliferative inflammation. Specific inflammation. Granulomatosis.
Task	Granulomas containing lymphocytes and macrophages were detected during analysis of skin biopsy material. Among macrophages there are large cells with fat inclusions, which contain microorganisms in spheric packages (Virchow's cells). The following disease is based on the described type of hypersensitivity:
Correct answer	Leprosy
B	Syphilis
C	Tuberculosis
D	Rhinoscleroma
E	Epidemic typhus
№	krok 2015
Topic	Pathomorphology of the immune system. Reactions and mechanisms of hypersensitivity. The autoimmune disease. Immunodeficiency States.
Task	During autopsy of a 9-month-old girl's body, who died due to severe pneumonia complicated with sepsis, lack of thymus is observed. In the lymph nodes the lymphoid follicles and cortical substance are absent; follicles of spleen are reduced in size with no light zones and plasma cells. What is the cause of such structural changes?
Correct answer	Thymus agenesis

B	Accidental involution of thymus
C	Thymus hypoplasia
D	Thymus atrophy
E	Thymus aplasia
№	krok 2014
Topic	Diseases of the esophagus, stomach and intestines.
Task	During autopsy approximately 2,0 liters of pus have been found in the abdominal cavity of the corpse. Peritoneum is lustreless and has grayish shade, serous tunic of intestines has grayish-colored coating that is easily removable. Specify the most likely type of peritonitis in the patient:
Correct answer	Fibrinopurulent peritonitis
B	Hemorrhagic peritonitis
C	Serous peritonitis
D	Tuberculous peritonitis
E	-
№	krok 2014
Topic	Atherosclerosis and arteriosclerosis. Coronary heart disease.
Task	Autopsy of the dead patient who died from pulmonary edema revealed a large yellow-grey nidus in the myocardium, and a fresh thrombus in the coronary artery. What is the most likely diagnosis?
Correct answer	Myocardial infarction
B	Cardiosclerosis
C	Myocarditis
D	Amyloidosis
E	Cardiomyopathy
№	krok 2014, 2013
Topic	The metabolic disorders and metabolism. The morphology of abnormal accumulation of endogenous and exogenous pigments. The morphology of disorders of mineral metabolism.
Task	A male patient is 28 years old. Histological study of a cervical lymph node revealed a change of its pattern due to the proliferation of epithelioid, lymphoid cells and macrophages having nuclei in form of a horseshoe. In the center of some cell clusters there were non-structured light-pink areas with fragments of nuclei. What disease are these changes typical for?
Correct answer	Tuberculosis
B	Hodgkin's disease
C	Actinomycosis

D	Tumor metastasis
E	Syphilis
№	krok 2014
Topic	Viral airborne infection. HIV infection. Rabies.
Task	During autopsy the following has been revealed: the meninges of the upper cerebral hemispheres are extremely plethoric, of yellow-green color and are soaked with purulent effluent. What kind of meningitis is characterised by such clinical presentations?
Correct answer	Meningococcal meningitis
B	Tuberculous meningitis
C	Grippal meningitis
D	Anthraxinduced
E	Epidemic typhusinduced
№	krok 2014
Topic	For pituitary disease. Diabetes mellitus. Diseases of the thyroid gland. Diseases of the adrenal glands.
Task	A 40-year-old female patient has undergone thyroidectomy. Histological study of thyroid gland found the follicles to be of different size and contain foamy colloid, follicle epithelium is high and forms papillae, there is focal lymphocytic infiltration in stroma. Diagnose the thyroid gland disease:
Correct answer	Basedow's disease
B	Hashimoto's thyroiditis
C	Riedel's thyroiditis
D	De Quervain's disease
E	Nodular goiter
№	krok 2014
Topic	Children infections.
Task	A 10-year-old child has painful swallowing, neck edema, temperature rise up to 39, 0° C, the whole body is covered with bright-red petechial rash. Back of the throat and tonsils are hyperemic, the tongue is crimson-colored. Tonsillar surface is covered with isolated grayish-colored necrosis nidi. What disease is it?
Correct answer	Scarlet fever
B	Meningococcal nasopharyngitis
C	Diphtheria
D	Influenza
E	Measles

№	krok 2014
Topic	Pre - & perinatal pathology.
Task	A patient intending to undergo a gender reassignment surgery has been admitted to a specialised clinic. In the course of examination both male and female gonades have been revealed, with male structure of external genitals. What kind of genital maldevelopment has the patient?
Correct answer	True hermaphroditism
B	Male pseudohermaphroditism
C	Female pseudohermaphroditism
D	Accessory ovary
E	Ectopia of testis
№	krok 2014
Topic	Pathomorphology of the immune system. Reactions and mechanisms of hypersensitivity. The autoimmune disease. Immunodeficiency States.
Task	In the course of puncture biopsy of transplanted kidney the following has been revealed: diffuse infiltration of stroma by lymphocytes and plasmocytes and necrotic arteritis. What pathological process has developed in the transplant?
Correct answer	Immune rejection
B	Ischemic kidney failure
C	Glomerulonephritis
D	Tubular necrosis
E	Pyelonephritis
№	krok 2014
Topic	Kidney Disease.
Task	Tissue sampling of a 37-year-old male patient with chronic renal disease has revealed the following: sclerosis, lymphocytic and plasmocytic infiltration of renal pelvis and calices walls, dystrophy and atrophy of tubules. Remaining tubules are enlarged and stretched with colloid masses, epithelium is flattened out ("scutiform" or "shield-shaped" kidney). What is the most likely diagnosis?
Correct answer	Chronic pyelonephritis
B	Tubular interstitial nephritis
C	Acute pyelonephritis
D	Glomerulonephritis
E	Nephrosclerosis
№	krok 2014
Topic	Nomenclature and morphological features of tumors from epithelium.

Task	Autopsy of a 50-year-old male who had tuberculosis revealed a dense gray-white nidus in form of a nodule 2 cm in diameter in the subpleural portion of the upper right lobe. The pleura in this region was thickened, in the pleural cavity there was a small amount of serous hemorrhagic fluid. Histological study of the region revealed some glandular structures with signs of cellular atypia and abnormal mitoses, which were found within the fibrous connective tissue. What other pathology had developed in the lungs?
Correct answer	Adenocarcinoma
B	Squamous cell carcinoma
C	Adenoma
D	Fibrosarcoma
E	Fibroma
№	krok 2014
Topic	Infectious and parasitic diseases. Characterization of the infectious process. Intestinal infectious diseases.
Task	On the 24th day since the onset of disease, a male patient diagnosed with typhoid fever and undergoing treatment in an infectious diseases hospital has suddenly developed clinical presentations of acute abdomen leading to the death of the patient. During autopsy peritonitis has been revealed, with numerous ulcers covering the colon mucosa and reaching as deep as muscular and, in places, serous tunic. The ulcers have smooth edges and even floor. The intestinal wall is perforated. What stage of typhoid fever has the lethal complication arisen at?
Correct answer	Clean ulcer
B	Medullary swelling
C	Necrosis
D	Dirty ulcer
E	Regeneration
№	krok 2014
Topic	Pathomorphology of the immune system. Reactions and mechanisms of hypersensitivity. The autoimmune disease. Immunodeficiency States.
Task	A 30-year-old patient has dyspnea fits, mostly at night. He has been diagnosed with bronchial asthma. What type of allergic reaction according to the Gell-Coombs classification is most likely in this case?
Correct answer	Anaphylactic
B	Cytotoxic
C	Stimulating
D	Immune complex
E	Delayed-type hypersensitivity
№	krok 2014

Topic	Hypertension and arteriolosclerosis. Hypertension and symptomatic hypertension.
Task	Autopsy has revealed shrunken kidneys weighing 50 mg, with fine-grained surface and uniformly thinned substance. Microscopic investigation has shown the thickening of arteriole walls due to accumulation of homogeneous anhisto pink-coloured masses in them. Glomerules were undersized, sclerotic, with atrophied tubules. What disease are these changes characteristic of?
Correct answer	Essential hypertension
B	Pyelonephritis with kidney shrinkage
C	Renal amyloidosis
D	Acute glomerulonephritis
E	Membranous nephropathy
№	krok 2014
Topic	Nomenclature and morphological features of tumors from epithelium.
Task	Histological examination of biopsy samples taken from the thickened edges of a gastric ulcer revealed small clusters of small, markedly atypical hyperchromatic epithelial cells that were localized in the overdeveloped stroma. Specify the tumor:
Correct answer	Scirrhus undifferentiated carcinoma
B	Medullary carcinoma
C	Adenocarcinoma
D	Undifferentiated sarcoma
E	Adenoma
№	krok 2014
Topic	Processes of adaptation and compensation.
Task	A 10-year-old child was found to have a congenital hypoplasia of the left kidney. Ultrasound examination revealed that the right kidney was markedly enlarged and had regular shape. No functional disorders were revealed. Specify the process that developed in the right kidney:
Correct answer	Vicarious hypertrophy
B	Working hypertrophy
C	Hypertrophic growth
D	Pseudohypertrophy
E	Metaplasia
№	krok 2014
Topic	Diseases of the female and male reproductive system.

Task	A 35-year-old female patient has undergone biopsy of the breast nodules. Histological examination has revealed enhanced proliferation of the small duct and acini epithelial cells, accompanied by the formation of glandular structures of various shapes and sizes, which were located in the fibrous stroma. What is the most likely diagnosis?
Correct answer	Fibroadenoma
B	Adenocarcinoma
C	Cystic breast
D	Invasive ductal carcinoma
E	Mastitis
№	krok 2014
Topic	Children infections.
Task	A 7-year-old boy got ill with diphtheria. On the third day he died of asphyxiation. At autopsy the mucosa of the larynx, trachea and bronchi had thickened, edematous, lustreless appearance and was covered with gray films which could be easily removed. Specify the type of laryngeal inflammation:
Correct answer	Croupous
B	Diphtheritic
C	Purulent
D	Catarrhal
E	Intermediate
№	krok 2013
Topic	Atherosclerosis and arteriosclerosis. Coronary heart disease.
Task	Microscopy of the coronary artery of a dead 53-year-old patient revealed luminal occlusion due to a fibrous plaque with some lipids. The most likely form of atherosclerosis in this case is:
Correct answer	Liposclerosis
B	Lipidosis
C	Prelipid stage
D	Atheromatosis
E	Ulceration
№	krok 2013
Topic	Pre - & perinatal pathology.
Task	Examination of an 18-year-old girl revealed the following features: hypoplasia of the ovaries, broad shoulders, narrow pelvis, shortening of the lower extremities, "sphinx neck". Mental development is normal. The girl was diagnosed with Turner's syndrome. What kind of chromosome abnormality is it?

Correct answer	Monosomy X
B	Trisomy X
C	Trisomy 13
D	Trisomy 18
E	Nullisomy X
№	krok 2013
Topic	For pituitary disease. Diabetes mellitus. Diseases of the thyroid gland. Diseases of the adrenal glands.
Task	A 38-year-old female patient complains of general weakness, cardiac pain, increased appetite, no menstruation. Objectively: the height is 166 cm, weight kg, the patient has moon-shaped face, subcutaneous fat is deposited mainly in the upper body, torso and hips. There are also blood-red streaks. Ps- 62/min, AP-160/105 mm Hg. Which of the following diseases is the described pattern of obesity most typical for?
Correct answer	Cushing pituitary basophilism
B	Alimentary obesity
C	Myxedema
D	Insulinoma
E	Babinski-Frohlich syndrome
№	krok 2013
Topic	The metabolic disorders and metabolism. The morphology of abnormal accumulation of endogenous and exogenous pigments. The morphology of disorders of mineral metabolism.
Task	A patient with jaundice has high total bilirubin that is mainly indirect (unconjugated), high concentration of stercobilin in the stool and urine. The level of direct (conjugated) bilirubin in the blood plasma is normal. What kind of jaundice can you think of?
Correct answer	Hemolytic
B	Parenchymal (hepatic)
C	Mechanical
D	Neonatal jaundice
E	Gilbert's disease
№	krok 2013
Topic	Hemodynamic.
Task	At autopsy the occipital lobe of brain was found to have a cavity 2,5x1,5 cm large filled with a transparent liquid. The cavity had smooth brownish walls. What process had developed in the brain?
Correct answer	Cyst on the site of a hemorrhage
B	Softening of the cerebrocortical grey matter

C	Brain abscess
D	Paracephalia
E	A cyst on the site of the softening of the cerebrocortical grey matter
№	krok 2013
Topic	Proliferative inflammation. Specific inflammation. Granulomatosis.
Task	Study of the biopsy material revealed a granuloma consisting of lymphocytes, plasma cells, macrophages with foamy cytoplasm (Mikulicz cells), many hyaline globules. What disease can you think of?
Correct answer	Rhinoscleroma
B	Leprosy
C	Syphilis
D	Tuberculosis
E	Actinomycosis
№	krok 2013
Topic	Atherosclerosis and arteriosclerosis. Coronary heart disease.
Task	Autopsy of a 78-year-old patient revealed that retroperitoneal tissue was soaked with blood, the abdominal aorta had a sacciform protrusion including a defect with irregular edges. The wall of the aorta was here and there of stone-like density. This is the complication of the following disease:
Correct answer	Atherosclerosis
B	Essential hypertension
C	Systemic vasculitis
D	Visceral syphilis
E	Marfan syndrome
№	krok 2013
Topic	Kidney Disease.
Task	14 days after quinsy a 15-year-old child presented with morning facial swelling, high blood pressure, "meat slops"urine. Immunohistological study of a renal biopsy sample revealed deposition of immune complexes on the basement membranes of the capillaries and in the glomerular mesangium. What disease developed in the patient?
Correct answer	Acute glomerulonephritis
B	Acute interstitial nephritis
C	Lipoid nephrosis
D	Acute pyelonephritis
E	Necrotizing nephrosis

№	krok 2013
Topic	Children infections.
Task	A diseased child has a high fever, sore throat, swelling of submandibular lymph nodes. Objectively: pharyngeal mucosa is edematous, moderately hyperemic, the tonsils are enlarged, covered with grayish membrane tightly adhering to the tissues above. Attempts to remove the membrane produce the bleeding defects. What di-sease are these presentations typical for?
Correct answer	Diphtheria
B	Catarrhal tonsillitis
C	Scarlet fever
D	Meningococcal disease
E	Measles
№	krok 2013
Topic	Morphology of reversible and irreversible damage of cells and tissues. Extracellular accumulation of proteins, carbohydrates and lipids.
Task	Examination of the removed stomach revealed a deep roundish defect with regular edges at the lesser curvature of the antrum. The defect reached the muscular tunic and was 1,5 cm in diameter. Within the defect floor there was a translucent dense area resembling of a hyaline cartilage. What process had developed in the floor of the stomach defect?
Correct answer	Local hyalinosis
B	Amyloidosis
C	Mucoid swelling
D	Fibrinoid alterations
E	General hyalinosis
№	krok 2013
Topic	Sepsis. Syphilis.
Task	A patient underwent biopsy of the soft palate arches for a suspected tumor (macroscopy revealed an ulcer with a dense floor). Study of the biopsy material revealed mucosal necrosis with infiltration of lymphocytes, epithelioid cells, plasma cells, single neutrophils in the submucosa. There were also apparent signs of endovasculitis and perivasculitis. The described changes are typical for:
Correct answer	Primary syphilis
B	Aphthous stomatitis
C	Ulcerative stomatitis
D	Necrotizing ulcerative Vincent stomatitis
E	Pharyngeal diphtheria
№	krok 2013

Topic	Pre - & perinatal pathology.
Task	Healthy parents with unremarkable family history have the child with multiple developmental defects. Cytogenetic analysis revealed the trisomy 13 in the somatic cells (Patau syndrome). What phenomenon has caused the defects?
Correct answer	Abnormal gametogenesis
B	Somatic mutation
C	Recessive mutation
D	Dominant mutation
E	Chromosomal mutation
№	krok 2013
Topic	Systemic connective tissue disease with autoimmunization.
Task	A patient died from progressive heart failure. Autopsy revealed that the heart was enlarged in diameter, flabby. The muscle section exhibited irregular blood supply. Histological study of myocardium revealed hyperemia, the stroma was found to have lymphohistiocytic infiltrates with degeneration of cardiomyocytes. The revealed morphological changes are indicative of:
Correct answer	Non-purulent interstitial myocarditis
B	Venous plethora
C	Cardiomyoliposis
D	Cardiosclerosis
E	Myocardial infarction
№	krok 2013
Topic	Kidney Disease.
Task	A male patient has been diagnosed with acute poststreptococcal glomerulonephritis. It is most likely that the lesion of the basement membrane of renal corpuscles was caused by the following allergic reaction:
Correct answer	Immune complex
B	Anaphylactic
C	Cytotoxic
D	Delayed
E	Stimulating
№	krok 2013
Topic	Nomenclature and morphological features of tumors from epithelium.
Task	Histological examination of the removed skin neoplasm revealed clusters and cords of atypical cells of stratified squamous epithelium, growing into the underlying tissue. What diagnosis can be assumed?
Correct answer	Non-keratinizing squamous cell carcinoma

