

№	krok 2017
topic	Pathomorphology of the immune system. Reactions and mechanisms of hypersensitivity. The autoimmune disease. Immunodeficiency States.
task	After anaesthetic application during tooth extraction the patient developed marked soft tissue edema of the upper and lower jaw, skin rash on the face, reddening, and itching. What pathological process results in such reaction to the anaesthetic?
correct answer	Allergy
B	Toxic action of a drug
C	Inflammation
D	Circulatory deficiency
E	Disturbed lymph drainage
№	krok 2017
topic	pulp and periapical tissue diseases
task	Histological investigation of an extracted tooth revealed presence of necrotic detritus with fatty acid crystals and numerous microbe colonies in the pulp chamber. What diagnosis is the most likely?
correct answer	Pulp gangrene
B	Chronic pulpitis
C	Complicated chronic pulpitis
D	Serous pulpitis
E	Purulent pulpitis
№	krok 2017, 2016
topic	Tuberculosis
task	Autopsy of a man with tuberculosis has 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 2017

topic	Damage and death of cells and tissues. Necrosis and apoptosis. Pathological anatomy organ failure. Foundations of thanatology. Death, definition, signs of death.
task	Histological investigation of renal biopsy material taken from a patient with tuberculosis has revealed chaotically located chromatin granules in the focus of caseous necrosis. These changes are the result of:
correct answer	Karyorrhexis
B	Karyolysis
C	Karyopyknosis
D	Mitotic activity of nuclei
E	Apoptosis
№	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 35-year-old woman is diagnosed with faucial diphtheria. The patient died with signs of acute heart failure. On autopsy: heart cavities are enlarged in the diameter, heart muscle is dull, flaccid, striped on section, with yellowish areas under the endocardium. What type of degeneration was detected in cardiac hystiocytes?
correct answer	Fatty
B	Carbohydrate
C	Ballooning
D	Hyaline droplet
E	Hydropic
№	krok 2017
topic	Pathomorphology of the immune system. Reactions and mechanisms of hypersensitivity. The autoimmune disease. Immunodeficiency States.
task	Often the cause of secondary immunodeficiency is an infectious affection of an organism, when agents reproduce directly in the cells of immune system and destroy them. Specify the diseases, during which the described above occurs:
correct answer	Infectious mononucleosis, AIDS
B	Tuberculosis, mycobacteriosis
C	Poliomyelitis, viral hepatitis type A
D	Dysentery, cholera
E	Q fever, typhus

№	krok 2017
topic	Circulatory disorders: hyperemia, ischemia, infarction, hemorrhage, hemorrhage, stasis, plasturgie. Shock. Violation of lymph circulation.
task	During development of a frostbite the exposed skin becomes pale and its temperature drops. What mechanism is the basis of these developments?
correct answer	Reflex vasoconstriction
B	Dermal and subcutaneous vasodilatation
C	Visceral vasoconstriction
D	Decreased heart rate
E	Closure of arteriovenous anastomoses
№	krok 2017
topic	Kidney Disease.
task	After an abortion a 25-year-old woman developed oliguria, anuria, and increasing azotemia. The patient died of acute renal failure. Autopsy revealed degeneration and necrosis of the convoluted renal tubules epithelium. What disease was the cause of death in this case?
correct answer	Acute necrotizing nephrosis
B	Acute pyelonephritis
C	Chronic glomerulonephritis
D	Renal amyloidosis
E	Rapidly progressive glomerulonephritis
№	krok 2017
topic	Diseases of paradont
task	During examination of the oral cavity at the vestibular surface of the lower right incisor there was detected a rounded growth on the thin pedicle. Histologically: in the connective tissue there are numerous thin-walled sinusoids, hemorrhage areas, hemosiderin foci, and giant cells resembling osteoclasts. Make the diagnosis:
correct answer	Giant cell epulis
B	Granular cell ameloblastoma
C	Angiomatous epulis
D	Gingival fibromatosis
E	Cavernous hemangioma
№	krok 2017

topic	Diseases of hard tooth tissues
task	During examination a dentist noticed bowl-shaped defects on the frontal surface of the patient's canines in the cervical area. Microscopically the pulp is covered with compacted dentin, slightly atrophied and sclerosed. What pathological process occurs in the patient?
correct answer	Cuneiform defects
B	Superficial caries
C	Median caries
D	Stage of chalky white spots
E	Deep caries
№	krok 2017
topic	Diseases of hard tooth tissues
task	During teeth examination on the lateral surface of the first upper molar there was detected a cone-shaped carious cavity with base oriented towards the tooth surface and apex - towards the tooth center. Softened dentin is visible at the floor of the carious cavity. Make the diagnosis:
correct answer	Dentin caries
B	Enamel caries
C	Cement caries
D	Tooth erosion
E	-
№	krok 2017
topic	Diseases of paradont
task	After restoration of maxillary incisors with artificial crowns a 44-year-old woman was found to have a brownish growth in the form of a node 15 mm in diameter. Histological study revealed that under the stratified squamous epithelium of the gingiva there was a connective tissue mass with numerous sinusoidal vessels, oval-shaped mononuclear cells forming osteoid substance, and polynuclear giant cells that destroyed the alveolar ridge of the upper jaw. What is the most likely diagnosis?
correct answer	Giant cell epulis
B	Fibromatous epulis
C	Angiomatous epulis
D	Gingival fibromatosis
E	Eosinophilic granuloma
№	krok 2017

topic	Liver Disease
task	Preventative examination of a 55-year-old patient revealed type II diabetes mellitus. An endocrinologist detected an increase in body weight and liver enlargement. The man is a nonsmoker and does not abuse alcohol but likes to have a "hearty meal". Histological examination by means of diagnostic liver puncture revealed that the hepatocytes were enlarged mostly on the lobule periphery, their cytoplasm had transparent vacuoles that reacted positively with sudan III. What liver pathology was revealed?
correct answer	Fatty hepatitis
B	Acute viral hepatitis
C	Chronic viral hepatitis
D	Alcohol hepatitis
E	Portal liver cirrhosis
№	krok 2017
topic	Nomenclature and morphological features of tumors from epithelium.
task	On microscopic examination of a surgical biopsy material (part of the lip with an ulcer) near the ulcer margins and under the ulcer floor in the connective tissue of mucosa there are epithelial complexes composed of atypical stratified epithelium with pathological mitotic figures. Within these complexes there are accumulations of bright pink concentric formations. What pathology is it?
correct answer	Squamous cell keratinous carcinoma
B	Squamous cell nonkeratinous carcinoma
C	Papilloma
D	Transitional cell carcinoma
E	Basal cell carcinoma
№	krok 2017
topic	quarantine infections
task	A worker of a cattle farm consulted a surgeon about fever up to 40° C, headache, weakness. Objective examination of his back revealed hyperemia and a dark red infiltration up to 5 cm in diameter with black bottom in its center, which was surrounded with pustules. What disease are these presentations typical of?
correct answer	Anthrax
B	Plague
C	Tularemia
D	Furuncle
E	Abscess
№	krok 2017