B	Keratinizing squamous cell carcinoma
C	Carcinoma in situ
D	Papilloma
E	Adenoma
№	krok 2013
Topic	Nomenclature and morphological features of tumors of the nervous tissue. Features of tumours of the Central nervous system.
Task	Autopsy of a 62-year-old woman revealed a dense well-circumscribed node of 6 cm in diameter in the cranial cavity. The node was attached to the dura mater and histologically consisted of clusters and microconcentric structures of endothelial cells, psammoma bodies. What kind of tumor was found at autopsy?
Correct answer	Meningioma
B	Glioblastoma
C	Medulloblastoma
D	Melanoma
E	Cancer metastasis
№	krok 2013
Topic	Violation of hemostasis. Thrombosis, disseminated intravascular coagulation. Embolism.
Task	During the intravenous transfusion of the saline the patient's condition deteriorated dramatically, and the patient died from asphyxiation. Autopsy revealed acute venous congestion of internal organs with the dramatic right heart dilatation. When the right ventricle was punctured underwater, the bubbles escaped. What pathological process occurred in the patient?
Correct answer	Air embolism
B	Gaseous embolism
C	Adipose embolism
D	Tissue embolism
E	Thromboembolism
№	krok 2013
Topic	Nomenclature and morphological features of tumors from melaniebrady tissue.
Task	A 65-year-old male suddenly lost the vision in one eye due to the retinal detachment. The patient underwent enucleation. Histological examination of the removed eye retina and choroid revealed clusters of atypical cells with marked polymorphism of cells and nuclei, with a moderate number of mitoses including the pathological ones. The cell cytoplasm and intercellular medium contained brown pigment giving a positive DOPA reaction. Perls' reaction was negative. What is the most likely diagnosis?
Correct answer	Melanoma
B	Pigmented mole

C	Hemorrhage
D	Cysticercosis
E	Wilson's disease
№	krok 2013
Topic	Systemic connective tissue disease with autoimmunization.
Task	Microscopy of the myocardium of a patient who had died from heart failure revealed foci of fibrinoid necrosis located diffusely in the interstitial stroma, and often around the vessels. Such foci were surrounded by lymphocytes, macrophages, histiocytes. Pericardium was found to have signs of serofibrinous pericarditis. What is the most likely diagnosis?
Correct answer	Rheumatic heart disease
B	Myocardial infarction
C	Cardiomyopathy
D	Cardiosclerosis
E	-
№	krok 2013
Topic	Pathomorphology of the immune system. Reactions and mechanisms of hypersensitivity. The autoimmune disease. Immunodeficiency States.
Task	10 days after having quinsy caused by beta-hemolytic streptococcus a 6-year-old child exhibited symptoms of glomerulonephritis. What mechanism of glomerular lesion is most likely in this case?
Correct answer	Immunocomplex
B	Cellular cytotoxicity
C	Anaphylaxis
D	Atopy
E	Antibody-dependent cell-mediated cytotoxicity
№	krok 2013
Topic	Pathomorphology of the immune system. Reactions and mechanisms of hypersensitivity. The autoimmune disease. Immunodeficiency States.
Task	A 22-year-old woman ate some seafood. 5 hours later the trunk and the distal parts of limbs got covered with small itchy papules which were partially fused together. After one day, the rash disappeared spontaneously. Specify the hypersensitivity mechanism underlying these changes:
Correct answer	Atopy (local anaphylaxis)
B	Systemic anaphylaxis
C	Cellular cytotoxicity

D	Immune complex hypersensitivity
E	.Antibody-dependent cell-mediated cytotoxicity
№	krok 2013
Topic	Regeneration and reparation. Sclerosis.
Task	As a result of a mechanical injury an over 10 cm long portion of a peripheral nerve was damaged. This led to the impairment of the upper limb activity. The patient was offered nerve transplantation. What glial cells will participate in regeneration and provide the trophism of the injured limb?
Correct answer	Schwann cells
B	Fibrous cells
C	Protoplasmic cells
D	Microglia
E	Ependymal cells
№	krok 2013
Topic	Nomenclature and morphological features of tumors from epithelium. Diseases of the female and male reproductive system.
Task	A 35-year-old female patient underwent biopsy of the breast nodules. Histological examination revealed enhanced proliferation of the small duct epithelial cells and acini, accompanied by the formation of glandular structures of various shapes and sizes, which were located in the fibrous stroma. What is the most likely diagnosis?
Correct answer	Fibroadenoma
B	Adenocarcinoma
C	Cystic breast
D	Invasive ductal carcinoma
E	Mastitis
№	krok 2013
Topic	Diseases of the respiratory system.
Task	Microscopy of the bronchial wall revealed atrophy of the mucosa, metaplastic change from columnar to squamous epithelium, an increase in the number of goblet cells, diffuse infiltration of the bronchial wall with lymphoplasmacytic elements with a large number of neutrophilic granulocytes, pronounced sclerosis. Specify the morphological form of bronchitis:
Correct answer	Chronic purulent bronchitis
B	Acute bronchitis
C	Polypoid chronic bronchitis
D	Acute purulent bronchitis

E	Chronic bronchitis
№	krok 2013
Topic	Regeneration and reparation. Sclerosis.
Task	Histological examination of the biopsy material obtained from the lower third of the esophagus of a 57-year-old male with the symptoms of continuous reflux revealed the change of the stratified squamous epithelium to the singlelayer columnar glandular epithelium with signs of mucus production. Specify the pathological process in the mucous membrane:
Correct answer	Metaplasia
B	Hyperplasia
C	Hypertrophy
D	Organization
E	Regeneration
№	krok 2013
Topic	For pituitary disease. Diabetes mellitus. Diseases of the thyroid gland. Diseases of the adrenal glands.
Task	A female patient complains of vision impairment. On examination she was found to have obesity, fasting hyperglycemia. What complication of diabetes can cause vision impairment?
Correct answer	Microangiopathy
B	Macroangiopathy
C	Atherosclerosis
D	Neuropathy
E	Glomerulopathy
№	krok 2012
Topic	Morphology of reversible and irreversible damage of cells and tissues. Extracellular accumulation of proteins, carbohydrates and lipids.
Task	Autopsy of a 58 year old man revealed that bicuspid valve was deformed, thickened and unclosed. Microscopically: foci of collagen fibrilla are eosinophilic, react positively to fibrin. The most probably it is:
Correct answer	Fibrinoid swelling
B	Fibrinous inflammation
C	Mucoid swelling
D	Hyalinosis
E	Amyloidosis
№	krok 2012
Topic	Processes of adaptation and compensation.

Task	Chronic inflammation and transformation of the one-layer ciliated epithelium into multiple-layers flat epithelium was revealed in the thickened mucous membrane of the bronchus biopstate of the patient with smoke abuse. Which of the processes is the most likely?
Correct answer	Metaplasia
B	Hyperplasia of the epithelium
C	Squamous cancer
D	Leucoplacia
E	Epithelium hypertrophy
№	krok 2012
Topic	Leukemias (leukemia) and lymphomas.
Task	Microscopic examination of the enlarged neck gland of a 14 year old girl revealed destruction of the tissue structure of the node, absence of the lymph follicles, sclerotic areas and necrosis foci, cell constitution of the node is polymorphous, lymphocytes, eosinophiles, big atypical cells with multilobular nuclei (Beresovsky-Sternberg cells) and mononuclear cells of the large size are present. What is the most likely diagnosis?
Correct answer	Lymphogranulomatosis
B	Acute lympholeucosis
C	Chronic lympholeucosis
D	Berkitt's lymphoma
E	Fungoid mycosis
№	krok 2012
Topic	For pituitary disease. Diabetes mellitus. Diseases of the thyroid gland. Diseases of the adrenal glands.
Task	A child has abnormal formation of tooth enamel and dentin as a result of low concentration of calcium ions in blood. Such abnormalities might be caused by deficiency of the following hormone:
Correct answer	Parathormone
B	Thyrocalcitonin
C	Thyroxin
D	Somatotropic hormone
E	Triiodothyronine
№	krok 2012, 2010, 2008
Topic	Leukemias (leukemia) and lymphomas.
Task	A 62 year old woman complains of frequent pain attacks in the area of her chest and backbone, rib fractures. Her doctor suspected myeloma (plasmocytoma). What of the following laboratory characteristics will be of the greatest diagnostic importance?
Correct answer	Paraproteinemia

B	Hyperalbuminemia
C	Proteinuria
D	Hypoglobulinemia
E	Hypoproteinemia
№	krok 2012
Topic	Kidney Disease.
Task	A patient with a history of chronic glomerulonephritis presents with azotemia, oliguria, hypo- and isosthenuria, proteinuria. What is the leading factor in the pathogenesis of these symptoms development under chronic renal failure?
Correct answer	Mass decrease of active nephrons
B	Intensification of glomerular filtration
C	Tubular hyosecretion
D	Disturbed permeability of glomerular membranes
E	Intensification of sodium reabsorption
№	krok 2012
Topic	Cerebro - vascular diseases. Atherosclerosis and arteriosclerosis. Coronary heart disease.
Task	Autopsy of a woman with cerebral atherosclerosis revealed in the left cerebral hemisphere a certain focus that is presented by flabby, anhistic, greyish and yellowish tissue with indistinct edges. What pathological process is the case?
Correct answer	Ischemic stroke
B	Multifocal tumor growth with cystic degeneration
C	Multiple foci of fresh and old cerebral hemorrhage
D	Focal encephalitis
E	Senile encephalopathy
№	krok 2012
Topic	Kidney Disease.
Task	Autopsy of a man who died from ethylene glycol poisoning revealed that his kidneys are a little bit enlarged, edematic; their capsule can be easily removed. Cortical substance is broad and light-grey. Medullary substance is dark-red. What pathology had this man?
Correct answer	Necrotic nephrosis
B	Acute pyelonephritis
C	Acute glomerulonephritis
D	Acute tubular-interstitial nephritis
E	Lipoid nephrosis
№	krok 2012, 2010, 2008

Topic	For pituitary disease. Diabetes mellitus. Diseases of the thyroid gland. Diseases of the adrenal glands.
Task	A 44 year old woman complains of general weakness, heart pain, significant increase of body weight. Objectively: moon face, hirsutism, AP is 165/100 mm Hg, height - 164 cm, weight - 103 kg; the fat is mostly accumulated on her neck, thoracic girdle, belly. What is the main pathogenetic mechanism of obesity?
Correct answer	Increased production of glucocorticoids
B	Reduced production of thyroid hormones
C	Increased insulin production
D	Reduced glucagon production
E	Increased mineralocorticoid production
№	krok 2012
Topic	Pathomorphology of the immune system. Reactions and mechanisms of hypersensitivity. The autoimmune disease. Immunodeficiency States.
Task	A man with a long-term history of bronchial asthma died from asphyxia. Histological examination of his lungs revealed that the lumens of bronchioles and minor bronchi contained a lot of mucus with some eosinophils. There was also sclerosis of interalveolar septa, dilatation of alveole lumens. What mechanism accounts for the development of hypersensitivity reaction?
Correct answer	Reagine reaction
B	Cytotoxic reaction
C	Immune complex reaction
D	Lymphocytemediated cytolysis
E	Granulomatosis
№	krok 2012
Topic	Diseases of the female and male reproductive system.
Task	Histologic analysis of uterus mucous membrane revealed twisting glands, serrated and spinned, they were extended by stroma growth with proliferation of its cells. Formulate a diagnosis:
Correct answer	Glandular hyperplasia of endometrium
B	Acute endometritis
C	Leiomyoma
D	Cystic mole
E	Placental polyp
№	krok 2012, 2010
Topic	Circulatory disorders: hyperemia, ischemia, infarction, hemorrhage, hemorrhage, stasis, plasturgie. Shock. Violation of lymph circulation.

Task	A 63 year old male patient who had been suffering from chronic diffuse obstructive disease, pulmonary emphysema, for 15 years died from cardiac insufficiency. Autopsy revealed nutmeg liver cirrhosis, cyanotic induration of kidneys and spleen, ascites, edemata of lower limbs. These changes of internal organs are typical for the following disease:
Correct answer	Chronic right-ventricular insufficiency
B	Acute right-ventricular insufficiency
C	Chronic left-ventricular insufficiency
D	Acute left-ventricular insufficiency
E	General cardiac insufficiency
№	krok 2012
Topic	Damage and death of cells and tissues. Necrosis and apoptosis. Pathological anatomy organ failure. Foundations of thanatology. Death, definition, signs of death.
Task	A 38 year old man died all of a sudden. Autopsy revealed myocardial infarction in the posterior wall of the left ventricle. What are the most likely alterations in myocardiocyte structure that can be revealed microscopically in the infarction focus?
Correct answer	Karyolysis
B	Adipose degeneration
C	Carbohydrate degeneration
D	Calcification
E	Protein degeneration
№	krok 2012
Topic	Damage and death of cells and tissues. Necrosis and apoptosis. Pathological anatomy organ failure. Foundations of thanatology. Death, definition, signs of death.
Task	A 38 year old man died all of a sudden. Autopsy revealed myocardial infarction in the posterior wall of the left ventricle. What are the most likely alterations in myocardiocyte structure that can be revealed microscopically in the infarction focus?
Correct answer	Karyolysis
B	Adipose degeneration
C	Carbohydrate degeneration
D	Calcification
E	Protein degeneration
№	krok 2012
Topic	Circulatory disorders: hyperemia, ischemia, infarction, hemorrhage, hemorrhage, stasis, plasturgie. Shock. Violation of lymph circulation.

Task	A 42 year old patient complains of pain in the epigastral area, vomiting; vomit masses have the colour of "coffee-grounds", the patient has also melena. Anamnesis records gastric ulcer. Blood formula: erythrocytes - $2,8 \cdot 10^{12}/l$, leukocytes - $8 \cdot 10^9/l$, Hb- 90 g/l. What complication is it?
Correct answer	Haemorrhage
B	Penetration
C	Perforation
D	Canceration
E	Pyloric stenosis
№	krok 2012
Topic	Pathomorphology of the immune system. Reactions and mechanisms of hypersensitivity. The autoimmune disease. Immunodeficiency States.
Task	A 10 year old child had the mantoux tuberculin test administered. 48 hours later a papule up to 8 mm in diameter appeared on the site of the injection. What type of hypersensitivity reaction developed after the tuberculin injection?
Correct answer	Type IV hypersensitivity reaction
B	Arthus phenomenon
C	Seroreaction
D	Atopic reaction
E	Type II hypersensitivity reaction
№	krok 2012, 2010
Topic	Tuberculosis
Task	Autopsy of a 17 year old girl who died from pulmonary failure revealed a small area of caseous necrosis in the inferior lobe of the right lung, and occurrences of caseous necrosis in the bronchopulmonary, bronchial and bifurcational lymph nodes. What is the most probable postmortem diagnosis?
Correct answer	Primary tuberculosis
B	Hematogenous progression of primary tuberculosis
C	Hematogenous tuberculosis with predominant lung affection
D	Tuberculoma
E	Caseous pneumonia under secondary tuberculosis
№	krok 2012, 2008
Topic	The General doctrine about the tumors. Morphological features of tumor tissues derived mesenchyme.

Task	Examination of a 55 year old woman revealed under the skin of submandibular area a movable slowly growing pasty formation with distinct borders 1,0x0,7 cm large. Histological examination revealed lipocytes that form segments of different forms and sizes separated from each other by thin layers of connective tissue with vessels. What is the most probable diagnosis?
Correct answer	Lipoma
B	Fibroma
C	Angioma
D	Liposarcoma
E	Fibrosarcoma
№	krok 2012
Topic	Kidney Disease
Task	A patient has been diagnosed with acute glomerulonephritis that developed after he had had streptococcal infection. It is most likely that the affection of basal glomerular membrane is caused by an allergic reaction of the following type:
Correct answer	Immune complex
B	Anaphylactic
C	Cytotoxic
D	Delayed
E	Stimulating
№	krok 2012, 2010
Topic	Nomenclature and morphological features of tumors from epithelium.
Task	A 45 year old man consulted a doctor about a plaque-like formation on his neck. Histological examination of a skin biopate revealed clusters of round and oval tumour cells with a narrow border of basophilic cytoplasm resembling of cells of basal epidermal layer. What tumour is it?
Correct answer	Basal cell carcinoma
B	Epidermal cancer
C	Hydroadenoma
D	Trichoepithelioma
E	Syringoadenoma
№	krok 2012
Topic	Infectious and parasitic diseases. Characterization of the infectious process. Intestinal infectious diseases.