topic	Atherosclerosis and arteriosclerosis. Coronary heart disease.
task	The autopsy of a 37-year-old man has revealed the following: in the aorta on the smooth glossy ivorycolored intima there are yellowish-gray spots blending with each other, which form stripes that do not protrude from the intima surface. Microscopy reveals swelling and destruction of elastic membranes, diffuse impregnation of aortic wall with orange granules (if stained with Sudan III), orange coloring of macrophage cytoplasm and nonstriated muscle elements. Specify this process:
correct answer	Lipoidosis of the aorta
B	Liposclerosis of the aorta
C	Atheromatosis of the aorta
D	Atherocalcinosis of the aorta
E	Imbibition of the aorta with cadmium salts
№	krok 2017, 2014
topic	Nomenclature and morphological features of tumors from epithelium.
task	A 69-year-old patient developed a small plaque with subsequent ulceration on the skin of the lower eyelid. The formation was removed. Microscopic examination of dermis revealed complexes of atypical epithelial cells arranged perpendicularly to the basal membrane on the periphery. The cells were dark, of polygonal prismatic shape, and had hyperchromic nuclei with frequent mitoses. What is the histological form of carcinoma in this patient?
correct answer	Basal cell carcinoma
B	Keratinizing squamous cell carcinoma
C	Nonkeratinizing squamous cell carcinoma
D	Adenocarcinoma
E	Undifferentiated carcinoma
№	krok 2017
topic	Circulatory disorders: hyperemia, ischemia, infarction, hemorrhage, hemorrhage, stasis, plasturgie. Shock. Violation of lymph circulation.
task	A 68-year-old man, who had been suffering from essential hypertension for a long time, was delivered to a resuscitation unit with hemiplegia. The patient died after 7 hours. On autopsy: in the right cerebral hemisphere there is a cavity 5x5 cm in size with uneven margins, filled with dark red blood clots. What cerebral circulation disorder developed in the patient?
correct answer	Hematoma
B	Hemorrhagic infiltration
C	Thrombosis
D	Petechial hemorrhage

E	Local venous hyperemia
№	krok 2017
topic	diseases of the pulp and periapical tissues of the tooth
task	A 33-year-old man has a cystic growth connected to the 2nd molar of the lower jaw. Within the cystic cavity there is a rudimentary tooth. On microscopy: inner cystic surface is covered with stratified squamous epithelium, there are groups of mucin-producing cells. What diagnosis is the most likely?
correct answer	Follicular cyst
B	Periodontitis
C	Primordial cyst
D	Radicular cyst
E	Follicular ameloblastoma
№	krok 2017
topic	diseases of hard tooth tissues
task	The autopsy of a 45-year-old man, who worked in organic acids production and died from uremia, has revealed reduced and completely destroyed crowns of the upper and lower incisors. Microscopy detects destruction of dentin and enamel, the pulp is covered with dense replacing dentin. What pathological process occurred in the teeth in this case?
correct answer	Necrosis of the hard tooth tissues
B	Fluorosis
C	Teeth erosion
D	Cuneiform defects
E	Hypercementosis
№	krok 2017
topic	General doctrine of inflammation. Exudative inflammation. The morphology of exudative inflammation
task	Autopsy of a 58-year-old man, who had been suffering from rheumatic heart disease and died of cardiopulmonary decompensation, revealed gray diffuse film- and fiber-shaped coating in his pericardium. What type of inflammation is characteristic of this pericarditis?
correct answer	Croupous fibrinous
B	Serous
C	Hemorrhagic
D	Diphtheritic fibrinous
E	Suppurative
№	krok 2017

topic	Sepsis. Syphilis.
task	During examination of the patient's oral cavity a dentist noticed deformation of the teeth and a crescent indentation on the upper right incisor. The teeth are undersized, barrel-shaped - tooth cervix is wider than its edge. The patient uses a hearing aid, suffers from visual impairment. What type of syphilis affects teeth in such a way?
correct answer	Late congenital
B	Primary
C	Early congenital
D	Secondary
E	Neurosyphilis
№	krok 2017
topic	Sepsis. Syphilis.
task	Autopsy of a 45-year-old man revealed the following: wrinkled shagreenresembling intima in the ascending aorta; elastic staining is negative. Wall of the left ventricle is up to 1,5 cm in width; no myocardial alterations. Specify the most probable disease of the aorta:
correct answer	Syphilitic mesaortitis
B	Atherosclerosis of the aorta
C	Rheumatic vasculitis
D	Aortic failure
E	-
№	krok 2017
topic	tuberculosis
task	A patient has developed a painful sore with soft ragged edges in the oral cavity. Microscopically there is lymphocytic infiltration with epithelioid and giant multinucleate Langhans cells in the sore floor. What diagnosis is the most likely?
correct answer	Tuberculosis
B	Syphilis
C	Ulcerative stomatitis (Vincent's stomatitis)
D	Ulcer-cancer
E	Gangrenous stomatitis
№	krok 2017
topic	

task	The autopsy of the body of a man, who suffered from toxic diphtheria and died on the 9th day from the onset of disease with signs of cardiac decompensation, has revealed the following: dilated cardiac cavities, dull flaccid myocardium, myocardial section is variegated. Microscopy revealed fatty degeneration of cardiac hystiocytes, large foci of myocytolysis, stromal edema with scant lymphocytic and macrophageal infiltration. Specify the type of myocarditis in this case:
correct answer	Alterative
B	Granulomatous
C	Focal intermediate exudative
D	Septic
E	Interstitial
№	krok 2017
topic	endocardial and myocardial diseases
task	A patient has developed a grayish-white dense protruding focus on the oral mucosa. Histologically there are hyperkeratosis, parakeratosis, and acanthosis of epithelium with lymphocytic and plasmocytic infiltration of underlying connective tissue in this area. What pathology has developed in the oral mucosa?
correct answer	Leukoplakia
B	Hyalinosis
C	Leukoderma
D	Local tumor-like amyloidosis
E	-
№	krok 2016
topic	Pathomorphology of the immune system. Reactions and mechanisms of hypersensitivity. The autoimmune disease. Immunodeficiency States.
task	Histological investigation of a 40-year-old man's thymus revealed the following: decreased part of parenchymatous elements, increased part of adipose and loose connective tissues, high concentration of thymic bodies with total organ weight remaining the same. Name this phenomenon:
correct answer	Age-related thymic involution
B	Accidental thymic involution
C	Thymic hypotrophy
D	Thymic dystrophy
E	Thymic atrophy
№	krok 2016

topic	
task	Microscopy of an extracted tooth has revealed a focus of enamel destruction at the dentinoenamel junction. Within this focus accumulation of microorganisms occurs; calcium salts disappear from enamel columns; intercolumn substance and enamel columns are partially destroyed. What diagnosis is the most likely?
correct answer	Superficial caries
B	Median caries
C	Deep caries
D	Fluorosis
E	Cemental caries
№	krok 2016, 2013
topic	diseases of hard tooth tissues
task	A patient with a long history of chronic periodontitis underwent removal of a maxillary cyst located at the root of the affected tooth. Microscopy shows that the bone wall is made up of fibrous tissue infiltrated by lymphocytes and plasma cells. The inner surface of the cyst is covered with stratified squamous epithelium with no signs of keratinization. What is the most likely diagnosis?
correct answer	Radicular cyst
B	Follicular cyst
C	Primordial cyst
D	Eosinophilic granuloma
E	Gingival fibromatosis
№	krok 2016, 2015
topic	Infectious and parasitic diseases. Characterization of the infectious process. Intestinal infectious diseases.
task	An autopsy of the body of an elderly man, who was suffering from acute intestinal disorder during his last 2 weeks of life, has revealed the following change in the rectum and sigmoid colon: brown and green film covering the mucosa is detected. The intestinal wall is thickened; the cavity sharply narrows down. Microscopy reveals mucosa necrosis of varying depth, necrotic tissue is pierced through with fibrin threads, leucocytic infiltration is observed. What diagnosis is the most probable?
correct answer	Fibrinous colitis
B	Catharrhal colon
C	Ulcerative colitis
D	Follicular colitis
E	-
№	krok 2016, 2012, 2008