Task	A 71 year old man had been presenting with diarrhea for 10 days. The feces had admixtures of blood and mucus. He was delivered to a hospital in grave condition and died 2 days later. Autopsy of the body revealed the following: diphtheritic colitis with multiple irregularlyshaped ulcers of different depth in both sigmoid colon and rectus. Bacteriological analysis revealed Shigella. What was the main disease?
Correct answer	Dysentery
B	Typhoid fever
C	Salmonellosis
D	Nonspecific ulcerous colitis
E	Yersiniosis
№	krok 2012
Topic	Atherosclerosis and arteriosclerosis. Coronary heart disease
Task	Autopsy of a 75 year old patient who had been suffering from disseminated atherosclerosis and died under chronic cardiac failure revealed constriction and deformation of coronary arteries, tuberos intima whose section appeared to be white and petrosal. Specify the stage of atherosclerosis morphogenesis:
Correct answer	Atherocalcinosis
B	Lipoidosis
C	Liposclerosis
D	Bilipid
E	Atheromatosis
№	krok 2012
Topic	Diseases of the respiratory system.
Task	Examination of a bronchial tissue sample revealed atrophy of mucous membrane, cystic degeneration of glands, focal metaplastic changes of lining prismatic epithelial cells into multilayer squamous cells; increase in goblet cell number; in some parts of bronchial wall and especially in the mucous membrane there was marked cellular inflammatory infiltration and growth of granulation tissue bulging into the bronchial lumen in form of a polyp. What is the most likely diagnosis?
Correct answer	Chronic bronchitis
B	Lobar pneumonia
C	Acute bronchitis
D	Bronchopneumonia
E	Interstitial pneumonia
№	krok 2012, 2011
Topic	Kidney Disease

Task	Acute renal impairment caused death of a bleeding patient. Autopsy revealed enlarged kidneys with a broad pale pink cortical layer expressively demarcated from dark red renal pyramids. Macroscopic examination revealed lack of epithelial nuclei of convoluted tubules, tubulorrhesis, phlebostasis. The cell nuclei of choroid glomus and straight tubules were present. What pathology is it?
Correct answer	Necronephrosis
B	Infarction
C	Glomerulonephritis
D	Pyelonephritis
E	Nephrosis
№	krok 2012, 2010
Topic	For pituitary disease. Diabetes mellitus. Diseases of the thyroid gland. Diseases of the adrenal glands.
Task	A 50 year old patient has been taking treatment thrice for the last 6 months because of fractures caused by domestic accidents. Microscopical examination of bony tissue revealed foci of lacunar resolution, giant-cell granulomas in the tumour-like formations, cysts. Bony tissue was substituted by fibrous connective tissue. Examination revealed also adenoma of parathyroid gland and hypercalcemia. What is the most probable diagnosis?
Correct answer	Parathyroid osteodystrophy
B	Myelomatosis
C	Osteomyelitis
D	Osteopetrosis
E	Paget's disease
№	krok 2012
Topic	Pathomorphology of the immune system. Reactions and mechanisms of hypersensitivity. The autoimmune disease. Immunodeficiency States.
Task	Examination of a child who frequently suffers from infectious diseases revealed that IgG concentration in blood serum was 10 times less than normal, IgA and IgM concentration was also significantly reduced. Analysis showed also lack of B-lymphocytes and plasmocytes. What disease are these symptoms typical for?
Correct answer	Bruton's disease
B	Swiss-type agammaglobulinemia
C	Dysimmunoglobulinemia
D	Louis-Bar syndrome
E	Di George syndrome
№	krok 2012
Topic	Processes of adaptation and compensation

Task	A patient who abuses smoking has chronic bronchitis. Biopsy of his primary bronchus revealed multilayer pavement epithelium. What pathological process was revealed in the bronchus?
Correct answer	Metaplasia
B	Physiological regeneration
C	Reparative regeneration
D	Hyperplasia
E	Dysplasia
№	krok 2012, 2011, 2008
Topic	Processes of adaptation and compensation
Task	In course of a conditional experiment the development of mesenchyma cells was completely inhibited. Development of the following muscular tissue will be disturbed:
Correct answer	Smooth muscular tissue
B	Neural muscular tissue
C	Epidermal muscular tissue
D	Cardiac muscular tissue
E	Skeletal muscular tissue
№	krok 2011
Topic	Viral airborne infection. HIV infection. Rabies.
Task	Quite often the cause of secondary immunodeficiency is an infection involvement, when the causative agents propagate directly in the cells of immune system and destroy it. The following diseases are characterized by:
Correct answer	Infectious mononucleosis, AIDS
B	Tuberculosis, mycobacteriosis
C	Poliomyelitis, type A hepatitis
D	Dysentery, cholera
E	Q-febris, epidemic typhus
№	krok 2011
Topic	Sepsis. Syphilis.
Task	Extensive thromboembolic infarction of the left cerebral hemispheres, large septic spleen, immunocomplex glomerulonephritis, ulcers on the edges of the aortic valves, covered with polypous thrombus with colonies of staphylococcus were revealed on autopsy of the young man who died in coma. What disease caused cerebral thromboemboly?
Correct answer	Septic bacterial endocarditis
B	Septicemia

C	Acute rheumatic valvulitis
D	Septicopyemia
E	Rheumatic thromboendocarditis
№	krok 2011, 2007
Topic	General doctrine of inflammation. Exudative inflammation. The morphology of exudative inflammation
Task	Autopsy of a patient who suffered from croupous pneumonia and died from pneumococcal sepsis revealed 900 ml of turbid greenish-yellow liquid in the right pleural cavity. Pleural leaves are dull, plephoric. Name the clinicopathological form of inflammation in the pleural cavity:
Correct answer	Empyema
B	Fibrinous inflammation
C	Phlegmon
D	Chronic abscess
E	Acute abscess
№	krok 2011, 2007
Topic	The subject and objectives of pathomorphology. Methods of pathological research. The main stages of development of pathology. the accumulation of proteins, carbohydrates and lipids. Morphology of reversible and irreversible damage of cells and tissues. Intracellular accumulation of proteins, carbohydrates and lipids.
Task	Autopsy of a man who died from chronic cardiovascular collapse revealed "tiger heart". Sidewards of endocardium a yellowish-white banding can be seen; myocardium is dull, dark-yellow. What process caused this pathology?
Correct answer	Fatty parenchymatous degeneration
B	Carbohydrate degeneration
C	Hyaline degeneration
D	Fatty vascular-stromal degeneration
E	Amyloidosis
№	krok 2011
Topic	Sepsis. Syphilis.
Task	A 38-year-old man died in the attempt of lifting weight. He had collaptoid state. Autopsy revealed an extensive aneurism rupture of thoracic aorta. He suffered from visceral syphilis during his lifetime. What pathological process caused weakness of aortic wall, its dilatation and rupture?
Correct answer	Vanishing of elastic fibers
B	Vanishing of collagen fibers
C	Muscle layer atrophy

D	Intima changes by shagreen leather type
E	Vascularization
№	krok 2011, 2009
Topic	Circulatory disorders: hyperemia, ischemia, infarction, hemorrhage, hemorrhage, stasis, plasturgie. Shock. Violation of lymph circulation.
Task	Autopsy of a 73-year-old man who had been suffering from the coronary heart disease along with cardiac insufficiency for a long time revealed: nutmeg liver, brown induration of lungs, cyanotic induration of kidneys and spleen. What kind of circulation disorder was the cause of such effects?
Correct answer	General chronic venous congestion
B	Arterial hyperaemia
C	General acute venous congestion
D	Acute anaemia
E	Chronic anaemia
№	krok 2011, 2008
Topic	Systemic connective tissue disease with autoimmunization.
Task	It was revealed that T-lymphocytes were affected by HIV. Virus enzyme - reverse transcriptase (<i>RN A</i> -dependent <i>DN A</i> -polymerase) - catalyzes the synthesis of:
Correct answer	<i>DN A</i> on the matrix of virus <i>mRN A</i>
B	Virus informational <i>RN A</i> on the matrix of <i>DN A</i>
C	<i>DN A</i> on virus ribosomal <i>RN A</i>
D	Viral <i>DN A</i> on <i>DN A</i> matrix
E	<i>mRN A</i> on the matrix of virus protein
№	krok 2011, 2009
Topic	Leukemias (leukemia) and lymphomas
Task	Microscopical examination of an enlarged cervical lymph node revealed blurring of its structure, absence of lymphoid follicles; all the microscopic fields showed cells with roundish nuclei and thin limbus of basophil cytoplasm. It is known from the clinical data that other groups of lymph nodes are also enlarged as well as spleen and liver. What disease might be suspected?
Correct answer	Lymphoid leukosis
B	Lymphogranulomatosis
C	Lymphosarcoma
D	Myeloid leukosis
E	Multiple myeloma

№	krok 2011, 2008
Topic	Sepsis. Syphilis.
Task	A man with a wound of his limb that had been suppurating for a long time died from intoxication. Autopsy revealed extreme emaciation, dehydration, brown atrophy of liver, myocardium, spleen and cross-striated muscles as well as renal amyloidosis. What diagnosis corresponds with the described presentations?
Correct answer	Chroniosepsis
B	Septicopyemia
C	Septicemia
D	Chernogubov's syndrome
E	Brucellosis
№	krok 2011
Topic	Diseases of the respiratory system.
Task	Pulmonary examination of a patient who has worked as a stone grinder for 9 years revealed small dense roundish nodules consisting of connective tissue. The nodules were found to have peripheral macrophages. Such pulmonary alterations are indicative of the following disease:
Correct answer	Silicosis
B	Acute pneumonia
C	Multiple bronchiectasis
D	Chronic bronchitis
E	Bronchial asthma
№	krok 2011, 2009
Topic	Diseases of the respiratory system.
Task	Autopsy of a man with a malignant stomach tumour who had died from cancer intoxication revealed in the posteroinferior lung fields some dense, grayish-red irregular foci protruding above the section surface. Microscopic examination revealed exudate containing a large amount of neutrophils in the lumen and walls of small bronchi and alveoles. Such pulmonary alterations indicate the following disease:
Correct answer	Acute purulent bronchopneumonia
B	Acute bronchitis
C	Croupous pneumonia
D	Intermittent pneumonia
E	Acute serous bronchopneumonia
№	krok 2011

Topic	Pathomorphology of the immune system. Reactions and mechanisms of hypersensitivity. The autoimmune disease. Immunodeficiency States.
Task	Examination of a pregnant woman having Rh-negative blood revealed high level of antierythrocytic antibodies. For its reduction she was implanted with her husband's Rh-positive skin graft. The graft was rejected in two weeks. Its microscopic examination revealed circulatory disturbance, edema and cellular infiltration with lymphocytes, neutrophils and macrophages predominance. What is the most likely pathology?
Correct answer	Graft immunity
B	Immediate hypersensitivity
C	Delayed-type hypersensitivity
D	Granulomatous inflammation
E	Interstitial inflammation
№	krok 2011
Topic	Nomenclature and morphological features of tumors from melaniebrady tissue
Task	A 46-year-old man had a bulging dark macula on skin that caused no discomfort. With time it began to increase in size and became painful. It turned dark brown and there was a nodule on palpation. Histological examination of tissues revealed spindle and polymorphous cells with multiple mitoses. Their cytoplasm contained brown pigment. What tumour is it?
Correct answer	Melanoma
B	Basalioma
C	Hemangioma
D	Nevus
E	–
№	krok 2011
Topic	Nomenclature and morphological features of tumors from epithelium.
Task	Medical examination of a 20-year-old woman revealed a dense encapsulated node 1 cm in diameter that was palpated in the mammary gland. The postoperative biopsy revealed connective tissue overgrowth around the mammary ducts and glandular components of different diameter that didn't make lobules and bore no signs of cellular abnormality. What diagnosis will be made?
Correct answer	Fibroadenoma
B	Fibroma
C	Metastatic cancer
D	Adenoma
E	Fibrosarcoma
№	krok 2011

Topic	Systemic connective tissue disease with autoimmunization
Task	A 38-year-old male patient has been ill with systemic lupus erythematosus for three years. He was diagnosed with diffuse renal affection accompanied by massive edemata and expressive proteinuria. What is the most likely cause of proteinuria development?
Correct answer	Autoimmune renal affection
B	Aseptic renal affection
C	Ischemic renal affection
D	Urinary bladder inflammation
E	Urinary tracts inflammation
№	krok 2011
Topic	The metabolic disorders and metabolism. The morphology of abnormal accumulation of endogenous and exogenous pigments. The morphology of disorders of mineral metabolism.
Task	A patient presents with icteritiousness of skin, scleras and mucous membranes. Blood plasma the total bilirubin is increased, stercobilin is increased in feces, urobilin is increased in urine. What type of jaundice is it?
Correct answer	Haemolytic
B	Gilbert's disease
C	Parenchymatous
D	Obturatorial
E	Cholestatic
№	krok 2011
Topic	Diseases of the respiratory system.
Task	A patient with marked pneumofibrosis that developed after infiltrating pulmonary tuberculosis has been diagnosed with respiratory failure. What is its pathogenetic type?
Correct answer	Restrictive
B	Obstructive
C	Dysregulatory
D	Reflex
E	Apneistic
№	krok 2011
Topic	Pathomorphology of the immune system. Reactions and mechanisms of hypersensitivity. The autoimmune disease. Immunodeficiency States.
Task	During surgical manipulations a patient has been given novocaine injection for anesthesia. 10 minutes later the patient developed paleness, dyspnea, hypotension. What type of allergic reaction is it?

Correct answer	Anaphylactic immune reaction
B	Cellulotoxic immune reaction
C	Aggregate immune reaction
D	Stimulating immune reaction
E	Cell-mediated immune reaction
№	krok 2011, 2008
Topic	Diseases of the respiratory system.
Task	A patient died from cardiopulmonary decompensation. Histological examination revealed diffused pulmonary affection along with interstitial edema, infiltration of tissue by lymphocytes, macrophages, plasmocytes; pulmonary fibrosis, panacinar emphysema. What is the most likely diagnosis?
Correct answer	Fibrosing alveolitis
B	Chronic bronchitis
C	Bronchopneumonia
D	Pulmonary atelectasis
E	Bronchial asthma
№	krok 2011
Topic	General doctrine of inflammation. Exudative inflammation. The morphology of exudative inflammation
Task	A 49-year-old patient with croupous pneumonia died from pneumococcal septicemia. Autopsy revealed up to 700 ml of turbid greenish-yellow foul-smelling liquid in the left pleural cavity. The pleural leaflets were dull and plethoric. What form of pleural inflammation is it?
Correct answer	Empyema
B	Chronic abscess
C	Acute abscess
D	Phlegmon
E	Fibrinous inflammation
№	krok 2011
Topic	Circulatory disorders: hyperemia, ischemia, infarction, hemorrhage, hemorrhage, stasis, plasturgie. Shock. Violation of lymph circulation.
Task	A 45-year-old woman has breast cancer. Her left arm has symptoms of lymphatic system insufficiency - limb edema, lymph node enlargement. What form of lymphatic circulation insufficiency is it?
Correct answer	Mechanic insufficiency
B	Dynamic insufficiency

C	Resorption insufficiency
D	Combined insufficiency
E	-
№	krok 2011
Topic	Liver Disease
Task	The liver puncture biopsy of a patient with hepatocellular insufficiency revealed hydropic and ballooning degeneration of hepatocytes, necrosis of certain cells, presence of Kaunsilmen's bodies. Portal and lobular stroma were infiltrated mostly with lymphocytes and macrophages as well as with a small number of polymorphonuclear lymphocytes. What is the most likely diagnosis?
Correct answer	Acute viral hepatitis
B	Chronic persistent hepatitis
C	Chronic aggressive hepatitis
D	Autoimmune hepatitis
E	Alcoholic hepatitis
№	krok 2011
Topic	The General doctrine about the tumors. Morphological features of tumor tissues derived mesenchyme.
Task	Examination of the anterior abdominal wall of a pregnant woman revealed a tumour like formation that arose on the spot of a tumour that was removed two years ago. The neoplasm was well-defined, dense, 2x1 cm large. Histological examination revealed that the tumour was composed of differentiated connective tissue with prevailing collagen fibres. What tumour might be suspected?
Correct answer	Desmoid
B	Lipoma
C	Fibrosarcoma
D	Hibernoma
E	Leiomyoma
№	krok 2009
Topic	Viral airborne infection. HIV infection. Rabies
Task	Quite often the cause of secondary immunodeficiency is an infection involvement, when the causative agents propagate directly in the cells of immune system and destroy it. The following diseases are characterized by:
Correct answer	Infectious mononucleosis, AIDS
B	Tuberculosis, mycobacteriosis
C	Poliomyelitis, type A hepatitis
D	Dysentery, cholera
E	Q-febris, epidemic typhus

№	krok 2009
Topic	The General doctrine about the tumors. Morphological features of tumor tissues derived mesenchyme.
Task	Examination of a patient revealed a dense, movable skin tumour that is standing out distinctly from the surrounding tissues. Its section is found to be white and composed of fibrous tissue. Microscopic examination revealed interlacing collagen Fibers and few cells. What tumour is it?
Correct answer	Fibroma
B	Myoma
C	Histiocytoma
D	DermatoFibroma
E	Desmoid
№	krok 2009
Topic	Violation of hemostasis. Thrombosis, disseminated intravascular coagulation. Embolism
Task	A 70-year-old patient suffers from atherosclerosis complicated by the lower limb thrombosis that has caused gangrene on his left toes. What is the most likely cause of the thrombosis origin?
Correct answer	Thrombocyte adhesion
B	Prothrombinase activation
C	Transformation of prothrombin into thrombin
D	Transformation of Fibrinogen into Fibrin
E	Impaired heparin synthesis
№	krok 2009
Topic	Pathomorphology of the immune system. Reactions and mechanisms of hypersensitivity. The autoimmune disease. Immunodeficiency States.
Task	A female patient suffering from bronchial asthma had got a viral infection that provoked status asthmaticus with fatal outcome. Histological examination of lungs revealed spasm and edema of bronchioles, apparent infiltration of their walls with lymphocytes, eosinophils and other leukocytes; labrocyte degranulation. What mechanism of hypersensitivity underlies the described alterations?
Correct answer	Reagin reaction
B	Inflammatory
C	Autoimmune
D	Immune complex
E	Immune cytolysis
№	krok 2009
Topic	Leukemias (leukemia) and lymphomas.