topic	Diseases of the respiratory system.
task	Macroscopic examination of lung tissue revealed areas of high airiness with small bubbles. Histological examination revealed thinning and rupture of alveolar septa accompanied by formation of large diversiform cavities. What disease was revealed in the lung?
correct answer	Pulmonary emphysema
B	Multiple bronchiectasis
C	Cavernous tuberculosis
D	Chronic bronchitis
E	Fibrosing alveolitis
№	krok 2016, 2015, 2014
topic	Violation of hemostasis. Thrombosis, disseminated intravascular coagulation. Embolism.
task	A 28-year-old patient had been diagnosed with multifragmental fracture of the right hip. On the third day after the injury he began to complain of pain in the right side of the chest, difficult respiration. One day later the patient died of progressive heart and respiratory failure. Histological study of the pulmonary and cerebral blood vessels revealed orange sudanophilic droplets that completely obstructed the vessels of microvasculature. What complication caused the death of the patient?
correct answer	Fat embolism
B	Gas embolism
C	Drug-induced embolism
D	Microbial embolism
E	Thromboembolism
№	krok 2016, 2012, 2007
topic	
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 2016
topic	Kidney Disease.

task	A 50-year-old patient has been referred for treatment of neck lymphadenitis. His individual penicillin sensitivity was tested. In 30 seconds fullbody fever raised in the patient and his arterial blood pressure dropped to 0 mm Hg followed by cardiac arrest. Resuscitation was unsuccessful. Autopsy revealed acute venous hyperemia of viscera. Histological study revealed mast cells (tissue basocytes) degranulation in the skin (at the area of injections), myocardium and lungs. What kind of hypersensitivity reaction occurred in the patient?
correct answer	Anaphylactic
B	Delayed-type hypersensitivity
C	Complement-mediated cytotoxic
D	Immune complex-mediated
E	-
№	krok 2016
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 78-year-old patient suffering from atherosclerosis has been delivered to a surgical ward with signs of acute abdomen. Laparoscopy revealed blackened and flaccid small intestine loops; demarcation line is not clear. Diagnose the changes that occurred in the patient's small intestine:
correct answer	Hemorrhagic infarction complicated with humid gangrene
B	Hemorrhagic infarction complicated with dry gangrene
C	Ischemic stroke complicated with humid gangrene
D	Ischemic stroke complicated with dry gangrene
E	-
№	krok 2016, 2014
topic	The General doctrine about the tumors. Morphological features of tumor tissues derived mesenchyme.
task	Examination of a 29-year-old patient revealed a dense, immobile, ill-defined tumor-like formation in the lower jaw. The overlying mucosa was pale. Biopsy of the neoplasm revealed osteoid structures lined with atypical osteoblasts; numerous pathologic mitotic figures; a great number of thin-walled vessels. What is the most likely diagnosis?
correct answer	Osteosarcoma
B	Osteoblastoclastoma
C	Exacerbation of chronic osteomyelitis
D	Ameloblastoma
E	Primary jaw carcinoma

№	krok 2016, 2014
topic	Nomenclature and morphological features of tumors from epithelium.
task	Microscopic examination of a skin tumor revealed that it invaded the underlying tissue, destroyed it and formed nests and cords of atypical epithelium, which include pearl-like formations. Specify the tumor:
correct answer	Keratinizing squamous cell carcinoma
B	Squamous cell non-keratinizing carcinoma
C	Solid carcinoma
D	Adenocarcinoma
E	Medullary carcinoma
№	krok 2016
topic	Morphology of reversible and irreversible damage of cells and tissues. Intracellular accumulation of proteins, carbohydrates and lipids.
task	Histological examination of the myocardium of a 47-year-old patient with rheumatic heart disease (section material) revealed big visually empty vacuoles within the cardiomyocytes. They turn black, when stained with osmic acid, and yellow-red, when stained with sudan III. What pathological process is it?
correct answer	Adipose degeneration
B	Hyaline droplet degeneration
C	Hydropic degeneration
D	Carbohydrate degeneration
E	Dysproteinosis
№	krok 2016, 2014
topic	periodontal disease
task	A 38-year-old woman complains of bleeding gums, halitosis, exposure of tooth necks. Objectively: the patient has gingivitis, plaque and tartar. Inflammation involves the alveolar part of gingiva with dental pockets. The bone tissue exhibits signs of bone resorption. What pathology does the patient have?
correct answer	Parodontitis
B	Periostitis
C	Periodontitis
D	Gingivitis
E	-
№	krok 2016, 2013

topic	periodontal disease
task	Vestibular surface of the left lower incisor has a pink fungoid formation up to 2 cm large, which is fixed to the supraalveolar tissue by a wide pedicle. Histological examination revealed branched capillary vessels with multiple hemorrhages and foci of hemosiderosis. What is the most likely diagnosis?
correct answer	Angiomatous epulis
B	Fibrous epulis
C	Giant cell epulis
D	Gingival fibromatosis
E	Cavernous hemangioma
№	krok 2016
topic	Circulatory disorders: hyperemia, ischemia, infarction, hemorrhage, hemorrhage, stasis, plasturgie. Shock. Violation of lymph circulation.
task	A woman suffering from essential hypertension had suddenly lost consciousness; she was delivered to a resuscitation unit in a comatose state with the diagnosis of disturbed cerebral circulation. The patient died one day after her hospitalization. Autopsy revealed a cavity in the left hemisphere of the brain. The cavity is 5x4 cm in size and filled with blood clots and liquid blood. What hemorrhage is it according to the mechanism of its origin?
correct answer	Hemorrhage caused by vessel rupture
B	Hemorrhage caused by vessel erosion
C	Diapedetic hemorrhage
D	Hemorrhagic extravasation
E	Petechial hemorrhage
№	krok 2016
topic	Tuberculosis
task	Autopsy of a young man revealed lung cavities with inner walls made up of granulation tissue of varying degree of maturity, pronounced pneumosclerosis and bronchiectasis. Some cavities had caseation areas. What is your presumptive diagnosis?
correct answer	Fibrous cavernous tuberculosis
B	Infiltrative tuberculosis
C	Caseous pneumonia
D	Acute cavernous tuberculosis
E	Bronchiectasis
№	krok 2016

topic	Morphology of reversible and irreversible damage of cells and tissues. Extracellular accumulation of proteins, carbohydrates and lipids.
task	An autopsy is performed on the body of a 58-year-old woman, who suffered from diabetes mellitus. On histological examination of kidneys the following was revealed: segmental homogenous oxyphilic deposits are detected in the glomerules; arteriole walls are diffusely thickened, homogenous, oxyphilic. Diagnose the morphologic changes that occurred in the renal glomerules and vessels:
correct answer	Hyalinosis
B	Hyaline droplet degeneration
C	Amyloidosis
D	Mucoid degeneration
E	Fibrinoid degeneration
№	krok 2016
topic	Pathomorphology of the immune system. Reactions and mechanisms of hypersensitivity. The autoimmune disease. Immunodeficiency States.
task	A patient has been administered conduction anesthesia with novocaine in preparation for tooth extraction. After the anesthesia administration the patient developed swelling and hyperemy around the injection site, skin itch, general fatigue, motor agitation. Name the developed complication:
correct answer	Allergy
B	Idiosyncrasy
C	Tachyphylaxis
D	Drug dependence
E	Inflammation
№	krok 2016, 2013
topic	Atherosclerosis and arteriosclerosis. Coronary heart disease.
task	A 65-year-old patient had been treated for 3 days in a resuscitation unit for a cardiac pathology. Suddenly he developed ventricular fibrillation that became the immediate cause of death of this patient. Microscopy of the left ventricular myocardium revealed a large focus of cardiomyocyte karyolysis demarcated by the zone of hyperaemia. What cardiac pathology was the cause of death?
correct answer	Acute myocardial infarction
B	Ischemic myocardial degeneration
C	Acute myocarditis
D	Diffuse cardiosclerosis
E	Postinfarction cardiosclerosis

№	krok 2016
topic	diseases of the pulp and periapical tissues of the tooth
task	Microscopy of an extracted tooth has revealed the following: odontoblasts and pulpocytes are decreased in size and number; thickened connective fibers of the pulp are stretched between the cells that remain. What general pathological process is likely to be occurring in the tooth pulp?
correct answer	Atrophy
B	Adipose degeneration
C	Amyloidosis
D	Local hyalinosis
E	Local hemosiderosis
№	krok 2016
topic	Diseases of the respiratory system.
task	Microscopy of an autopsy material sampled from lungs has revealed that alveolar lumen is filled with exudate consisting mostly of erythrocytes. What type of pneumonia is the most likely to be the cause?
correct answer	Influenza virus pneumonia
B	Typhoid pneumonia
C	Measles pneumonia
D	Staphylococcal pneumonia
E	Pneumococcal pneumonia
№	krok 2016
topic	Infectious and parasitic diseases. Characterization of the infectious process. Intestinal infectious diseases.
task	Autopsy of the body of a 46-year-old man, who had been suffering from typhoid fever and died of intestinal hemorrhage, has revealed sequestration areas, tissue rejection in the areas of lymphoid follicle clusters. What stage of typhoid fever is it?
correct answer	Dirty ulcers
B	Healing
C	Clean ulcers
D	Brain-like swelling of the follicles
E	Necrosis
№	krok 2016
topic	Systemic connective tissue disease with autoimmunization.

task	During autopsy of the body of a patient, who had died due to heart failure, the following has been detected: myogenic dilatation of the heart left ventricle, microfocal cardiosclerosis, vasculitis, Aschoff bodies with disorganization of connective tissue, myocardosis. Make the diagnosis:
correct answer	Rheumatic productive myocarditis
B	Rheumatic exudative myocarditis
C	Cardiac infarction
D	Systemic lupus erythematosus
E	Myocardial ischemic dystrophy
№	krok 2016
topic	Pathomorphology of the immune system. Reactions and mechanisms of hypersensitivity. The autoimmune disease. Immunodeficiency States.
task	A 30-year-old man addressed a doctor with complaints of enlarged submandibular lymph nodes. Anamnesis states that the patient previously had been treated for acute apical periodontitis of the 36th and 46th teeth. Histologically the following could be detected in the removed lymph node: hyperemia, edema, increased amount of plasmocytes and plasmablasts in the medullary area and germinal centers of follicles. What can cause such changes in lymph nodes?
correct answer	Antigenic stimulation
B	Immunodeficiency state
C	Metastasis of a malignant tumor
D	Granulomatous inflammation
E	Lymphoma
№	krok 2016
topic	For pituitary disease. Diabetes mellitus. Diseases of the thyroid gland. Diseases of the adrenal glands.
task	A 35-year-old woman complains of swollen neck. Subtotal thyreoidectomy is performed. On histological examination of the removed part of the thyroid gland the following was detected: atrophy of parenchyma, moderate sclerosis development, duffuse infiltration by lymphocytes and plasma cells leading to formation of lymphatic follicles. What pathology has developed in the thyroid gland?
correct answer	Hashimoto's thyroiditis
B	Follicular adenoma
C	Riedel's thyroiditis
D	Papillary carcinoma of the thyroid gland
E	Diffuse toxic goiter
№	krok 2016

topic	Leukemias (leukemia) and lymphomas.
task	A 12-year-old patient suffering from acute leukemia presents with fever up to 39, 8° C, acute pain in the throat. Examination of the oral cavity has revealed swollen tonsils, their surface is covered in deep lesions with uneven margins, numerous petechial hemorrhages in the pharyngeal mucosa and around the tonsils. Determine the type of tonsillitis that complicates the disease progress in this case:
correct answer	Necrotic
B	Catarrhal
C	Fibrinous
D	Lacunar
E	Purulent
№	krok 2015
topic	General doctrine of inflammation. Exudative inflammation. The morphology of exudative inflammation
task	A 7-year-old child suffers from acute disease. A pediatrician observed the following during examination: pharynx mucosa is hyperemic, edematous, swollen, covered with large amount of mucus. Buccal mucosa has whitish discoloured spots. On the next day the child came out in rash with large spots covering the skin of his face, neck and torso. What kind of inflammation causes changes in pharynx mucosa?
correct answer	Catarrhal
B	Serous
C	Serofibrinous
D	Fibrinous
E	Hemorrhagic
№	krok 2015, 2013
topic	periodontal disease
task	Histological examination of the grayish-pink elastic nodule of 0,3 cm in diameter found by a surgeon at the root of the extracted tooth shows granulation tissue with cords of stratified squamous epithelium. What is the most likely diagnosis?
correct answer	Granulomatous periodontitis
B	Eosinophilic granuloma
C	Granulating pulpitis
D	Acute apical periodontitis
E	Granulating periodontitis
№	krok 2015, 2012
topic	Leukemias (leukemia) and lymphomas.

task	Histological examination of a lymph node removed from the posterior triangle of neck of an 18-year-old patient revealed some cell agglomerations that included single multinuclear Reed-Sternberg cells, major Hodgkin's cells, minor Hodgkin's cells and many lymphocytes, single plasmatic cells, eosinophils. What is the most likely diagnosis?
correct answer	Lymphogranulomatosis
B	Nodular lymphoma
C	Burkitts tumour
D	Lymphocytic lymphoma
E	Chronic lymphoid leukosis
№	krok 2015, 2013
topic	Infectious and parasitic diseases. Characterization of the infectious process. Intestinal infectious diseases.
task	Autopsy of a man who died from intractable hemorrhage revealed necrosis of grouped and solitary follicles, dead tissues imbued with bile and blood in the ileum; sequestration and rejection of necrotic masses with defect formation in the lower segment of the intestine. Which of the following diagnoses is most likely?
correct answer	Typhoid fever, ulcerative stage
B	Typhoid fever, "clean ulcer" stage
C	Typhoid fever, necrosis stage
D	Abdominal typhoid salmonellosis
E	Crohn's disease
№	krok 2015
topic	Morphology of reversible and irreversible damage of cells and tissues. Intracellular accumulation of proteins, carbohydrates and lipids.
task	A female patient with heavy poisoning caused by sepsis has died. "Tiger heart" was revealed during autopsy. Microscopic investigation allowed to detect lipids in the cardiac myocytes cytoplasm. What morphogenetic development mechanism is the main cause of this kind of dystrophy?
correct answer	Decomposition
B	infiltration
C	Transformation
D	Pathological synthesis
E	-
№	krok 2015
topic	diseases of the lips, tongue and soft tissues of the oral cavity