Task	A 62-year-old female patient complains about frequent pains in the region of thorax and vertebral column, rib fractures. A physician suspected myelomatosis (plasmocytoma). Which of the following laboratory indices will be of the greatest diagnostic importance?
Correct answer	Paraproteinemia
B	Hyperalbuminemia
C	Proteinuria
D	Hypoglobulinemia
E	Hypoproteinemia
№	krok 2009
Topic	Circulatory disorders: hyperemia, ischemia, infarction, hemorrhage, hemorrhage, stasis, plasturgie. Shock. Violation of lymph circulation
Task	While playing volleyball a sportsman jumped and then landed across the external edge of his foot. This caused acute pain in the talocrural articulation, active movements became limited, passive movements remained unlimited but painful. In the region of the external ankle a swelling appeared, the skin turned red and became warmer to the touch. What type of peripheral circulation disorder has developed in this case?
Correct answer	Arterial hyperaemia
B	Stasis
C	Embolism
D	Venous hyperaemia
E	Thrombosis
№	krok 2009
Topic	Diseases of the respiratory system.
Task	A 12-year-old adolescent suffering from bronchial asthma has a severe attack of asthma: he presents with marked expiratory dyspnea, skin pallor. What type of alveolar ventilation disorder is observed?
Correct answer	Obstructive
B	Restrictive
C	Thoracodiaphragmatic
D	Central
E	Neuromuscular
№	krok 2009
Topic	For pituitary disease. Diabetes mellitus. Diseases of the thyroid gland. Diseases of the adrenal glands.

Task	A patient with android-type obesity had been suffering from arterial hypertension, hyperglycemia, glycosuria for a long time and died from the cerebral haemorrhage. Pathologic examination revealed pituitary basophil adenoma, adrenal cortex hyperplasia. What is the most likely diagnosis?
Correct answer	Itsenko-Cushing's syndrome
B	Diabetes mellitus
C	Acromegalia
D	Pituitary nanism
E	Adiposogenital dystrophy
№	krok 2009
Topic	General doctrine of inflammation. Exudative inflammation. The morphology of exudative inflammation
Task	Colonoscopy of a patient with dysentery revealed that the mucous membrane of the large intestine was hyperemic, edematic, and its surface was covered with grey and-green layerings. What morphological form of dysenteric colitis is it?
Correct answer	Fibrinous
B	Catarrhal
C	Ulcerous
D	Purulent
E	Necrotic
№	krok 2009
Topic	Diseases of the respiratory system.
Task	Autopsy of a 50-year-old man revealed the following changes: his right lung was moderately compact in all parts, the dissected tissue was found to be airless, fine-grained, dryish. Visceral pleura had greyish-brown layers of fibrin. What is the most likely diagnosis?
Correct answer	Croupous pneumonia
B	Tuberculosis
C	Bronchopneumonia
D	Interstitial pneumonia
E	PneumoFibrosis
№	krok 2009
Topic	Morphology of reversible and irreversible damage of cells and tissues. Extracellular accumulation of proteins, carbohydrates and lipids.
Task	Autopsy of a man, who had been suffering from the multiple bronchiectasis for 5 years and died from chronic renal insufficiency, revealed that kidneys were dense and enlarged, with thickened cortical layer of white colour with greasy lustre. What renal disease might be suspected?

Correct answer	Secondary amyloidosis
B	Glomerulonephritis
C	Chronic pyelonephritis
D	Necrotic nephrosis
E	–
№	krok 2009
Topic	Systemic connective tissue disease with autoimmunization.
Task	Autopsy of a 49-year-old woman who died from chronic renal insufficiency, revealed: kidneys were dense, reduced, multicoloured, with haemorrhagic areas. Microscopic examination revealed some hematoxylin bodies in the nuclei of the renal tubule epithelium; "wire-loop" thickening of the glomerular capillary basement membrane; here and there in the capillaries some hyaline thrombi and foci of fibrinoid necrosis were present. What is the most likely diagnosis?
Correct answer	Systemic lupus erythematosus
B	Rheumatism
C	Arteriosclerotic pneumosclerosis
D	Amyloidosis
E	Atherosclerotic nephrosclerosis
№	krok 2009
Topic	Diseases of the female and male reproductive system.
Task	Preventive examination of a patient revealed an enlarged lymph node of metastatic origin on the medial wall of the left axillary crease. Specify the most likely localization of the primary tumour:
Correct answer	Mammary gland
B	Submandibular salivary gland
C	Lung
D	Stomach
E	Thyroid gland
№	krok 2009
Topic	Diseases of the female and male reproductive system.
Task	Gynecological examination of the uterine cervix in a 30-year-old woman revealed some bright-red lustrous spots that easily bleed when touched. Biopsy showed that a part of the uterine cervix was covered with cylindrical epithelium with papillary outgrowths; in the depth of tissue the growth of glands was present. What pathology of the uterine cervix was revealed?
Correct answer	Pseudoerosion
B	True erosion

C	Endocervicitis
D	Glandular hyperplasia
E	Leukoplakia
№	krok 2009
Topic	The accumulation of proteins, carbohydrates and lipids. Morphology of reversible and irreversible damage of cells and tissues. Intracellular accumulation of proteins, carbohydrates and lipids.
Task	A stillborn child was found to have thickened skin resembling of the tortoise shell, underdeveloped auricles. Histological examination of skin revealed hyperkeratosis, atrophy of the granular epidermis layer; inflammatory changes were not present. What is the most likely diagnosis?
Correct answer	Ichthyosis
B	Leukoplakia
C	Xerodermia
D	Erythroplakia
E	Dermatomyositis
№	krok 2009
Topic	The metabolic disorders and metabolism. The morphology of abnormal accumulation of endogenous and exogenous pigments. The morphology of disorders of mineral metabolism.
Task	A patient presents with icteritiousness of skin, scleras and mucous membranes. Blood plasma the total bilirubin is increased, stercobilin is increased in feces, urobilin is increased in urine. What type of jaundice is it?
Correct answer	Haemolytic
B	Gilbert's disease
C	Parenchymatous
D	Obturatorial
E	Cholestatic
№	krok 2009
Topic	Diseases of the esophagus, stomach and intestines.
Task	A pathologyhistology laboratory received a vermiform appendix up to 2,0 cm thick. Its serous membrane was pale, thick and covered with yellowish-green films. The wall was flaccid, of grayishred colour. The appendix lumen was dilated and filled with yellowish-green substance. Histological examination revealed that the appendix wall was infiltrated with neutrophils. Specify the appendix disease:
Correct answer	Acute phlegmonous appendicitis
B	Acute gangrenous appendicitis

C	Acute superficial appendicitis
D	Acute simple appendicitis
E	Chronic appendicitis
№	krok 2009
Topic	Proliferative inflammation. Specific inflammation. Granulomatosis.
Task	A patient with severe course of respiratory viral infection presented with clinical signs of progressing heart failure that led to his death in the 2nd week of disease. Autopsy revealed that the heart cavities were significantly dilated, the heart was flabby. Histological examination of the myocardium revealed microvascular plethora and diffuse stroma infiltration with lymphocytes and histiocytes. What is the most likely diagnosis?
Correct answer	Myocarditis
B	Stenocardia
C	Acute coronary insufficiency
D	Myocardial infarction
E	Cardiomyopathy
№	krok 2009
Topic	Damage and death of cells and tissues. Necrosis and apoptosis. Pathological anatomy organ failure. Foundations of thanatology. Death, definition, signs of death.
Task	A section of the left lung was found to have an area of dense red tissue. The area was cone-shaped, stood out distinctly from the healthy tissue, with its base directed to the pleura. The dissected tissue was granular, dark red. What is the most likely diagnosis?
Correct answer	Haemorrhagic infarction
B	Lung abscess
C	Lung gangrene
D	Primary tuberculous affection
E	Croupous pneumonia
№	krok 2009
Topic	Nomenclature and morphological features of tumors of the nervous tissue. Features of tumours of the Central nervous system.
Task	Examination of a young woman revealed a tumour up to 3 cm in diameter in form of a knot localized along the acoustic nerve. The tumour is homogenous, soft and elastic, of pink-and-white colour. Microscopically the tumour contains clusters of cells with oval nuclei. Fibrous cell clusters form regular structures made up by parallel rows of regularly oriented cells arranged in form of a palisade. Zones between the rows of cells are acellular and homogenous (Verocai bodies). What tumour is it?
Correct answer	Neurinoma
B	Malignant neurinoma

C	Ganglioneuroma
D	Neuroblastoma
E	Ganglioneuroblastoma
№	krok 2009
Topic	The General doctrine about the tumors. Morphological features of tumor tissues derived mesenchyme.
Task	Examination of the anterior abdominal wall of a pregnant woman revealed a tumour-like formation that arose on the spot of a tumour that was removed two years ago. The neoplasm was well-deFined, dense, 2x1 cm large. Histological examination revealed that the tumour was composed of differentiated connective tissue with prevailing collagen FIBres. What tumour might be suspected?
Correct answer	Desmoid
B	Lipoma
C	Fibrosarcoma
D	Hibernoma
E	Leiomyoma
№	krok 2008
Topic	Circulatory disorders: hyperemia, ischemia, infarction, hemorrhage, hemorrhage, stasis, plasturgie. Shock. Violation of lymph circulation.
Task	While playing volleyball a sportsman made a jump and landed on the outside edge of his foot. He felt acute pain in the talocrural joint, active movements are limited, passive movements are unlimited but painful. A bit later there appeared a swelling in the area of external ankle, the skin became red and warm. What type of peripheral circulation disturbance is the case?
Correct answer	Arterial hyperemia
B	Stasis
C	Embolism
D	Venous hyperemia
E	Thrombosis
№	krok 2008
Topic	The metabolic disorders and metabolism. The morphology of abnormal accumulation of endogenous and exogenous pigments. The morphology of disorders of mineral metabolism.
Task	A 65 year old man suffering from gout complains of kidney pain. Ultrasound examination revealed renal calculi. The most probable cause of calculi formation is the strengthened concentration of the following substance:
Correct answer	Uric acid
B	Cholesterol
C	Bilirubin

D	Urea
E	Cystine
№	krok 2008, 2007, 2010
Topic	Atherosclerosis and arteriosclerosis. Coronary heart disease.
Task	Examination of coronary arteries revealed atherosclerotic calcified plaques closing vessel lumen by 1/3. The muscle has multiple whitish layers of connective tissue. What process was revealed in the myocardium?
Correct answer	Diffusive cardiosclerosis
B	Tiger heart
C	Postinfarction cardiosclerosis
D	Myocarditis
E	Myocardium infarction
№	krok 2008
Topic	Proliferative inflammation. Specific inflammation. Granulomatosis.
Task	Histological examination of a skin tissue sampling revealed granulomas consisting of macrophagal nodules with lymphocytes and plasmatic cells. There are also some big macrophages with fatty vacuoles containing causative agents of a disease packed up in form of spheres (Virchow's cells). Granulation tissue is well vascularized. What disease is this granuloma typical for?
Correct answer	Lepra
B	Tuberculosis
C	Syphilis
D	Rhinoscleroma
E	Glanders
№	krok 2008
Topic	Proliferative inflammation. Specific inflammation. Granulomatosis.
Task	A 40 year old man noticed a reddening and an edema of skin in the area of his neck that later developed into a small abscess. The incised focus is dense, yellowish-green. The pus contains white granules. Histological examination revealed drusen of a fungus, plasmatic and xanthome cells, macrophages. What type of mycosis is the most probable?
Correct answer	Actinomycosis
B	Aspergillosis
C	Candidosis
D	Sporotrichosis
E	Coccidioidomycosis
№	krok 2008, 2010

Topic	Proliferative inflammation. Specific inflammation. Granulomatosis.
Task	6 months after labour a woman had uterine hemorrhage. Gynaecological examination of uterine cavity revealed a dark-red tissue with multiple cavities resembling of a "sponge". Microscopic examination of a tumour revealed in blood lacunas atypic light epithelial Langhans cells and giant cells of syncytiotrophoblast. What tumour is it?
Correct answer	Chorioepithelioma
B	Squamous cell nonkeratinous carcinoma
C	Adenocarcinoma
D	Fibromyoma
E	Cystic mole
№	krok 2008, 2010
Topic	Pathomorphology of the immune system. Reactions and mechanisms of hypersensitivity. The autoimmune disease. Immunodeficiency States.
Task	48 hours after tuberculine test (Mantoux test) a child had a papule 10 mm in diameter on the spot of tuberculine injection. What hypersensitivity mechanism underlies these changes?
Correct answer	Cellular cytotoxicity
B	Anaphylaxy
C	Antibody-dependent cytotoxicity
D	Immunocomplex cytotoxicity
E	Granulomatosis
№	krok 2008, 2010
Topic	General doctrine of inflammation. Exudative inflammation. The morphology of exudative inflammation
Task	A 17 year old boy fell seriously ill, the body temperature rose up to 38, 5° C, there appeared cough, rhinitis, lacrimation, nasal discharges. What inflammation is it?
Correct answer	Catarrhal
B	Serous
C	Fibrinous
D	Purulent
E	Hemorrhagic
№	krok 2008, 2010
Topic	Kidney Disease.

Task	A 30 year old woman has face edemata. Examination revealed proteinuria (5,87 g/l), hypoproteinemia, dysproteinemia, hyperlipidemia. What condition is the set of these symptoms typical for?
Correct answer	Nephrotic syndrome
B	Nephritic syndrome
C	Chronic pyelonephritis
D	Acute renal failure
E	Chronic renal failure
№	krok 2008
Topic	Viral airborne infection. HIV infection. Rabies.
Task	Skin of a man who died from cardiac insufficiency has an eruption in form of spots and specks. There are also bedsores in the area of sacrum and spinous vertebral processes. Microscopical examination of CNS, skin, adrenal glands revealed in the vessels of microcirculatory bed and in small arteries destructive-proliferative endothrombovasculitis with Popov's granulomas; interstitial myocarditis. What diagnosis corresponds with the described picture?
Correct answer	Spotted fever
B	Q fever
C	Enteric fever
D	Nodular periarteritis
E	HIV
№	krok 2008
Topic	General doctrine of inflammation. Exudative inflammation. The morphology of exudative inflammation
Task	Autopsy of a man who died from the sepsis in his femoral bone revealed phlegmonous inflammation that affected the marrow, haversian canals and periosteum. Under the periosteum there are multiple abscesses, adjoining soft tissues of thigh also have signs of phlegmonous inflammation. What pathological process was described?
Correct answer	Acute hematogenous osteomyelitis
B	Osteoporosis
C	Chronic hematogenous osteomyelitis
D	Osteopetrosis
E	–
№	krok 2008, 2010
Topic	Violation of hemostasis. Thrombosis, disseminated intravascular coagulation. Embolism.
Task	A patient ill with thrombophlebitis of his lower limbs had chest pain, blood spitting, progressing respiratory insufficiency that led to his death. Autopsy diagnosed multiple lung infarctions. What is the most probable cause of their development?

Correct answer	Thromboembolism of pulmonary artery branches
B	Thrombosis of pulmonary artery branches
C	Thrombosis of bronchial arteries
D	Thromboembolism of bronchial arteries
E	Thrombosis of pulmonary veins
№	krok 2008
Topic	Processes of adaptation and compensation.
Task	In course of a preventive examination of a miner a doctor revealed changes of cardiovascular fitness which was indicative of cardiac insufficiency at the compensation stage. What is the main proof of cardiac compensation?
Correct answer	Myocardium hypertrophy
B	Tachycardia
C	Rise of arterial pressure
D	Dyspnea
E	Cyanosis
№	krok 2008
Topic	Violation of hemostasis. Thrombosis, disseminated intravascular coagulation. Embolism.
Task	2 hours after a skeletal extension was performed to a 27 year old patient with multiple traumas (closed injury of chest, closed fracture of right thigh) his condition abruptly became worse and the patient died from acute cardiopulmonary decompensation. Histological examination of pulmonary and cerebral vessels stained with Sudan III revealed orange drops occluding the vessel lumen. What complication of polytrauma was developed?
Correct answer	Fat embolism
B	Gaseous embolism
C	Microbal embolism
D	Thromboembolism
E	Air embolism
№	krok 2008
Topic	Viral airborne infection. HIV infection. Rabies.
Task	In course of severe respiratory viral infection there appeared clinical signs of progressing cardiac insufficiency that caused death of a patient in the 2nd week of disease. Autopsy revealed that the heart was sluggish, with significant cavity dilatation. Histological examination of myocardium revealed plephora of microvessels and diffuse infiltration of stroma by lymphocytes and histiocytes. What disease corresponds with the described picture?
Correct answer	Myocarditis

B	Stenocardia
C	Acute coronary insufficiency
D	Myocardium infarction
E	Cardiomyopathy
№	krok 2008
Topic	Liver Disease
Task	A 38 year old patient with full-blown jaundice, small cutaneous hemorrhages, general weakness and loss of appetite underwent puncture biopsy of liver. Histological examination revealed disseminated dystrophy, hepatocyte necrosis, Councilman's bodies. Lobule periphery has signs of significant infiltration by lymphocytes, there are also individual multinuclear hepatocytes. What is the most probable diagnosis?
Correct answer	Acute viral hepatitis
B	Acute alcoholic hepatitis
C	Miliary hepatic cirrhosis
D	Toxic degeneration of liver
E	Chronic hepatitis
№	krok 2008
Topic	Sepsis.
Task	A 20 year old patient died from intoxication 8 days after artificial illegal abortion performed in her 14-15th week of pregnancy. Autopsy of the corpse revealed yellowish colour of eye sclera and of skin, necrotic suppurative endometritis, multiple pulmonary abscesses, spleen hyperplasia with a big number of neutrophils in its sinuses. What complication after abortion was developed?
Correct answer	Septicopyemia
B	Septicemia
C	Hemorrhagic shock
D	Chroniosepsis
E	Viral hepatitis type A
№	krok 2008
Topic	The accumulation of proteins, carbohydrates and lipids. Morphology of reversible and irreversible damage of cells and tissues. Intracellular accumulation of proteins, carbohydrates and lipids.
Task	A 6 year old child was delivered to a hospital. Examination revealed that the child couldn't fix his eyes, didn't keep his eyes on toys, eye ground had the cherryred spot sign. Laboratory analyses showed that brain, liver and spleen had high rate of ganglioside glycometide. What congenital disease is the child ill with?
Correct answer	Tay-Sachs disease