task	A patient, who works as a milkmaid, has made an appointment with a dentist with complaints of aphtha-shaped rash on the mucosa of oral cavity. The doctor detected rash on her hands in the area of nail plates. What agent causes this disease?
correct answer	Foot-and-mouth disease virus
B	Cytomegalovirus
C	Vesicular stomatitis virus
D	Herpesvirus
E	Coxsackie B virus
№	krok 2015, 2014
topic	Kidney Disease.
task	A 53-year-old patient with a long history of nephrolithiasis underwent nephrectomy. The kidney looks as a thin-walled sac filled with urine. Renal parenchyma is atrophied. Specify this complication of nephrolithiasis:
correct answer	Hydronephrosis
B	Pyelonephritis
C	Pyonephrosis
D	Multicystic kidney disease
E	Nephrosclerosis
№	krok 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 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 2015
topic	Atherosclerosis and arteriosclerosis. Coronary heart disease.
task	A 67-year-old patient has atherosclerosis of cardiac and cerebral vessels. Examination revealed hyperlipidemia. What class of blood plasma lipoproteids is most important in atherosclerosis pathogenesis?
correct answer	Low-density lipoproteids

B	Chylomicrons
C	α -lipoproteids
D	High-density lipoproteids
E	-
№	krok 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 25-year-old woman has died when giving birth. The histological study of her kidneys has revealed the following in the epithelium of nephron tubules: condensation of nucleus chromatin, nuclei breaking down into lumps, and lysis, along with plasmorrhaxis and cytolysis. What pathologic process was revealed in the epithelium of kidney tubules?
correct answer	Necrosis
B	Hydropic degeneration
C	Amyloidosis
D	Fatty degeneration
E	Hyalinosis
№	krok 2015
topic	Pathomorphology of the immune system. Reactions and mechanisms of hypersensitivity. The autoimmune disease. Immunodeficiency States.
task	A 50-year-old patient has been referred for treatment of neck lymphadenitis. His individual penicillin sensitivity was tested. In 30 seconds fullbody fever raised in the patient and his arterial blood pressure dropped to 0 mm Hg, followed by cardiac arrest. Resuscitation was unsuccessful. Autopsy revealed acute venous hyperemia of viscera. Histological study revealed mast cells (tissue basocytes) degranulation in the skin (at the area of injections), myocardium and lungs. What kind of hypersensitivity reaction occurred in patient?
correct answer	Anaphylactic
B	Delayed-type hypersensitivity
C	Complement-mediated cytotoxic
D	Immune complex-mediated
E	-
№	krok 2015, 2013
topic	Nomenclature and morphological features of tumors from epithelium.

task	Examination of the oral mucosa revealed a small nodule with papillary surface. Histological examination revealed conjugate papillary proliferations of stratified squamous epithelium without cellular atypism and underlying stroma represented by thin-walled vessels and loose connective tissue. What formation has developed in a patient?
correct answer	Papilloma
B	Fibroma
C	Fibrolipoma
D	Epithelium hyperplasia
E	Basal cell carcinoma
№	krok 2015, 2014
topic	diseases of the lips, tongue and soft tissues of the oral cavity
task	A 9-year-old child has multiple lesions of the oral mucosa in form of small painful hyperemic sores with a white deposit in the center; enlarged and painful submandibular lymph nodes. Microscopic examination of the affected region revealed a superficial defect covered by fibrin; edematous and hyperemic submucosa with inflammatory infiltration. What is the most likely diagnosis?
correct answer	Aphthous stomatitis
B	Hypertrophic stomatitis
C	Herpetic stomatitis
D	Catarrhal gingivitis
E	-
№	krok 2015
topic	diseases of the lips, tongue and soft tissues of the oral cavity
task	An irregular-shaped dense grey and white focus has appeared on the patient's oral cavity mucosa, raising above mucosa surface. The patient considers it to be denture-caused damage of mucosa. Microscopy has revealed the following: hyperplasia, hyperkeratosis, parakeratosis, acanthosis of stratified epithelium of mucosa; underlying connective tissue has lymphoplasmacytic infiltration. What pathology is it?
correct answer	Leukoplakia
B	Candidosis
C	Ichthyosis
D	Syphilitic papula
E	Lupus erythematosus
№	krok 2015
topic	The General doctrine about the tumors. Morphological features of tumor tissues derived mesenchyme.

task	A rounded whitish-pink tumor node with diameter of 6 cm has been removed from uterine cavity. Microscopy revealed it to consist of chaotically arranged smooth muscle fibers with large amount of stroma threaded through with nerves and blood vessels. What diagnosis is most probable?
correct answer	Ffibromyoma
B	Granular cell (Abrikosov's) tumor
C	Desmoid
D	Hibernoma
E	Rhabdomyoma
№	krok 2015, 2013
topic	Viral airborne infection. HIV infection. Rabies.
task	A patient consulted an immunologist about diarrhea, weight loss within several months, low-grade fever, enlarged lymph nodes. The doctor suspected HIV infection. What immunocompetent cells must be studied in the first place?
correct answer	Helper T-lymphocytes
B	Suppressor T-lymphocytes
C	B-lymphocytes
D	Monocytes
E	Plasma cells
№	krok 2015, 2012
topic	Liver Disease
task	Preventive examination of a 55-year-old patient revealed type II diabetes mellitus. An endocrinologist revealed an increase in body weight and liver enlargement. The man is non-smoker and doesn't abuse alcohol but likes to have a good meal. Histological examination by means of diagnostic liver puncture revealed that the hepatocytes were enlarged mostly on the lobule periphery, their cytoplasm had transparent vacuoles showing positive reaction with sudan III. What liver pathology was revealed?
correct answer	Fatty hepatitis
B	Acute viral hepatitis
C	Chronic viral hepatitis
D	Alcohol hepatitis
E	Portal liver cirrhosis
№	krok 2015, 2014
topic	Atherosclerosis and arteriosclerosis. Coronary heart disease.

task	A 64-year-old male patient died with symptoms of acute cardiovascular failure. Autopsy results: the section of the anterior wall of the left ventricle showed a yellowish flaccid 1,5-2 cm focus surrounded by a reddish rim. The convoluted coronary arteries had lumen irregularly narrowed by 75%. The vessel intima was thickened, dense, covered with whitish plaques, crunched when cut. What disease can you think of?
correct answer	Acute myocardial infarction
B	Continuously recurrent myocardial infarction
C	Postinfarction cardiosclerosis
D	Microfocal cardiosclerosis
E	Recurrent myocardial infarction
№	krok 2015, 2013
topic	Systemic connective tissue disease with autoimmunization.
task	Postmortem examination of a patient with a long history of rheumatism revealed thickening and shortening of the mitral valve leaflets with abundant thrombotic deposits. Histological examination of the valve leaflets confirmed sclerosis and revealed multiple foci of connective tissue disorganization in form of mucoid and fibrinoid swelling, as well as deendothelization foci. Endothelium defects were covered with thrombotic deposits of 1-2 mm. What type of valvular endocarditis is the case?
correct answer	Recurrent verrucous endocarditis
B	Acute verrucous endocarditis
C	Fibroplastic endocarditis
D	Diffuse valvulitis
E	Polypousulcerative endocarditis
№	krok 2015, 2014
topic	children infection
task	Autopsy of a dead 6-year-old child revealed a marked edema of the soft tissues of neck and enlarged tonsils. Pharyngeal mucosa was covered with numerous dense whitish-yellow pellicles exposing deep ulcers after their removal. Histological examination of the pharyngeal mucosa revealed necrosis of the upper epithelial layers, impregnation of the mucous membrane with the fibrinous exudate and moderate leukocyte infiltration. What infectious disease caused the death of the child?
correct answer	Diphtheria
B	Parainfluenza
C	Scarlet fever
D	Whooping cough
E	Measles