B	Wilson's syndrome
C	Turner's syndrome
D	Niemann-Pick disease
E	MacArdle disease
№	krok 2008
Topic	Leukemias (leukemia) and lymphomas.
Task	A patient has a cluster of matted together dense lymph nodes on his neck. Histological examination of a removed lymph node revealed proliferation of reticular cells, presense of Reed-Sternberg cells. What disease is meant?
Correct answer	Lymphogranulomatosis
B	Lymphoblastic leukosis
C	Myeloblastic leukosis
D	Myelocytic leukosis
E	Lymphocytic leukosis
№	krok 2008
Topic	Tuberculosis
Task	A patient ill with tuberculosis died from progressing cardiopulmonary decompensation. Autopsy in the area of the right lung apex revealed a cavity 5 cm in diameter communicating with lumen of a segmental bronchus. On the inside cavity walls are covered with caseous masses with epithelioid and Langhans cells beneath them. What morphological form of tuberculosis is it?
Correct answer	Acute cavernous tuberculosis
B	Tuberculoma
C	Caseous pneumonia
D	Infiltrative tuberculosis
E	Acute focal tuberculosis
№	krok 2008
Topic	Pathomorphology of the immune system. Reactions and mechanisms of hypersensitivity. The autoimmune disease. Immunodeficiency States.
Task	For the purpose of myocardium infarction treatment a patient was injected with embryonal stem cells derived from this very patient by means of therapeutic cloning . What transplantation type is it?
Correct answer	Autotransplantation
B	Allotransplantation
C	Xenotransplantation
D	Isotransplantation

E	Heterotransplantation
№	krok 2008
Topic	Pathomorphology of the immune system. Reactions and mechanisms of hypersensitivity. The autoimmune disease. Immunodeficiency States.
Task	A 30 year old woman has applied a lipstick with a fluorescent substance for a long time. Then she got a limited erythema and slight peeling on her lip border, later there appeared transversal striae and cracks. Special methods of microscopic examination of the affected area helped to reveal sensitized lymphocytes and macrophages in the connective tissue; cytolysis. What type of immunological hypersensitivity was developed?
Correct answer	IV type (cellular cytotoxicity)
B	I type (reaginic)
C	II type (antibody cytotoxicity)
D	III type (immune complex cytotoxicity)
E	Granulomatosis
№	krok 2008
Topic	Nomenclature and morphological features of tumors of the nervous tissue. Features of tumours of the Central nervous system.
Task	Examination of a young woman revealed a node-like, soft and elastic homogenous tumour of pinkish-white colour along the acoustic nerve. The tumour contains cell bundles with oval nuclei. Cellular fibrous bundles form rhythmic structures made up by parallel rows of regularly oriented cells arranged in form of a palisade with cell-free homogenous zone (Verocay bodies) between them. What tumour is it?
Correct answer	Neurinoma
B	Malignant neurinoma
C	Ganglioneurinoma
D	Neuroblastoma
E	Ganglioneuroblastoma
№	krok 2008
Topic	Diseases of the respiratory system.
Task	The upper lobe of the right lung is enlarged, grey and airless, the incision surface is dripping with turbid liquid, the pleura has many fibrinogenous films; microscopical examination of alveoles revealed exudate containing neutrophils, desquamated alveolocytes and fibrin fibers. The bronchus wall is intact. What is the most probable diagnosis?
Correct answer	Croupous pneumonia
B	Interstitial pneumonia
C	Pulmonary abscess

D	Focal pneumonia
E	Influenzal pneumonia
№	krok 2008
Topic	Kidney Disease.
Task	A 28 year old patient had high arterial pressure, hematuria and facial edemata. In spite of treatment renal insufficiency was progressing. 6 months later the patient died from uremia. Microscopic examination of his kidneys and their glomerules revealed proliferation of capsule nephrothelium and of podocytes with "demilune"formation, sclerosis and hyalinosis of glomerules. What disease corresponds with the described picture?
Correct answer	Subacute glomerulonephritis
B	Acute pyelonephritis
C	Nephrotic syndrome
D	Chronic glomerulonephritis
E	Acute glomerulonephritis
№	krok 2007
Topic	Damage and death of cells and tissues. Necrosis and apoptosis. Pathological anatomy organ failure. Foundations of thanatology. Death, definition, signs of death.
Task	A patient ill with diabetes mellitus felt acute pain in his right foot. Objectively: foot thumb is black, foot tissues are edematous, there are foci of epidermis desquamation, stinking discharges. What clinicopathological form of necrosis is it?
Correct answer	Moist gangrene
B	Bedsore
C	Sequestrum
D	Dry gangrene
E	Infarction
№	krok 2007
Topic	Morphology of reversible and irreversible damage of cells and tissues. Extracellular accumulation of proteins, carbohydrates and lipids.
Task	Autopsy of a 58 y.o. man revealed that bicuspid valve was deformed, thickened and unclosed. Microscopically: foci of collagen fibrilla are eosinophilic, react positively to fibrin. The most probably it is:
Correct answer	Fibrinoid swelling
B	Fibrinous inflammation
C	Mucoid swelling
D	Hyalinosis

E	Amyloidosis
№	krok 2007
Topic	Circulatory disorders: hyperemia, ischemia, infarction, hemorrhage, stasis, plasturgie. Shock. Violation of lymph circulation.
Task	A patient died under conditions of cardiovascular insufficiency. Autopsy results: postinfarction cardiosclerosis, myocardium hypertrophy and dilatation of its cavities, especially of its right ventricle. Liver is enlarged, its surface is smooth, incision revealed that it was plethoric, with darkred specks against the background of brownish tissue. Histologically: plethora of central parts of lobules; peritheral parts around portal tracts contain hepatocytes in a state of adipose degeneration. How are these liver changes called?
Correct answer	Nutmeg liver
B	Pseudonutmeg liver
C	Amyloidosis
D	Liver cirrhosis
E	Liver steatosis
№	krok 2007
Topic	The metabolic disorders and metabolism. The morphology of abnormal accumulation of endogenous and exogenous pigments. The morphology of disorders of mineral metabolism.
Task	A 48 y.o. patient was admitted to the hospital with complaints about weakness, irritability, sleep disturbance. Objectively: skin and scleras are yellow. In blood: conjugated bilirubin, cholemia. Feces are acholic. Urine is of dark colour (bilirubin). What jaundice is it?
Correct answer	Mechanic
B	Hemolytic
C	Parenchymatous
D	Gilbert's syndrome
E	Crigler-Najjar syndrome
№	krok 2007
Topic	Pathomorphology of the immune system. Reactions and mechanisms of hypersensitivity. The autoimmune disease. Immunodeficiency States.
Task	A woman has been applying a new cosmetic preparation for a week that resulted in eyelid inflammation accompanied by hyperemia, infiltration and painfulness. What type of allergic reaction was developed?
Correct answer	IV
B	I
C	II
D	III

E	V
№	krok 2007
Topic	Nomenclature and morphological features of tumors from epithelium.
Task	6 months after delivery a woman had uterine bleeding. Gynecological examination revealed in the uterine cavity a dark-red tissue with multiple cavities that resembled of "sponge". Microscopic examination of the tumour revealed some atypic light epithelial Langhans cells and giant cells of cyncytiotrophoblast in blood lacunas. What tumour is it?
Correct answer	Chorioepithelioma
B	Squamous cell nonkeratinous carcinoma
C	Adenocarcinoma
D	Fibromyoma
E	Vesicular mole
№	krok 2007
Topic	Pathomorphology of the immune system. Reactions and mechanisms of hypersensitivity. The autoimmune disease. Immunodeficiency States.
Task	Histological examination of a 40 y.o. man's thymus revealed decreased share of parenchymatous gland elements, increased share of adipose and loose connective tissue, its enrichment with thymus bodies. The organ's mass was unchanged. What phenomenon is it?
Correct answer	Age involution
B	Accidental involution
C	Hypotrophy
D	Dystrophy
E	Atrophy
№	krok 2007
Topic	Sepsis. Syphilis.
Task	Mucous membrane of the right palatine tonsil has a painless ulcer with smooth lacquer fundus and regular cartilagenous edges. Microscopically: inflammatory infiltration that consists of lymphocytes, plasmocytes, a small number of neutrophils and epithelioid cells; endovasculitis and perivasculitis. What disease is it?
Correct answer	Syphilis
B	Actinomycosis
C	Tuberculosis
D	Pharyngeal diphtheria
E	Ulcerous necrotic Vincent's angina
№	krok 2007

Topic	Pathomorphology of the immune system. Reactions and mechanisms of hypersensitivity. The autoimmune disease. Immunodeficiency States.
Task	48 hours after performing tuberculin test (Mantoux test) to a child a 10 mm papule appeared on the spot of tuberculin introduction. What hypersensitivity mechanism underlies these changes?
Correct answer	Cellular cytotoxicity
B	Anaphylaxis
C	Antibody-dependent cytotoxicity
D	Immune complex cytotoxicity
E	Granulomatosis
№	krok 2007
Topic	Infectious and parasitic diseases. Characterization of the infectious process. Intestinal infectious diseases.
Task	Colonoscopy of a patient ill with dysentery revealed that mucous membrane of his large intestine is hyperemic, edematic, its surface was covered with grey-and-green coats. Name the morphological form of dysenteric collitis:
Correct answer	Fibrinous
B	Catarrhal
C	Ulcerous
D	Purulent
E	Necrotic
№	krok 2007
Topic	Anemia. Thrombocytopenia and thrombocytopathy. Coagulopathy.
Task	A 55 y.o. woman consulted a doctor about having continuous cyclic uterine hemorrhages for a year, weakness, dizziness. Examination revealed skin pallor. Hemogram: Hb- 70 g/l, erythrocytes - $3, 2 \cdot 10^{12}/l$, color index - 0,6, leukocytes $6, 0 \cdot 10^9/l$, reticulocytes - 1%; erythrocyte hypochromia. What anemia is it?
Correct answer	Chronic posthemorrhagic anemia
B	Hemolytic anemia
C	Aplastic anemia
D	B_{12} -folate-deficiency anemia
E	Iron-deficiency anemia
№	krok 2007
Topic	Tuberculosis.

Task	Autopsy of a 48 y.o. man revealed a round formation 5 cm in diameter with clearcut outlines in the region of the 1st segment of his right lung. This formation was encircled with a thin layer of connective tissue full of white brittle masses. Make a diagnosis of the secondary tuberculosis form:
Correct answer	Tuberculoma
B	Caseous pneumonia
C	Acute cavernous tuberculosis
D	Acute focal tuberculosis
E	Fibrous cavernous tuberculosis
№	krok 2007
Topic	Pathomorphology of the immune system. Reactions and mechanisms of hypersensitivity. The autoimmune disease. Immunodeficiency States.
Task	An experimental animal was first sensitized whereupon an antigen dose was introduced subcutaneously. This injection resulted in the development of a fibrinous inflammation with alteration of vessel walls, basal substance and fibrous structures of connective tissue in form of mucoid and fibrinoid swelling and necrosis. What immunological reaction took place?
Correct answer	Immediate hypersensitivity
B	Delayedtype hypersensitivity
C	Reaction of transplantation immunity
D	Normergic reaction
E	Granulomatosis
№	krok 2007
Topic	Kidney Disease.
Task	Microscopical renal examination of a 36 y.o. woman who died from renal insufficiency revealed in the glomerules proliferation of capsule nephrothelium as well as of podocytes and phagocytes accompanied by formation of "crescents", capillary loop necrosis, fibrinous thrombs in their lumens; sclerosis and hyalinosis of glomerules, atrophy of tubules and fibrosis of renal stroma. What is the most probable diagnosis?
Correct answer	Subacute glomerulonephritis
B	Acute glomerulonephritis
C	Chronic glomerulonephritis
D	Focal segmentary sclerosis
E	Membranous nephropathy
№	krok 2007
Topic	Diseases of the respiratory system.

Task	A forensic medical expert examines the body of a 58 y.o. man who had been consuming large amounts of alcohol for a long time and died at home. Microscopically: the right lung is dense and enlarged, its incision revealed that the tissue is greyish and homogenous, pleura is covered with greyish layers. Microscopically - alveolar cavities contain fibrin, hemolyzed erythrocytes. Make a diagnosis:
Correct answer	Croupous pneumonia
B	Focal pneumonia
C	Interstitial pneumonia
D	Primary pulmonary tuberculosis
E	Caseous pneumonia
№	krok 2007
Topic	discipline
Task	topic: Damage and death of cells and tissues. Necrosis and apoptosis. Pathological anatomy organ failure. Foundations of thanatology. Death, definition, signs of death. Autopsy of a 56 y.o. man revealed in the right temporal part of brain a big focus of softened grey matter that was semiliquid and light grey. Arteries of cerebral tela contain multiple whitish-yellow thickenings of intima that abruptly narrow the lumen. What is your diagnosis?
Correct answer	Ischemic stroke
B	Brain abscess
C	Hemorrhage
D	Hemorrhagic infarction
E	Brain edema
№	krok 2007
Topic	Leukemias (leukemia) and lymphomas.
Task	A 22 y.o. woman has enlarged lymph nodes. Histologically: a lymph node contains lymphocytes, histiocytes, reticular cells, small and big Hodgkin's cells, multinucleated Sternberg cells, isolated foci of caseous necrosis. What disease are these changes typical for?
Correct answer	Lymphogranulomatosis
B	Lymphosarcoma
C	Chronic leukosis
D	Acute leukosis
E	Lung cancer metastasis
№	krok 2007
Topic	Liver Disease
Task	Analysis of a puncture biopsy material of liver revealed hepatocyte dystrophy with necroses as well as sclerosis with disorder of beam and lobulous structure, with formation of pseudolobules and regenerative nodes. What is the most probable diagnosis:

Correct answer	Liver cirrhosis
B	Chronic hepatosis
C	Chronic hepatitis
D	Progressive massive liver necrosis
E	Acute hepatitis
№	krok 2007
Topic	Nomenclature and morphological features of tumors from epithelium.
Task	A 45 y.o. patient consulted a doctor about plaques shaped formation on his neck. Histological examination of biopsy skin material revealed tumorous cells of round and oval form with thin ring of basophilic cytoplasm that resemble of cells of basal epidermal layer. What tumour is it?
Correct answer	Basalioma
B	Epidermal cancer
C	Hydradenoma
D	Trichoepithelioma
E	Syringoadenoma
№	krok 2007
Topic	Diseases of the respiratory system.
Task	A 63 y.o. man fell ill with acute tracheitis and bronchitis accompanied by bronchial pneumonia. On the 10th day the patient died from cardiopulmonary insufficiency. Autopsy revealed fibrinous hemorrhagic laryngotracheobronchitis; lungs were enlarged, their incision revealed the "coalminer's" effect caused by interlacing of sections of bronchial pneumonia, hemorrhages into the pulmonary parenchyma, acute abscesses and atelectases. Internal organs have discirculatory and dystrophic changes. What is the most probable diagnosis?
Correct answer	Influenza, severe form
B	Moderately severe influenza
C	Parainfluenza
D	Respiratory syncytial infection
E	Adenoviral infection
№	krok 2007
Topic	General doctrine of inflammation. Exudative inflammation. The morphology of exudative inflammation

Task	Autopsy of a man who died from influenza revealed that his heart was slightly enlarged, pastous, myocardium was dull and had specks. Microscopical examination of myocardium revealed signs of parenchymatous adipose and hydropic dystrophy; stroma was edematic with poor macrophagal and lymphocytic infiltration, vessels were plethoric; perivascular analysis revealed petechial hemorrhages. What type of myocarditis was developed in this case?
Correct answer	Serous diffuse
B	Interstitial proliferative
C	Serous focal
D	Purulent
E	Granulomatous
№	krok 2010
Topic	Processes of adaptation and compensation.
Task	A patient who has been abusing tobacco smoking for a long time has got cough accompanied by excretion of viscous mucus; weakness after minor physical stress, pale skin. The patient has also lost 12,0 kg of body weight. Endoscopic examination of biosy material his illness was diagnosed as squamous cell carcinoma. Name a pathological process that preceded formation of the tumour:
Correct answer	Metaplasia
B	Hypoplasia
C	Hyperplasia
D	Necrosis
E	Sclerosis
№	krok 2010
Topic	Proliferative inflammation. Specific inflammation. Granulomatosis.
Task	A 22 year old patient from the West Ukraine complains of laboured nasal breathing. Morphological examination of biopsy material of nasal mucous membrane revealed lymphoid, epithelioid, plasma cells as well as Mikulicz's cells. What is the most probable diagnosis?
Correct answer	Rhinoscleroma
B	Glanders
C	Tuberculosis
D	Leprosy
E	Syphilis
№	krok 2010
Topic	Kidney Disease.