№	krok 2015
topic	Tuberculosis
task	A patient was suffering from primary tuberculosis 5 years ago. Radiography has revealed a sharply marginated nodular shadow with diameter of 4 cm in the 2nd segment of the right lung. Focus was surgically removed. Histological study has revealed the following: the focus of caseous necrosis surrounded by the thick capsule of connective tissue. What kind of secondary tuberculosis has occurred in patient?
correct answer	Tuberculoma
B	Acute cavernous tuberculosis
C	Fibro-cavernous tuberculosis
D	Caseous pneumonia
E	Cirrhotic tuberculosis
№	krok 2015
topic	Diseases of the respiratory system.
task	An autopsy of the body of a 56-year-old man, who was suffering from secondary tuberculosis, has revealed large areas of sclerosis in the I-II segments of the right lung. Tissue surrounding affected areas is pale, soft, convex; crunches when cut; does not recede. Specify the changes occurring in the tissues surrounding sclerosis focus.
correct answer	Focal emphysema
B	Bronchiectasis
C	Pneumothorax
D	Atelectasis
E	Abscess
№	krok 2015
topic	children infection
task	There is a 7-year-old child with complains of cough, lacrimation, rhinitis, skin rash, photophobia and three-day-long fever as high as 38° C . Physical examination has revealed the following: conjunctivitis; bright red maculopapular rash covering the skin of face, neck and torso; hyperemic pharynx; serous purulent secretions from the nose; dry rales in the lungs. What is most probable diagnosis?
correct answer	Measles
B	Scarlet fever
C	Rubella
D	Adenovirus infection
E	Chicken pox

№	krok 2014
topic	jaw disease
task	Histologically, the internal wall of a maxillary cyst is lined with stratified squamous epithelium with underlying granulation tissue with infiltrating lymphocytes. The outer layer is represented by loose fibrous connective tissue surrounded by cicatrical fibrous tissue. What diagnosis can be made?
correct answer	Cystic granuloma
B	Simple granuloma
C	Epithelial granuloma
D	Keratocyst
E	Ameloblastoma
№	krok 2014
topic	The General doctrine about the tumors. Morphological features of tumor tissues derived mesenchyme.
task	Examination of a patient revealed a hard palate tumor in form of a small dense gray node without clear boundaries. Histological study of the tumor after its removal revealed the following peculiarities: the tumor was constituted by small cubic cells with hyperchromatic nucleus forming alveoli, trabeculae, solid and cribriform structures. The tumor growth could be characterized as invasive. Specify the tumor:
correct answer	Adenoid cystic carcinoma
B	Malignant pleomorphic adenoma
C	Mucoepidermoid carcinoma
D	Adenolymphoma
E	Monomorphic adenoma
№	krok 2014
topic	Leukemias (leukemia) and lymphomas.
task	A patient underwent radiography that revealed numerous smooth-walled roundish defects in both jaws. Histological study revealed osteolysis and osteoporosis accompanied by the phenomena of poor bone formation. The patient's urine contained Bence-Jones protein. What is the most likely diagnosis?
correct answer	Multiple myeloma
B	Chronic myelogenous leukemia
C	Chronic erythroleukemia
D	Acute myeloid leukemia
E	Acute undifferentiated leukemia

№	krok 2014
topic	Pathomorphology of the immune system. Reactions and mechanisms of hypersensitivity. The autoimmune disease. Immunodeficiency States.
task	During anesthesia of the oral mucosa a 37-year-old patient has had anaphylactic reaction (widespread vasodilation, increased vascular permeability with liquid exiting the blood vessels and penetrating in the tissues). What type of hypersensitivity reaction occurred in the patient?
correct answer	Type I (anaphylactic)
B	Type II (antibody-dependent)
C	Type III (immune complex)
D	Type IV (cell cytotoxicity)
E	Type V (granulomatosis)
№	krok 2014
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 36-year-old patient with a several year history of chronic pulpitis had undergone tooth extraction. Microscopic examination of the pulp revealed some deep-purple structureless areas which can be interpreted as:
correct answer	Dystrophic calcification
B	Metabolic calcification
C	Metastatic calcification
D	Lithiasis
E	Dental tartar
№	krok 2014, 2013
topic	Morphology of reversible and irreversible damage of cells and tissues. Extracellular accumulation of proteins, carbohydrates and lipids.
task	The surgically excised connective tissue of the deformed mitral valve gives a basophilic reaction when stained with hematoxylin and eosin. When stained with toluidine blue, it turns purple (metachromasia). What changes of the connective tissue can be detected by these reactions?
correct answer	Mucoid edema
B	Fibrinoid necrosis of connective tissue
C	Connective tissue edema
D	Petrification

E	Hyalinosis
№	krok 2014
topic	General doctrine of inflammation. Exudative inflammation. The morphology of exudative inflammation
task	A 31-year-old patient has deep caries of the fifth maxillary tooth on the right. Acute purulent inflammation in the region of the tooth apex has developed. There is marked edema with isolated neutrophils in the perifocal tissues and soft tissues of cheek and palate. Diagnose the pathologic process in the soft tissues of cheek and palate:
correct answer	Acute serous inflammation
B	Acute suppurative periodontitis
C	Acute suppurative periostitis
D	Phlegmon
E	-
№	krok 2014
topic	Sepsis. Syphilis.
task	Autopsy of a dead man with no fixed abode revealed the aneurysm of the ascending aorta. Microscopy of the middle tunica of aorta revealed lymphocytic inflammatory infiltrates, plasma cells, fibroblast cells with some Pirogov-Langhans cells, endovasculitis. What disease should be suspected?
correct answer	Syphilis
B	Atherosclerosis
C	Rheumatism
D	Essential hypertension
E	Tuberculosis
№	krok 2014
topic	The General doctrine about the tumors. Morphological features of tumor tissues derived mesenchyme.
task	A 12-year-old girl has a bleeding ulcer 5 mm in diameter which is localized on the mouth floor. The ulcer is surrounded by bright-red tissue that turns white when pressed. Microscopic examination of a biopsy sample reveals a tumor constituted by a number of large cavities filled with blood. The cavities are lined with endothelial cells. Between the cavities there is stroma represented by the loose connective tissue. What is the most likely diagnosis?
correct answer	Ulcerated cavernous hemangioma
B	Secondary rhabdomyosarcoma
C	Squamous cell non-keratinizing carcinoma
D	Osteoblastoclastoma