Task	Autopsy of a man who died from burn disease revealed brain edema, liver enlargement as well as enlargement of kidneys with wide light-grey cortical layer and plethoric medullary area. Microscopic examination revealed necrosis of tubules of main segments along with destruction of basal membranes, intersticium edema with leukocytic infiltration and haemorrhages. What is the most probable postmortem diagnosis?
Correct answer	Necrotic nephrosis
B	Tubulointerstitial nephritis
C	Pyelonephritis
D	Gouty kidney
E	Myeloma kidney
№	krok 2010
Topic	Viral airborne infection. HIV infection. Rabies.
Task	A 30 year old man had been suffering from acute respiratory disease and died from cardiopulmonary decompensation. Autopsy revealed fibrinous-haemorrhagic inflammation in the mucous membrane of larynx and trachea, destructive panbronchitis, enlarged lungs that look black due to the multiple abcesses, haemorrhages, necrosis. What is the most probable postmortem diagnosis?
Correct answer	Influenza
B	Parainfluenza
C	Respiratory syncytial infection
D	Measles
E	Adenoviral infection
№	krok 2010
Topic	Pathomorphology of the immune system. Reactions and mechanisms of hypersensitivity. The autoimmune disease. Immunodeficiency States.
Task	A patient suffering from periodical attacks caused by inhalation of different flavoring substances was diagnosed with atopic bronchial asthma. IgE level was increased. This is typical for the following type of reactions:
Correct answer	Anaphylactic reactions
B	Cytotoxic reactions
C	Immunocomplex reactions
D	delayed-type hypersensitivity
E	Autoimmune reactions
№	krok 2010
Topic	Pathomorphology of the immune system. Reactions and mechanisms of hypersensitivity. The autoimmune disease. Immunodeficiency States.

Task	Histological examination of a 40 year old man's thymus revealed reduced share of parenchymatous elements, increased share of adipose and loose connective tissue, its enrichment with thymus bodies. The organ's mass was unchanged. What is this phenomenon called?
Correct answer	Age involution
B	Accidental involution
C	Hypotrophy
D	Dystrophy
E	Atrophy
№	krok 2010
Topic	Infectious and parasitic diseases. Characterization of the infectious process. Intestinal infectious diseases.
Task	A patient has been suffering from diarrhea for 5 days. On the fifth day colonoscopy revealed that membrane of rectum was inflamed, there were greyish-green films closely adhering to the subjacent tissue. What is the most probable diagnosis?
Correct answer	Dysentery
B	Typhoid fever
C	Nonspecific ulcerous colitis
D	Salmonellosis
E	Crohn's disease
№	krok 2010
Topic	General doctrine of inflammation. Exudative inflammation. The morphology of exudative inflammation
Task	A 4 year old child complained of pain during deglutition, indisposition. Objectively: palatine arches and tonsils are moderately edematous and hyperemic, there are greyish-white films up to 1 mm thick closely adhering to the subjacent tissues. What pathological process are these changes typical for?
Correct answer	Inflammation
B	Dystrophy
C	Necrosis
D	Metaplasia
E	Organization
№	krok 2010
Topic	Tuberculosis.
Task	A 46 year old patient who had been suffering from tuberculosis for 6 years died from massive pulmonary haemorrhage. Autopsy revealed different sized foci of sclerosis and caseous necrosis in lungs, in the upper part of the right lung there was a cavity 5 cm in diameter with dense grey walls, the cavity contained liquid blood and blood clots. What type of tuberculosis is it?

Correct answer	Fibrocavernous
B	Acute cavernous
C	Infiltrative
D	Fibrous focal
E	Acute focal
№	krok 2010
Topic	Pre - & perinatal pathology.
Task	A couple had a child with Down's disease. Mother is 42 years old. This disease is most probably caused by the following impairment of prenatal development:
Correct answer	Gametopathy
B	Blastopathy
C	Embryopathy
D	Non-specific fetopathy
E	Specific fetopathy
№	krok 2010
Topic	Pathomorphology of the immune system. Reactions and mechanisms of hypersensitivity. The autoimmune disease. Immunodeficiency States.
Task	Examination of a child who frequently suffers from infectious diseases revealed that IgG concentration in blood serum was 10 times less than normal, IgA and IgM concentration was also significantly reduced. Analysis showed also lack of B-lymphocytes and plasmocytes. What disease are these symptoms typical for?
Correct answer	Bruton's disease
B	Swiss-type agammaglobulinemia
C	Dysimmunoglobulinemia
D	Louis-Bar syndrome
E	Di George syndrome
№	krok 2010
Topic	For pituitary disease. Diabetes mellitus. Diseases of the thyroid gland. Diseases of the adrenal glands.
Task	Examination of a 42 year old patient revealed a tumour of adenohypophysis. Objectively: the patient's weight is 117 kg, he has moon-like hyperemic face, red-blue striae of skin distension on his belly. Osteoporosis and muscle dystrophy are present. AP is 210/140 mm Hg. What is the most probable diagnosis?
Correct answer	Cushing's disease
B	Cushing's syndrome

C	Conn's disease
D	Diabetes mellitus
E	Essential hypertension
№	krok 2010
Topic	Pathomorphology of the immune system. Reactions and mechanisms of hypersensitivity. The autoimmune disease. Immunodeficiency States.
Task	A patient with skin mycosis has disorder of cellular immunity. The most typical characteristic of it is reduction of the following index:
Correct answer	T-lymphocytes
B	Immunoglobulin G
C	Immunoglobulin E
D	B-lymphocytes
E	Plasmocytes
№	krok 2010
Topic	Nomenclature and morphological features of tumors of the nervous tissue. Features of tumours of the Central nervous system.
Task	Autopsy of a 5 year old child revealed in the area of vermis of cerebellum a soft greyish-pink node 2 cm in diameter with areas of haemorrhage. Histologically this tumour consisted of atypical monomorphous small roundish cells with big polymorphous nuclei. What tumour is it?
Correct answer	Medulloblastoma
B	Meningioma
C	Glioblastoma
D	Astrocytoma
E	Oligodendroglioma
№	krok 2010
Topic	Pathomorphology of the immune system. Reactions and mechanisms of hypersensitivity. The autoimmune disease. Immunodeficiency States.
Task	A patient in a transplantation centre underwent heart transplantation. The organ was taken from a donor who died in a road accident. Foreign heart can be rejected as a result of development of transplantation immunity. It is usually prevented by means of:
Correct answer	Immunosuppressors
B	Chemotherapy
C	Ultrasound
D	Enzymes
E	X-ray therapy

№	krok 2010
Topic	Infectious and parasitic diseases. Characterization of the infectious process. Intestinal infectious diseases.
Task	A patient had been suffering from profuse diarrhea and vomiting for 2 days. He died from acute dehydration. Autopsy revealed that the intestinal wall was edematous and hyperemic, with multiple haemorrhages in the mucous membrane. Intestine lumen contains whitish fluid resembling of rice water. What disease caused death?
Correct answer	Cholera
B	Dysentery
C	Salmonellosis
D	Typhoid fever
E	Enterocolitis
№	krok 2010
Topic	Diseases of the esophagus, stomach and intestines.
Task	A patient died from acute cardiac insufficiency, among clinical presentations there was gastrointestinal haemorrhage. Examination of mucous membrane of stomach revealed some defects reaching myenteron; their edges and bottom were mostly even and loose, some of them contained dark-red blood. What pathological process was revealed?
Correct answer	Acute ulcers
B	Chronic ulcers
C	Erosions
D	Thrombosis
E	Inflammation
№	krok 2010
Topic	Kidney Disease.
Task	A 33 year old man died from uraemia. Autopsy revealed enlarged kidneys weighing 500,0 each and consisting of multiple cavities 0,5-2 cm in diameter. The cavities were full of light-yellow transparent liquid. Renal pelvis and ureters had no peculiarities. What renal disease caused uraemia?
Correct answer	Bilateral polycystic renal disease
B	Chronic pyelonephritis
C	Renal tumour
D	Renal tuberculosis
E	Rapidly progressing glomerulonephritis
№	krok 2010
Topic	Pre - & perinatal pathology.

Task	An alcoholic woman has born a girl with mental and physical developmental lag. Doctors diagnosed the girl with fetal alcohol syndrome. What effect is the cause of the girl's state?
Correct answer	Teratogenic
B	Mutagenic
C	Malignization
D	Carcinogenic
E	Mechanic
№	krok 2010
Topic	Circulatory disorders: hyperemia, ischemia, infarction, hemorrhage, hemorrhage, stasis, plasturgie. Shock. Violation of lymph circulation.
Task	A patient with obliterating atherosclerosis underwent sympathectomy of femoral artery in the region of femoral trigone. What type of arterial hyperemia was induced by the operation?
Correct answer	Neuroparalytic
B	Reactive
C	Metabolic
D	Neurotonic
E	Functional
№	Крок 2019
Topic	Hypertension and arteriosclerosis. Hypertension and symptomatic hypertension.
Task	Autopsy of a 60-year-old woman, who for a long time had been suffering from essential hypertension, shows significantly diminished kidneys (weight of both kidneys is 80 g) with finely granular surface. Uniform renal cortical thinning can be observed on section. Name the described changes in the kidneys:
Correct answer	Primary contracted kidney
B	Pyelonephritic contracted kidney
C	Secondary contracted kidney
D	Amyloid contracted kidney
E	Diabetic nephrosclerosis
№	Крок 2019
Topic	Tumors of the central nervous system
Task	Autopsy of a 3-year-old child shows a tumor in the cerebellum. The tumor has no clear margins separating it from the surrounding tissues. Histologically it is made of small atypical cells with hyperchromic nuclei. This tumor is most likely a:
Correct answer	Medulloblastoma

B	Medullary sarcoma
C	Cancer metastasis
D	Sarcoma metastasis
E	Glioblastoma
№	Крок 2019
Topic	Acute systemic circulatory disorders
Task	Autopsy revealed a large wedge-shaped patch of a dense dark red tissue with clear margins in the upper lobe of the right lung. Histological examination detected there necrosis of the alveolar walls; the alveolar lumen is tightly packed with erythrocytes. What process occurred in the lungs?
Correct answer	Hemorrhagic infarction
B	Carneous degeneration
C	Gangrene
D	Hemorrhage
E	Atelectasis
№	Крок 2019
Topic	Molecular pathomorphological bases of the immune response.
Task	Regional lymph nodes surrounding an infected wound are enlarged. Histological examination shows increased number of macrophages, lymphocytes, and lymphatic follicles in the cortical layer of the lymph nodes, as well as a large amount of plasma cells. What process in the lymph nodes is indicated by these histological changes?
Correct answer	Antigen stimulation
B	Acquired deficiency of lymphoid tissue
C	Congenital deficiency of lymphoid tissue
D	Neoplastic aberration
E	Transplant rejection
№	Крок 2019
Topic	Tumors of the epithelium
Task	A patient has gradually developed a skin plaque on his face. In the center of this plaque there are necrotic patch and an ulcer. Histopathological analysis of the biopsy material reveals proliferation of atypical epithelial cells with large number of pathologic mitoses. What is the most likely diagnosis?
Correct answer	Skin cancer
B	Sarcoma
C	Papilloma

D	Trophic ulcer
E	Fibroma
№	Крок 2019
Topic	Proliferative (productive) inflammation
Task	Histological analysis of a biopsy skin sample obtained from a 24-year-old patient detects caseous necrosis surrounded with cellular infiltrate consisting of lymphocytes, among which there are single giant cells; proliferation of connective tissue and endovasculites are observed. Characterize this pathologic process:
Correct answer	Proliferative granulomatous inflammation
B	Proliferative interstitial inflammation
C	Abscess
D	Catarrhal inflammation
E	Ichorous inflammation
№	Крок 2019
Topic	Disorders of iron metabolism and metabolism of hemoglobinogenic
Task	Autopsy of a man, who had been suffering from mitral stenosis, reveals dense brown lungs. What pathologic process had occurred in the lungs?
Correct answer	Hemosiderosis
B	Hemochromatosis
C	Jaundice
D	Hemomelanosis
E	Lipofuscinosis
№	Крок 2019
Topic	Atherosclerosis and arteriosclerosis. Coronary heart disease.
Task	A 63-year-old man, who has been suffering from chronic diffuse obstructive pulmonary emphysema for 15 years, died of progressive heart failure. Autopsy shows nutmeg liver cirrhosis, cyanotic induration of kidneys and spleen, ascites, and edemas of the lower limbs. What type of heart failure can be characterized by such changes in the internal organs?
Correct answer	Chronic heart failure
B	Acute right ventricular failure
C	Chronic atrial failure
D	Acute left ventricular failure
E	Acute global heart failure
№	Крок 2019

Topic	Infections of childhood.
Task	A 6-year-old girl presents with acute onset of a disease. She developed sore throat and high temperature that were later accompanied by a punctate skin rash. Oral examination reveals acute pharyngeal hyperemia, raspberry tongue, and enlarged bright red tonsils with dull gray and yellow foci that spread to the peritonsillar tissues. The submandibular lymph nodes are enlarged. What disease are these changes characteristic of?
Correct answer	Scarlet fever
B	Measles
C	Pharyngeal diphtheria
D	Laryngeal diphtheria
E	Meningococcal nasopharyngitis
№	Кpok 2019
Topic	Radiation sickness, nosocomial illness.
Task	Autopsy of a man, who served on a nuclear submarine, revealed the following pathologies: bone marrow atrophy (panmyelophthisis), anemia, leukopenia, thrombocytopenia, lymphocytic disintegration in the lymph nodes, spleen, gastrointestinal lymphatic system, and hemorrhages into the adrenal glands. What disease had developed in this case?
Correct answer	Acute radiation sickness
B	Decompression sickness
C	Acute leukemia
D	Acute anemia
E	Vibration disease
№	Кpok 2019
Topic	Pathology of changes in diseases associated with nutrition.
Task	A 9-month-old child presents with delayed tooth eruption, improper sequence of tooth eruption, and horizontal maxillary configuration (high-arched palate). Microscopically enamel mineralization pattern is irregular, enamel columns are wrinkled, some of them are vacuolated, predentin zones are widened, single denticles can be observed. What disease is it?
Correct answer	Early rickets
B	Late rickets
C	Osteomalacia
D	Gout
E	Hypervitaminosis D
№	Кpok 2019
Topic	Respiratory diseases.

Task	Autopsy of a 58-year-old man, who for a long time has been drinking alcohol in large amounts and died at home, is being conducted. Macroscopically the right lung is dense and enlarged, its tissue is gray and homogeneous on section, its pleura is covered with grayish membranous deposits. Microscopically the alveolar cavities contain fibrin threads, neutrophils, and hemolysed erythrocytes. Make the diagnosis:
Correct answer	Croupous pneumonia
B	Focal pneumonia
C	Interstitial pneumonia
D	Primary pulmonary tuberculosis
E	Caseous pneumonia
№	Крок 2019
Topic	Systemic connective tissue diseases with auto immunization
Task	Autopsy of a 49-year-old woman who died of chronic kidney failure shows small dense striated kidneys with areas of hemorrhages. Microscopically nuclei of epithelial channels contain hematoxylin bodies; glomerular capillaries resemble wire loops, have thickened basement membranes, and in places contain hyaline thrombi and foci of fibrinoid necrosis. What is the most likely diagnosis?
Correct answer	Systemic lupus erythematosus
B	Rheumatism
C	Arteriolosclerotic nephrosclerosis
D	Amyloidosis
E	Atherosclerotic nephrosclerosis
№	Крок 2019
Topic	Particularly dangerous (convection, quarantine) infections.
Task	A 34-year-old man died in a comatose state. According to his family after a business trip to an African country he developed periodical jaundice attacks. Autopsy shows the following: dense enlarged spleen with slate-black pulp; enlarged plethoric liver, gray-black on section; cerebral gray matter is brown-gray; cerebral white matter contains numerous small hemorrhages. What infectious disease can be suspected?
Correct answer	Malaria
B	Meningococemia
C	Prion infection
D	Generalized herpetic infection
E	Generalized cryptococcosis
№	Крок 2019
Topic	Benign and malignant non-epithelial (mesenchymal) tumors.