E	Ulcerated melanoma
№	krok 2014
topic	Viral airborne infection. HIV infection. Rabies.
task	A 47-year-old patient with symptoms of severe intoxication and respiratory failure died. A section of lung tissue had a mottled pattern with multiple small focal hemorrhages and foci of emphysema. Histological examination revealed hemorrhagic bronchopneumonia accompanied by abscess; the cytoplasm of bronchial epithelial cells had eosinophil and basophil inclusions. According to the section analysis, make your diagnosis:
correct answer	Influenza
B	Adenovirus infection
C	Parainfluenza
D	Respiratory syncytial
E	Staphylococcal bronchopneumonia
№	krok 2014
topic	Infectious and parasitic diseases. Characterization of the infectious process. Intestinal infectious diseases.
task	During an abdominal surgery a 46-year-old patient working at a meat processing plant was found to have a very dense roundish formation 11 cm in diameter which was localized in the right lobe of the liver. The cross-section of the formation has a porous appearance due to a large number of small vesicles with layers of dense connective tissue. The surrounding tissues have visible necrotic areas and proliferation of granulation tissue including many eosinophils and foreign body giant cells. What disease can be thought of in this case?
correct answer	Echinococcus multilocularis
B	Malaria
C	Hepatitis
D	Hepatic rhabdomyosarcoma
E	Calculous cholecystitis
№	krok 2014
topic	Diseases of the esophagus, stomach and intestines.
task	A 42-year-old patient with gastric ulcer has a disbalance between the aggressive and defensive factors. Which of the following factors contributes to the development of gastric ulcer?
correct answer	Helicobacter pylori
B	Mucin
C	Hydrocarbonate

D	Prostaglandin
E	Prostacyclin
№	krok 2014
topic	Morphology of reversible and irreversible damage of cells and tissues. Extracellular accumulation of proteins, carbohydrates and lipids.
task	A 45-year-old patient with an 8-year history of tuberculosis died in a hospital of chronic renal failure. At autopsy, the kidneys were enlarged, the cross-section surface looked greasy, histological study revealed profuse deposits of structureless homogeneous eosinophilic masses exhibiting marked metachromasia when stained with Congo red. What pathological process developed in the kidneys?
correct answer	Secondary amyloidosis
B	Hematogenous renal tuberculosis
C	Acute glomerulonephritis
D	Toxic nephritis against the background of antibiotic therapy
E	Nephrosclerosis
№	krok 2014
topic	Viral airborne infection. HIV infection. Rabies.
task	A 35-year-old female patient has HIV at the AIDS stage. On the skin of the lower extremities and palatine mucosa there appeared rusty red spots, bright red nodules of various sizes. One of the nodules was taken for histological study. It revealed a lot of randomly distributed thin-walled vessels lined with endothelium, the bundles of spindle cells containing hemosiderin. What kind of tumor developed in the patient?
correct answer	Kaposi's sarcoma
B	Hemangioma
C	Burkitt's lymphoma
D	Lymphangioma
E	Fibrosarcoma
№	krok 2014
topic	Sepsis. Syphilis.
task	A dentist examined a 5-year-old boy and found him to have a saddle nose, high-arched palate, natiform skull. Both front maxillary incisors are peg-shaped and have a crescent-shaped notch in the cutting edge. Lymph nodes are not changed. What is the provisional diagnosis?
correct answer	Late congenital syphilis

B	Early congenital syphilis
C	Tertiary syphilis
D	Fluorosis
E	Rickets
№	krok 2014
topic	jaw disease
task	Microscopic examination of the biopsy sample taken from a deformed upper jaw bone revealed areas of bone resorption and replacement of bone tissue by randomly arranged bundles of mature collagen fibers with spindle and stellate cells; primitive structure of trabeculae; myxomatous foci. What is the most likely diagnosis?
correct answer	Fibrous osteodysplasia
B	Osteoma
C	Osteoblastosarcoma
D	Osteoporosis
E	Osteosarcoma
№	krok 2014
topic	Circulatory disorders: hyperemia, ischemia, infarction, hemorrhage, hemorrhage, stasis, plasturgie. Shock. Violation of lymph circulation.
task	A 35-year-old patient complains of pain in the upper jaw, bleeding, a slight loosening of teeth. He has been diagnosed with periodontitis. What is a typical pathological process in this case?
correct answer	Inflammation
B	Bleeding
C	Caries
D	Pain
E	Redness
№	krok 2013
topic	Circulatory disorders: hyperemia, ischemia, infarction, hemorrhage, hemorrhage, stasis, plasturgie. Shock. Violation of lymph circulation.
task	A patient with periodontitis has developed gingival edema. The gums are of dark red colour. What local circulation disorder prevails in the gums of the patient?
correct answer	Venous hyperemia
B	Arterial hyperemia

C	Ischemia
D	Thrombosis
E	Embolism
№	krok 2013
topic	Kidney Disease.
task	Autopsy of a 52-year-old woman with a long history of chronic glomerulonephritis revealed significantly reduced in size, dense kidneys with a surface of fine granularity; fibrinous inflammation of serous and mucous membranes; dystrophic changes in parenchymatous organs; cerebral edema. The described changes of serous membranes and internal organs are caused by the following complication:
correct answer	Uraemia
B	Anaemia
C	Sepsis
D	DIC syndrome
E	Thrombocytopenia
№	krok 2013
topic	Nomenclature and morphological features of tumors from epithelium.
task	Histological study of the bronchial wall and adjacent lung segments revealed sheets and strands of squamous epithelium. The cells have moderately expressed symptoms of atypia: polymorphism, nuclear hyperchromatism, mitoses. In the center of the complex there are concentric pink formations. What is the most likely diagnosis?
correct answer	Keratinizing squamous cell carcinoma
B	Non-keratinizing squamous cell carcinoma
C	Adenocarcinoma
D	Scirrhus
E	Undifferentiated carcinoma
№	krok 2013
topic	diseases of the pulp and periapical tissues of the tooth
task	Histologically, the internal wall of a cyst localized on the upper jaw is lined with stratified squamous epithelium with underlying granulation tissue infiltrated by lymphocytes. The external layer is represented by loose fibrous connective tissue surrounded by cicatrical fibrous tissue. What diagnosis can be made?
correct answer	Cystic granuloma
B	Simple granuloma

C	Epithelial granuloma
D	Keratocyst
E	Ameloblastoma
№	krok 2013
topic	periodontal disease
task	Histological examination of the grayish-pink elastic nodule of 0,3 cm in diameter found by a surgeon at the root of the extracted tooth shows granulation tissue with cords of stratified squamous epithelium. What is the most likely diagnosis?
correct answer	Granulomatous periodontitis
B	Eosinophilic granuloma
C	Granulating pulpitis
D	Acute apical periodontitis
E	Granulating periodontitis
№	krok 2013
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 77-year-old patient with atherosclerosis got pain in his right foot. The foot is enlarged, the skin is black and macerated, the demarcation zone is not defined clearly. What pathological process arose in the foot?
correct answer	Wet gangrene
B	Dry gangrene
C	Noma
D	Sequestrum
E	Coagulation necrosis
№	krok 2013
topic	Viral airborne infection. HIV infection. Rabies.
task	A 42-year-old man died with symptoms of severe intoxication and respiratory failure. A slide of lung tissue was heterogenous, with multiple microfocal hemorrhages and foci of emphysema. Histological examination of lungs revealed hemorrhagic abscessing bronchopneumonia; eosinophilic and basophilic granules in the cytoplasm of epithelial cells of bronchi. What is the most likely diagnosis?
correct answer	Influenza
B	Parainfluenza
C	Adenovirus infection