Task	A 27-year-old woman has undergone a sector resection of mammary gland tissue. Macroscopy detects a dense white node, 4 cm in diameter, with clear margins in the excised tissue. Immediate histological analysis shows the tumor to consist of a large amount of fibrous stroma with stromal proliferation around the small canaliculi. Canalicular epithelium overlays the basement membrane and retains its polarity. Make the diagnosis:
Correct answer	Pericanalicular fibroadenoma
B	Adenocarcinoma
C	Sarcoma
D	Dyshormonal disorders
E	Cancer
№	Крок 2019
Topic	Diseases of the esophagus, stomach and intestines.
Task	In the course of an urgent surgery, the vermiform appendix of the patient was excised. The appendix was acutely distended and gray-black throughout its whole length. In the distal segment a defect of the appendix wall was detected, through which a foul-smelling gray-brown substance was being discharged from the appendix lumen. Histological analysis shows necrotization of the appendix wall with hemorrhagic foci; lumen of the mesenteric artery is filled with a trombus. What type of appendicitis is it?
Correct answer	Acute gangrenous
B	Acute phlegmonous
C	Acute simple
D	Acute superficial
E	Chronic
№	Крок 2019
Topic	Inflammation: causes, morphogenesis. Pathomorphology of exudative inflammation
Task	A 39-year-old man underwent a surgery for peptic ulcer disease of the stomach. He died 7 days after the surgery. On autopsy the peritoneal layers are plethoric, dull, and covered with massive yellow-green membranous deposits. The peritoneal cavity contains approximately 300 mL of thick yellow-green fluid. What pathologic process was detected in the peritoneal cavity?
Correct answer	Fibrinopurulent peritonitis
B	Serous peritonitis
C	Serofibrinous peritonitis
D	Peritoneal commissures
E	Fibrinohemorrhagic p
№	krok 2018
Topic	Systemic connective tissue diseases with auto immunization

Task	Autopsy of a woman revealed the following morphologic changes: stenosis of the atrioventricular opening, mitral insufficiency. Histologically there are focal cardiosclerosis and "blooming" Aschoff nodules in the myocardium. What is the most likely diagnosis?
Correct answer	Rheumatism
B	Scleroderma
C	Dermatomyositis
D	Polyarteritis nodosa
E	Systemic lupus erythematosus
№	krok 2018
Topic	Intestinal infectious diseases.
Task	A patient was brought into the infectious diseases hospital on the 8th day since the disease onset. The patient complains of headache, malaise, and weakness. A sample of blood was taken for the serological test. Widal agglutination test results with blood sample diluted 1:200 and typhoid fever O-diagnosticum were positive. What diagnosis can be made based on the results of this test?
Correct answer	Typhoid fever
B	Dysentery
C	Cholera
D	Leptospirosis
E	Tuberculosis
№	krok 2018
Topic	Proliferative (productive) inflammation
Task	Histological investigation of the uterine scrape of the 45-year-old woman with disturbed ovarian menstrual cycle revealed increased number of endometrial glands, some of which are serrated, while others are dilated and cyst-like. Make the diagnosis:
Correct answer	Endometrial cystic glandular hyperplasia
B	Placental polyp
C	Atypical endometrial hyperplasia
D	Glandular endometrial polyp
E	Endometrial adenocarcinoma
№	krok 2018
Topic	Acute systemic circulatory disorders
Task	A 45-year-old man diagnosed with hepatic cirrhosis and ascites underwent drainage of 5 liters of fluid from his abdominal cavity, which resulted in development of syncopal state due to insufficient blood supply to the brain. What circulatory disorder occurred in the abdominal cavity in this case?
Correct answer	Arterial hyperemia

B	Ischemia
C	Venous hyperemia
D	Thrombosis
E	Embolism
№	krok 2018
Topic	Respiratory diseases.
Task	During autopsy of a 34-year-old man, who died of chronic kidney failure due to renal amyloidosis, in the lungs (mainly in the lower lobes) the pathologist detected multiple bronchial dilations filled with purulent masses accumulated in the bronchial lumen. Surface of the lungs section has fine-meshed pattern and resembles a honeycomb. Histologically there is a chronic inflammation detected in the bronchial wall, muscle fibers are replaced with connective tissue. These changes in the lungs can be defined as:
Correct answer	Bronchiectases
B	Bronchopneumonia
C	Chronic bronchitis
D	Chronic pneumonia
E	Lung abscesses
№	krok 2018
Topic	Necrosis. Clinical and morphological forms of necrosis.
Task	Autopsy revealed a large wedge-shaped patch of a dense dark red tissue with clear margins in the upper lobe of the right lung. Histological examination detected there necrosis of the alveolar walls; the alveolar lumen is tightly packed with erythrocytes. What process occurred in the lungs?
Correct answer	Hemorrhagic infarction
B	Carneous degeneration
C	Gangrene
D	Hemorrhage
E	Atelectasis
№	krok 2018
Topic	Inflammation: causes, morphogenesis. Pathomorphology of exudative inflammation
Task	A patient, who had received a thermal burn, developed painful boils filled with turbid liquid on the skin. What morphological type of inflammation has developed in the patient?
Correct answer	Serous
B	Proliferative
C	Croupous

D	Granulomatous
E	Diphtheritic
№	krok 2018
Topic	Hemostasis disorders: hemorrhagic syndrome, thrombosis, DIC syndrome. Embolism. Pulmonary artery thromboembolism, thanatogenesis.
Task	A 65-year-old woman, who had been suffering from deep vein thrombophlebitis of the lower leg, suddenly died when awaiting her appointment with the doctor. Autopsy revealed loose friable red masses with corrugated dull surface in the main pulmonary artery and its bifurcation. What pathologic process was discovered by the pathologist in the pulmonary artery?
Correct answer	Thromboembolism
B	Thrombosis
C	Tissue embolism
D	Foreign body embolism
E	Fat embolism
№	krok 2018
Topic	Atherosclerosis and arteriosclerosis. Coronary heart disease.
Task	Examination of the coronary arteries revealed atherosclerotic plaques with calcinosis that narrow the arterial opening by 1/3. In the muscle there are numerous whitish layers of connective tissue. Name the process detected in the myocardium:
Correct answer	Diffuse cardiosclerosis
B	Tiger heart
C	Postinfarction cardiosclerosis
D	Myocarditis
E	Myocardial infarction
№	krok 2018
Topic	Proliferative (productive) inflammation
Task	Microscopy of the myocardium of a girl, who died of diphtheria due to heart failure, shows fatty degeneration, multiple foci of cardiomyocytes necrosis, and small foci of cellular infiltrates in the interstitium. What type of myocarditis is it?
Correct answer	Alterative
B	Diffuse exudative
C	Focal exudative
D	Interstitial
E	Granulomatous
№	krok 2018

Topic	Proliferative (productive) inflammation
Task	A 40-year-old man developed skin redness and swelling in the neck area, where eventually a small abscess appeared. On section the focus is dense and yellow-green colored. In the purulent masses there are white granules. Histologically there are fungal druses, plasma and xanthome cells, and macrophages detected. Specify the most correct etiological name of this pathological process:
Correct answer	Actinomycosis
B	Furuncle
C	Carbuncle
D	Syphilis
E	Leprosy
№	krok 2018
Topic	Kidney disease.
Task	Renal examination shows the kidney to be swollen and plethoric, with easily removable capsule. Renal pelvis and calyces are dilated and filled with turbid urine; their mucosa is dull and has hemorrhagic foci. On section the renal tissue is variegated, there are yellow-gray areas surrounded with plethoric and hemorrhagic zone. What disease can be characterized by such results of macroscopic examination?
Correct answer	Acute pyelonephritis
B	Acute glomerulonephritis
C	Renal amyloidosis
D	Nephrolithiasis
E	Polycystic kidney
№	krok 2018
Topic	Respiratory diseases.
Task	Autopsy of the body of a 50-year-old man, who had been suffering from tuberculosis and died of cardiopulmonary decompensation, shows lobar affection of the lungs: the upper lobe of the right lung is enlarged, dense, yellow on section, crumbling, with pleural fibrin deposition. What type of secondary tuberculosis can be characterized by this pathology?
Correct answer	Caseous pneumonia
B	Fibrous focal tuberculosis
C	Infiltrative tuberculosis
D	Tuberculoma
E	Acute focal tuberculosis
№	krok 2018
Topic	Particularly dangerous (convection, quarantine) infections

Task	A 34-year-old man died in a comatose state. According to his family after a business trip to an African country he developed periodical jaundice attacks. Autopsy shows the following: dense enlarged spleen with slate-black pulp; enlarged plethoric liver, gray-black on section; cerebral gray matter is brown-gray; cerebral white matter contains numerous small hemorrhages. What infectious disease can be suspected?
Correct answer	Malaria
B	Meningococcemia
C	Prion infection
D	Generalized herpetic infection
E	Generalized cryptococcosis
№	krok 2018
Topic	Molecular pathomorphological bases of the immune response
Task	A 5-year-old child is diagnosed with Bruton syndrome (X-linked agammaglobulinemia) that manifests itself as severe clinical course of bacterial infections and absence of B lymphocytes and plasma cells. What changes of immunoglobulin content can be observed in blood serum of the child with immunodeficiency?
Correct answer	Decreased IgA, IgM
B	Increased IgA, IgM
C	Decreased IgD, IgE
D	Increased IgD, IgE
E	No changes
№	krok 2018
Topic	Acute systemic circulatory disorders
Task	Acute renal impairment caused death of a patient with hemorrhage. Autopsy revealed enlarged kidneys with broad pale pink cortical layer expressively demarcated from dark red renal pyramids. Macroscopic examination revealed lack of epithelial nuclei of the convoluted tubules, tubulorrhexis, phlebostasis. The cell nuclei of the choroid glomus and straight tubules were present. What pathology is it?
Correct answer	Necronephrosis
B	Infarction
C	Glomerulonephritis
D	Pyelonephritis
E	Nephrosis
№	krok 2018
Topic	General concepts of human infectious pathology. Classification of infectious diseases. Intestinal infectious diseases.

Task	Autopsy of the body revealed waxy degeneration of the rectus abdominis muscles. In the terminal segment of the small intestine there are ulcers 3-5 cm in diameter. The ulcer walls are covered in a crumbling grayish-white substance. The ulcer edges are markedly raised above the mucosa. Widal test is positive. Make the diagnosis:
Correct answer	Typhoid fever
B	Nonspecific ulcerative colitis
C	Relapsing fever
D	Crohn's disease
E	Dysentery
№	krok 2018
Topic	Tumors of the epithelium: benign organ-specific epithelial tumors, cancer (features of development and metastasis, the main histological forms).
Task	A 30-year-old man has undergone surgical removal of a thyroid tumor. Histologically the tumor is made up of papillary structures varying in size that emerge from the inner surface of dilated cystic follicles and are covered with atypical epithelium. What is the most likely diagnosis?
Correct answer	Papillary carcinoma
B	Colloid nodular goiter
C	Macrofollicular adenoma
D	Follicular carcinoma
E	Medullary carcinoma
№	krok 2018
Topic	Tumors of the epithelium: benign organ-specific epithelial tumors, cancer (features of development and metastasis, the main histological forms).
Task	Histological analysis of a removed skin tumor shows clusters and bands composed of atypical stratified squamous epithelium cells that penetrate into the underlying tissue. What preliminary diagnosis can be made?
Correct answer	Non-keratinizing squamous cell carcinoma
B	Solid cancer
C	Carcinoma in situ
D	Papilloma
E	Adenoma
№	krok 2018
Topic	Inflammation: causes, morphogenesis. Pathomorphology of exudative inflammation

Task	Autopsy of a patient, who died of bi-lateral bronchopneumonia, shows in the left lung lower lobe a cavity 5 cm in diameter, filled with yellowish-white liquid. What complication of the patient's pneumonia had developed?
Correct answer	Abscess
B	Gangrene
C	Granuloma
D	Sequestrum
E	Tuberculoma
№	krok 2018
Topic	Tumors of hematopoietic and lymphoproliferative tissue.
Task	A patient presents with enlarged cervical lymph nodes. Other lymph nodes and internal organs are without changes. Peripheral blood test results are normal. Histological examination of biopsy material taken from the cervical lymph node shows smoothed-out pattern, absent follicles, homogeneous cell composition represented by lymphoblasts. The cells penetrate into the lymph node capsule. What diagnosis can be made?
Correct answer	Lymphoblastic leukemia
B	Myeloblastic leukemia
C	Erythroblastic leukemia
D	Sezary disease
E	Burkitt lymphoma
№	krok 2018
Topic	Tumors of the central nervous system
Task	A young woman presents with a tumor along the auditory nerve. The tumor is node-shaped, 3 cm in diameter, soft and elastic, pink-white colored, and has homogeneous structure. Microscopically the tumor contains bundles of cells with oval nuclei. These cellular fibrous bundles form regular structures made up of parallel rows of regularly oriented cells arranged in the form of a palisade with acellular homogeneous area in between (Verocay bodies). Name this type of tumor:
Correct answer	Neurinoma
B	Malignant neurinoma
C	Ganglioneuroma
D	Neuroblastoma
E	Ganglioneuroblastoma
№	krok 2018
Topic	Hypo thalamo-pituitary disorders. Pathology of the adrenal glands. Pathology of the thyroid gland. Pathology of the endocrine system of the pancreas.

Task	When examining a biopsy material-obtained from the thyroid gland, the pathologist discovered lymphocyte infiltration of the thyroid tissues and destruction-of the parenchymal elements. Diffuse lymphocyte infiltration with lymphoid follicles was detected in the stroma. What is the most likely diagnosis?
Correct answer	Hashimoto's thyroiditis (chronic lymphocytic thyroiditis)
B	Papillary thyroid cancer
C	Undifferentiated thyroid carcinoma
D	Solid adenoma of the thyroid
E	Graves' disease (toxic diffuse goiter)
№	крок 2018
Topic	Systemic connective tissue diseases with auto immunization
Task	Autopsy of a 50-year-old woman, who had been suffering from systemic connective tissue disease, reveals small dense kidneys with lumpy surface. Microscopy of the renal glomeruli detects there foci of fibrinoid necrosis, hyaline thrombi, hematoxylin bodies, and so-called "wire loop thickening" of the basement membranes. What disease can be characterized by such changes in the kidneys?
Correct answer	Systemic lupus erythematosus
B	Rheumatism
C	Scleroderma
D	Rheumatoid arthritis
E	Dermatomyositis
№	крок 2020
Topic	Pathology of the endocrine system
Task	When examining a biopsy material obtained from the thyroid gland, the pathologist discovered lymphocyte infiltration of the thyroid tissues and destruction of the parenchymal elements. Diffuse lymphocyte infiltration with lymphoid follicles was detected in the stroma. What is the most likely diagnosis?
Correct answer	Graves' disease (toxic diffuse goiter)
B	Papillary thyroid cancer
C	Undifferentiated thyroid carcinoma
D	Hashimoto's thyroiditis (chronic lymphocytic thyroiditis)
E	Solid adenoma of the thyroid
№	крок 2020
Topic	. Infections of childhood.

Task	A 6-year-old child had acute onset of the disease that started as catarrhal nasopharyngitis. 2 days later the patient died. Autopsy of the body shows markedly plethoric and swollen pia mater that is soaked with thick turbid yellow-green fluid. The brain is swollen, the cerebellar tonsils are enlarged, and there is a clearly visible ligature mark on the brain. The described changes are characteristic of:
Correct answer	Meningococcosis
B	Diphtheria
C	Pertussis
D	Measles
E	Influenza
№	крок 2020
Topic	chronic heart failure and their consequences.
Task	A patient died with signs of heart failure. Autopsy shows the following: postinfarction cardiosclerosis, cardiac hypertrophy, and dilated cardiac chambers. The liver is enlarged, has smooth surface, is plethoric on section, covered in dark red specks against the brown-tinted background of the tissue. Histologically, the central veins of the hepatic lobules are plethoric; there is erythrocyte diapedesis into the perivascular space. Central hepatocytes are dystrophic, while peripheral hepatocytes are enlarged and affected by fatty degeneration. What process occurred in the patient's liver?
Correct answer	Nutmeg liver
B	Amyloidosis
C	Pseudonutmeg liver
D	Hepatic steatosis
E	Hepatic cirrhosis
№	крок 2020
Topic	Respiratory diseases.
Task	Microscopy of autopsy material detected that the alveolar lumens in the lungs are filled with exudate, consisting mainly of erythrocytes. What is the most likely cause of this development?
Correct answer	Influenza virus pneumonia
B	Measles pneumonia
C	Typhoid pneumonia
D	Staphylococcal pneumonia
E	Pneumococcal pneumonia
№	крок 2020
Topic	Sepsis.

Task	A patient developed a purulent inflammatory process in the periodontal tissues. The process was caused by activation of the microorganisms inherent in the body, which are a part of oral mucosal microflora. What type of infection is it?
Correct answer	Reinfection
B	Superinfection
C	Autoinfection
D	Relapse
E	Exogenous infection
№	кpok 2020
Topic	Diseases of the liver
Task	Histology of the liver of a deceased, who was an injection drug user, revealed the following: hydropic degeneration of hepatocytes, ground glass hepatocytes, acidophilic Councilman bodies, lymphocytic-macrophageal infiltrations in the portal tracts. What is the most likely etiology of this disease?
Correct answer	Viral
B	Parasitic
C	Toxic
D	Bacterial
E	Fungal
№	кpok 2020
Topic	Regional circulatory disorders
Task	A patient who for a long time was suffering from rheumatism and had mitral stenosis died of cardiopulmonary failure. Autopsy revealed brown induration of the lungs. What circulatory disorder leads to such changes in the lungs?
Correct answer	Chronic right ventricular failure
B	Acute left ventricular failure
C	Portal hypertension
D	Acute right ventricular failure
E	Chronic left ventricular failure
№	кpok 2020
Topic	Necrosis. Clinical and morphological forms of necrosis.
Task	Autopsy of the body revealed a large wedge-shaped patch of a dense dark red tissue with clear margins in the upper lobe of the right lung. Histological examination detected there necrosis of the alveolar walls; the alveolar lumen is tightly packed with erythrocytes. What process occurred in the lungs?
Correct answer	Hemorrhagic infarction

B	Gangrene
C	Atelectasis
D	Hemorrhage
E	Carneous degeneration
№	крок 2020
Topic	Sepsis.
Task	Autopsy of the body of an 18-year-old young man shows that the spleen weight is 580 grams, it is dark-red on section, spleen pulp easily scrapes off. Histologically, there is marked proliferation of reticular cells and a large number of mature neutrophils in the sinusoidal capillaries. In this case the spleen can be described as:
Correct answer	Septic
B	Porphyric
C	Sago
D	Cyanotic
E	Leukemia
№	крок 2020
Topic	Intestinal infectious diseases.
Task	Autopsy of the body revealed waxy degeneration of the rectus abdominis muscles. In the terminal segment of the small intestine there are ulcers 3-5 cm in diameter. The ulcer walls are covered in a crumbling grayish-yellow substance. The ulcer edges are moderately raised above the mucosa. Widal test is positive. Make the diagnosis:
Correct answer	Typhoid fever
B	Dysentery
C	Crohn's disease
D	Nonspecific ulcerative colitis
E	Relapsing fever
№	крок 2020
Topic	Pathomorphology of accumulation of products of disturbed metabolism
Task	A person was hospitalized with markedly icteric skin, sclerae, and mucosa. Urinalysis shows the presence of direct bilirubin. Patient's urine is the color of dark beer. Fecal levels of bile pigments are low. What type of jaundice is observed in this patient?
Correct answer	Hemolytic
B	Obstructive
C	Absorption

D	Hepatocellular
E	Conjugated
№	кpok 2020
Topic	Systemic connective tissue diseases with auto immunization
Task	Autopsy of the body revealed large (1–2 cm) brown-red deposits on the external surface of the aortic valve. The deposits cover ulcers and crumble easily. What disease can be suspected in this case?
Correct answer	Acute verrucous endocarditis
B	Diffuse endocarditis
C	Fibroblastic endocarditis
D	Recurrent verrucous endocarditis
E	Endocarditis ulceropolyposa
№	кpok 2020
Topic	Tumors of the epithelium: benign organ-specific epithelial tumors
Task	A biopsy material obtained from a mammary tumor has solid layers that consist of small epithelial cells with polymorphic nuclei and numerous pathological mitoses. The stroma is scant and has lymphocyte infiltration. Make the diagnosis:
Correct answer	Paget disease
B	Scirrhou carcinoma
C	Adenofibroma
D	Medullary carcinoma
E	Adenoma
№	кpok 2020
Topic	Infections of childhood.
Task	A 7-year-old boy has a bright-pink punctate rash against the background of hyperemia on his forehead, neck, lower abdomen, and in the popliteal spaces. His nasolabial triangle is pale. In the oropharynx there is a bright-red hyperemic area with clear margins, the tonsils are swollen and friable, lacunas contain pus, the tongue is raspberry pink. The cervical lymph nodes are enlarged and painful. Make the diagnosis:
Correct answer	Pertussis
B	Rubella
C	Infectious mononucleosis
D	Diphtheria
E	Scarlet fever
№ 1	KPOK1 2021

Topic	Tuberculosis
task text	1. Autopsy of a the body of a child shows a primary tuberkculosis complex: the primary affect is a jejunal ulcer, there are lymphangitis and regional caseous lymphadenitis. Nyt death occurred as a rezul of ulcer perforation and deelopent of diffuse peritonitis. What is the route of tuberculosis infection in this child?
correct answer	Alimentary
B	Transplacental
C	Aerogenig
D	Contact
E	Mixed
№ 2	KPOK1 2021
Topic	Ishimic diseases of heart
task text	2. A patient with an acute transmural left ventricular myocardial infarction has died of cardiac rupture and tamponade. What process in the infarction zone could have contributed to the rupture?
correct answer	Autolytia processes with pathologic softening of myocardal tissue (myomalacia)
B	Increased pressure in the pulmonary circulation
C	Scar formation with thinning of the wall of the left cardiac ventricale.
D	Thinning of the cicatricially-changed stomach wall with formation of the aneurism
E	Replacement with connective tissue with a decrease in myocardial elasticity
№ 3	KPOK1 2021
Topic	Acute nflammation
task text	3. Sigmoidoscopy of a 10-year-old child shows the rectal and sigmoid mucosa to be swollen, reddish, and covered in f thick layer of mucus. These changes correspond with the following paathology:
correct answer	Catarral inflammation
B	Purulent inflammation
C	Venous plethora
D	Bruise
E	E. Hemorrhage inflammation
№ 4	KPOK1 2021
Topic	Rheumatic diseases
task text	Histology of the cardiac auricle in a patient with mitral valve stenosis reveled Aschoff-Talalayev granulomas. What genesis of heart disease is in this case evident, according to this histological study?
correct answer	Rheumatic

B	Congenital
C	Atherosclerotic
D	Septic
E	Syphilitic
№ 5	KPOK1 2021
Topic	Epithelial tumor
task text	A patient has gradually developed a skin plaque on his face. In the center of this plaque there are necrotic patch and an ulcer. Hislopathological analysis of the biopsy material reveals proliferation of atypical epithelial cells with large number of pathologic mitoses. Make the diagnosis.
correct answer	Scin cancer
B	Fibroma
C	Papilloma
D	Sarcoma
E	Trophic ulcer
№ 6	KPOK1 2021
Topic	Respiratory diseases
task text	A 45-year-old man with acute pneumonia has developed pulmonary edema on the 6th day of illness, which resulted in his death. Autopsy shows that the entire upper lobe of the right lung is affected. This lobe is enlarged, dense, and gray on section. It has fibrinous deposits on the pleura. A cloudyTiquidHows fromTEe section surface. Microscopy shows fibrin, neutrophils, macrophages, and hemolyzed ervthrocytes in the lumen of the alveoli. What type of pneumonia is the patient present with?
correct answer	Croupous pneumonia
B	Staphylococcal bronchopneumonia
C	Viral pneumonia
	Staphylococcal bronchopneumonia
D	Adult respiratory distress syndrome
E	Hypostatic pneumonia
№ 7	KPOK1 2021
Topic	Diseases of kidney
task text	Autopsy of the body of a 61- year-old man with rheumatoid arthritis shows enlarged and dense yellow-white kidneys with awaxy sheen and areas of cicatricial depressions on their surface. Congo red-staining-reveals deposition _of homogeneous-pink masses in the capillary loops, of the glomeruli, in the walls of the arterioles and arteries, in the basement membrane of the tubules, and in the stroma. In this case, rheumatoid arthritis was complicated by the development of the following process:

correct answer	Secondary renal amyloidosis
B	Postinfectious glomerulonephritis
C	Fibroplastic glomerulonephritis
D	Rapidly progressive glomerulonephritis
E	Acute necrotizing nephrosis
№ 8	KPOK1 2021
Topic	Diseases of alimentary system
task text	Fibrogastroscopy of a 48-year-old man. a driver, with complaints of epigastric pain after eating shows hyperemic gastric mucosa with reduced folds. In the gastrobiopsy specimen, microscopy detects thinned mucosa, reduced number of glands and proliferation of <u>connective tissue</u> , infiltrated by lymphocytes and plasma cells. Make a diagnosis.
correct answer	Chronic superficial gastritis
B	Giant hypertrophic gastritis
C	Acute catarrhal gastritis
D	Chronic atrophic gastritis
E	Acute purulent gastritis
№ 9	KPOK1 2021
Topic	Diseases of the endocrine glands
task text	Autopsy of the body of a 45- year-old woman, who was suffering from upper-body obesity, steroid-induced diabetes mellitus, arterial hypertension, and secondary ovarian dysfunction, shaws hypertrichosis, hirsutism, and striae <u>on</u> the skin of the thighs and abdomen. In the anterior part to the pituitary gland, there is a tumor (microscopically it is a basophilic adenoma). In the adrenal glands, hyperplasia of the fascicular zone is observed. What diagnosis is the most likely?
correct answer	Cushing disease
B	Cushing syndrome
C	Adiposogenital dystrophy
D	Pituitary dwarfism
E	Simmonds disease
№ 10	KPOK1 2021
Topic	Necrosis
task text	Examination of the femoral bone detected chronic suppurative inflammation of the compact substance and bone marrow, formation of bone sequestra. What disease is associated with such changes?
correct answer	Osteomyelitis

B	Reticulosarcoma
C	Multiple myeloma
D	Periostitis
E	Giant cell tumor of bone
№ 11	KPOK1 2021
Topic	Syphilis
task text	A biopsy material was obtained from the arches of the patient's soft palate due to a suspected tumor (macroscopy detected an ulcer with the dense floor). In the biopsy material the following was detected: necrosis of the mucosa with infiltration of the submucosal layer by lymphocytes, epithelioid cells, plasma cells, and single neutrophils. Notable is the presence of marked endovasciilitis_and perivasculitis. The described changes are characteristic of:
correct answer	Primary syphilis
B	Necrotizing ulcerative stomatitis
C	Aphthous stomatitis
D	Ulcerative stomatitis
E	Pharyngeal diphtheria
№ 12	KPOK1 2021
Topic	Diseases of the endocrine glands
task text	A 16-year-old girl has jin hair on the pubis and in the armpits, her mammary glands are underdeveloped. She has no menstruations. What hormone imbalance can these symptoms be the indicative of?
correct answer	Ovarian failure
B	Adrenal medulla hyperfunction
C	Hyperthyroidism
D	Hypothyroidism
E	Adrenal zona reticularis hyperfunction
№ 13	KPOK1 2021
Topic	Embolism. Thrombosis
task text	Autopsy of the body of a person, who died after an abdominal surgery, revealed <u>numerous thrombi</u> in the veins of the lesser pelvis. Clinically, thromboembolism syndrome was registered. Where should the pathologist search for thromboembolas?
correct answer	Pulmonary arteries
B	Brain
C	Portal vein
D	Lower limb veins

E	Left ventricle of the heart
№ 14	KPOK1 2021
Topic	Infection diseases
task text	Autopsy of the body of a 40-year-old patient detected groups of enlarged follicles in the small intestine. Their surface has ridges and fissures arranged in a pattern that <u>resembles evri and sulci of the brain</u> The follicles protrude above the surface of the intestinal mucosa. On section they are gray-red and juicy. Microscopy shows proliferation of monocytes, histiocytes, and reticular cells, there are macrophage clusters that form <u>granulomas</u> , while lymphocytes are depleted. What disease can be characterized by these changes?
correct answer	Dysentery
B	Salmonellosis
C	Cholera
D	Typhoid fever
E	Amebiasis
№ 15	KPOK1 2021
Topic	Inflammation
task text	A man had a trauma and subsequent hemorrhagic bursitis of the left knee joint. When he was examined 3 months later, he had a limited range of motion in this joint because of scar formation. What component of inflammation is the basis for the development of this complication?
correct answer	Proliferation
B	Primary alteration
C	Exudation
D	Disturbed microcirculation
E	Secondary alteration
№ 16	KPOK1 2021
Topic	Tuberculosis
task text	Microscopy of a lung tissue shows an inflamed area that consists of a necrotic focus surrounded by regular rows of epithelioid and lymphoid cells. There are plasma cells, macrophages, and <u>Pirogov- Langhans giant multinucleated cells</u> . Specify the type of such inflammation.
correct answer	Tuberculous inflammation
B	Exudative inflammation
C	Leprosy inflammation
D	Alterative inflammation
E	Typical productive inflammation

№ 1	KPOK1 2021
Topic	Diseases of the endocrine glands
task text	When examining a biopsy material obtained from the thyroid gland, the pathologist discovered lymphocyte infiltration of the thyroid tissues and destruction of the parenchymal elements. Diffuse lymphocyte infiltration with lymphoid follicles was detected in the stroma. What is the most likely diagnosis?
correct answer	Hashimoto's thyroiditis (chronic lymphocytic thyroiditis)
B	Graves' disease (toxic diffuse goiter)
C	Solid adenoma of the thyroid
D	Papillary thyroid cancer
E	Undifferentiated thyroid carcinoma
№ 2	KPOK1 2021
Topic	systemic connective tissue diseases
task text	Autopsy of the body of a woman revealed the following morphologic changes: stenosis of the atrioventricular opening, mitral insufficiency. Histologically there are focal cardiosclerosis and «blooming» Aschoff nodules in the myocardium. What is the most likely diagnosis?
correct answer	Rheumatism
B	Scleroderma
C	Dermatomyositis
D	Systemic lupus erythematosus
E	Polyarteritis nodosa
№ 3	KPOK1 2021
Topic	Tuberculosis
task text	A 40-years-old man has died of pulmonary hemorrhage. In the upper lobe of the right lung, autopsy shows a cavity 4 cm diameter with dense walls and uneven inner surface. The cavity contains blood clots. Microscopy detects disintegrating leukocytes in the inner layer of the cavity wall and proliferations of epithelioid, lymphoid, and giant multinucleated cells with horseshoeshaped nuclei in the middle layer of the cavity wall. The observed changes in the lung are characteristic of a:
correct answer	Tuberculous cavity
B	Pulmonary infarction with septic breakdown
C	Congenital cyst
D	Bronchiectatic cavity
E	Lung abscess
№ 4	KPOK1 2021

Topic	intestinal infections
task text	Autopsy of the body revealed waxy degeneration of the rectus abdominis muscles. In the terminal segment of the small intestine there are ulcers 3-5 cm in diameter. The ulcer walls are covered in a crumbling gray-yellow substance. The ulcer edges are moderately raised above the mucosa. Widal test is positive. Make the diagnosis:
correct answer	Typhoid fever
B	Relapsing fever
C	Nonspecific ulcerative colitis
D	Crohn`s disease
E	Dysentery
№ 5	KPOK1 2021
Topic	Raspiratory diseases
task text	Autopsy of the body of a 42-year-old man, who had chronic diffuse bronchitis and died of cardiopulmonary failure, shows large hyperinflated lungs that cover the mediastinum with their edges. The lungs do not deflate, are pale gray, emit cracking sound when cut. Pressing a finger to the surface of the lungs leaves an indentation. Bronchial lumen produces mucopurulent exudate. Make the diagnosis:
correct answer	Chronic diffuse obstructive pulmonary emphysema
B	Chronic focal emphysema
C	Vicarious compensatory emphysema
D	Primary idiopathic emphysema
E	Interstitial emphysema
№ 6	KPOK1 2021
Topic	Childhood infections
task text	An 8-year-old child had an acute onset of the disease. The death occurred two days after the onset. On the basal surface of the brain, autopsy shows acutely plethoric soft meninges that are soaked through with thick and turbid yellow-green exudate. Brain tissues are edematous. Make the diagnosis:
correct answer	Meningococcal infection
B	Diphtheria
C	Measles
D	Pertussis
E	Scarlet fever
№ 7	KPOK1 2021
Topic	Syphilis

task text	A 14-year-old boy was diagnosed with Hutchinson's triad: barrel-shaped teeth, parenchymatous keratitis, and deafness. These signs are characteristic of:
correct answer	Syphilis
C	Tuberculosis
D	Toxoplasmosis
E	Leprosy
№ 8	Opisthorchiasis
Topic	Diseases of kidney
task text	Autopsy of the body of a 40- year-old woman, who died of uremia, shows enlarged variegated kidneys. In the kidneys, the glomerular capillary membranes are thickened and resemble «wire loops»; there are foci of fibrinoid necrosis in their walls and hyaline thrombi in their lumina. In the nuclei, there are hematoxylin bodies. In the heart, Libman- Sacks endocarditis is observed. What renal disorder is the most likely in this case?
correct answer	Terminal glomerulonephritis
B	Cholera glomerulonephritis
C	Sclerotic kidney
D	Rheumatic glomerulonephritis
E	Lupus nephritis
№ 9	KPOK1 2021
Topic	Embolism. Thrombosis
task text	Autopsy of the body of a person, who died after an abdominal surgery, revealed numerous thrombi in the veins of the lesser pelvis. Clinically, thromboembolism syndrome was registered. Where should the pathologist search for thromboembolus?
correct answer	Pulmonary arteries
B	Lower limb veins
C	Brain
D	Portal vein
E	Left ventricle of the heart
№ 10	KPOK1 2021
Topic	Embolism. Thrombosis
task text	After an open scapular fracture, a man suddenly died. Early autopsy detects frothy blood in the right ventricle and pulmonary arteries. What was the cause of death in this case?
correct answer	Air embolism

B	Pulmonary edema
C	Bacterial embolism
D	Fat embolism
E	Tissue embolism
№ 11	KPOK1 2021
Topic	Syphilis
task text	A patient, who for a long time was suffering from rheumatism and had mitral stenosis, died of cardiopulmonary failure. Autopsy revealed brown induration of the lungs. What circulatory disorder leads to such changes in the lungs?
correct answer	Chronic left ventricular failure
B	Portal hypertension
C	Acute right ventricular failure
D	Chronic right ventricular failure
E	Acute left ventricular failure
№ 12	KPOK1 2021
Topic	mixed degeneration
task text	A man for a long time was suffering from hemoblastosis. Autopsy of the body revealed brown color of the bone marrow, spleen, liver, and lymph nodes. Peris histochemical reaction was performed. It was determined that reticular, endothelial, and histiocytic elements of the affected organs contain blue granules. What pigment was detected uMng the Peris histochemical reaction?
correct answer	Hemosiderin
B	Bilirubin
C	Hematoporphrin
D	Hematoidin
E	-
№ 13	KPOK1 2021
Topic	Viral infections
task text	A man had an acute onset of the disease. He complained of chills, fever of 40°C, headache, cough, and dyspnea. The man died on the 5 day after the onset. Autopsy shows enlarged lungs with variegated appearance - "large variegated lung". Such clinical presentation of the lungs is characteristic of the following disease:
correct answer	Influenza
B	Adenovirus infection
C	Croupous pneumonia
D	Bronchiectasis

E	Respiratory syncytial infection
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