D	Respiratory syncytial virus infection
E	Staphylococcal bronchopneumonia
№	krok 2013
topic	nutritional diseases
task	Preventive examination of 1-1.5-year-old children living in an orphanage revealed focal thickening of ribs and wrists, bowed legs. The dentist pointed out delayed teething, wrong eruption order, irregular mineralization of the enamel and dentin, high-arched palate. What disease has developed in children?
correct answer	Rickets
B	Dystrophic calcification
C	Metabolic calcification
D	Metastatic calcification
E	Osteomalacia
№	krok 2013
topic	Pathomorphology of the immune system. Reactions and mechanisms of hypersensitivity. The autoimmune disease. Immunodeficiency States.
task	Having recovered from angina 23-year-old patient developed urinary syndrome (hematuria, proteinuria, leukocyturia). Study of the puncture biopsy of a kidney revealed manifestations of intracapillary proliferative glomerulonephritis, and electron microscopy revealed large subepithelial deposits. What is the pathogenesis of this disease?
correct answer	Immunocomplex mechanism
B	Atopy, anaphylaxis with production of IgE and their fixation to the mast cells
C	Cytotoxic, cytolytic action of antibodies
D	Cell-mediated cytolysis
E	Granulomatosis
№	krok 2013
topic	Pathomorphology of the immune system. Reactions and mechanisms of hypersensitivity. The autoimmune disease. Immunodeficiency States.
task	Survey radiograph of facial skull of a 16-year-old girl shows some hole-like foci of cranial bone destruction. Histological examination of biopsy material revealed zones of destruction of bone trabeculae, proliferation of connective tissue with diffuse histiocytic infiltrate and a large number of eosinophilic leukocytes. Diagnose the disease:
correct answer	Eosinophilic granuloma
B	Histiocytosis X

C	Fibrous dysplasia
D	Osteoclastoma
E	Cherubism
№	krok 2013
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 irregularly shaped 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 2013
topic	Nomenclature and morphological features of tumors from epithelium.
task	Microscopy of colonic biopsy material revealed a tumour made up of prismatic epithelium and forming atypical glandular structures of various shapes and sizes. The basal membrane of glands was destroyed. Tumour cells were polymorphic, with hyperchromatic nuclei and a large number of pathological mitoses. What is the most likely diagnosis?
correct answer	Adenocarcinoma
B	Basal cell carcinoma
C	Solid carcinoma
D	Mucosal carcinoma
E	Undifferentiated carcinoma
№	krok 2013
topic	Tuberculosis
task	Autopsy of a young man revealed some lung cavities with inner walls made up of granulation tissue with varying degrees of maturity; pronounced pneumosclerosis and bronchiectasis. Some cavities had caseation areas. What is your presumptive diagnosis?
correct answer	Fibrous cavernous tuberculosis
B	Infiltrative tuberculosis
C	Caseous pneumonia

D	Acute cavernous tuberculosis
E	Bronchiectasis
№	krok 2013
topic	Diseases of the respiratory system.
task	On the base of the clinical data a child was diagnosed with atypical pneumonia resistant to the effects of beta-lactam antibiotics. The patient's sputum was cultured and incubated in a special medium, which resulted in growth of microorganisms forming microscopic colonies with a dense center (looking like fried eggs). What microorganism caused the disease?
correct answer	Mycoplasma pneumoniae
B	Klebsiella pneumoniae
C	Streptococcus pneumoniae
D	Legionella pneumophila
E	Chlamidia pneumoniae
№	krok 2013
topic	Proliferative inflammation. Specific inflammation. Granulomatosis.
task	A 20-year-old male got his tongue pierced. 5 months later a dense pale pink formation appeared in the zone of puncture. Biopsy revealed growing connective tissue with focal clusters of single polymorphonuclear neutrophils, fibroblasts, foreign body cells, lymphocytes and plasmocytes. What kind of pathological process developed in the tongue tissues?
correct answer	Nonspecific productive inflammation
B	Fibrinous exudative inflammation
C	Purulent exudative inflammation
D	Circulatory disturbance
E	Tumour
№	krok 2013
topic	Infectious and parasitic diseases. Characterization of the infectious process. Intestinal infectious diseases.
task	A patient with marked manifestations of exsiccosis died in the infectious disease hospital. Postmortem examination results: the corpse with contracted muscles, dry skin and mucous membranes, thick and dark blood in veins, edematous plethoric mucosa, distended bowel loops, the lumen contains about 4 liters of rice-water fluid. What is the most likely diagnosis?
correct answer	Cholera
B	Enteric fever
C	Dysentery
D	Anthrax, intestinal form

E	Yersiniosis
№	krok 2013
topic	Sepsis. Syphilis.
task	Following the tooth extraction for acute pulpitis complicated by purulent periodontitis a patient developed osteomyelitis of mandible. 10 days later the patient died with symptoms of severe intoxication. Autopsy revealed a 2x2 cm large abscess of the right frontal lobe of brain, bilateral abscessed pneumonia, myeloid hyperplasia of spleen. What is the most likely diagnosis?
correct answer	Pyosepticemia
B	Septicemia
C	Chroniosepsis
D	Secondary septic endocarditis
E	-
№	krok 2013
topic	children infection
task	A 4-year-old girl died suddenly with symptoms of asphyxia. Autopsy revealed white spots on the buccal mucosa; large blotches of rash on the skin of face, trunk and extremities; conjunctivitis, edema with foci of necrosis on the laryngeal mucosa; giant-cell pneumonia on microscopy. What is the most likely diagnosis?
correct answer	Measles
B	Scarlet fever
C	Influenza
D	Meningococcal infection
E	Typhus
№	krok 2013
topic	Nomenclature and morphological features of tumors from epithelium.
task	A 69-year-old patient got a small plaque with subsequent ulceration on the skin of the lower eyelid. The formation was removed. Microscopic examination of dermis revealed complexes of atypical epithelial cells arranged perpendicularly to the basal membrane on the periphery. The cells were dark, of polygonal prismatic shape with hyperchromic nuclei with frequent mitoses. What is the histological form of carcinoma in this patient?
correct answer	Basal cell carcinoma
B	Keratinizing squamous cell carcinoma
C	Nonkeratinizing squamous cell carcinoma
D	Adenocarcinoma

E	Undifferentiated
№	krok 2012, 2007
topic	For pituitary disease. Diabetes mellitus. Diseases of the thyroid gland. Diseases of the adrenal glands.
task	Examination of a 32-year-old patient revealed disproportional skeleton size, enlargement of superciliary arches, nose, lips, tongue, jaw bones, feet. What gland's function was disturbed?
correct answer	Hypophysis
B	Epiphysis
C	Pancreas
D	Thyroid
E	Suprarenal
№	krok 2012, 2007
topic	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, 2010
topic	jaw disease
task	Examination of a 30-year-old man's mandible revealed in the region of his molar a dense tumour-like formation that significantly deformed the mandible. Here and there the formation wasn't fully detached from the bone tissue. Microscopical examination of a tissue sampling revealed that stroma had some cords and follicles with odontogenous cylindric epithelial cells in peripharia and stellate cells resembling of the enamel organ pulp in the centre. What is the most likely diagnosis?
correct answer	Ameloblastoma
B	Adenomatoid tumour
C	Primary intraosteal cancer
D	Adenocarcinoma
E	Osteoclastoma
№	krok 2012, 2010

topic	Sepsis. Syphilis.
task	A female patient suffering from secondary syphilis got foci of skin depigmentation in the upper parts of her back. What pathological process is it?
correct answer	Leukoderma
B	Metaplasia
C	Leukoplasia
D	Dysplasia
E	Parakeratosis
№	krok 2012
topic	Sepsis. Syphilis.
task	A 14-year-old patient has been diagnosed with Hutchinson's triad: screwdrivershaped teeth, parenchymatous keratitis and deafness. What disease are these signs typical for?
correct answer	Syphilis
B	Toxoplasmosis
C	Lepra
D	Tuberculosis
E	Opisthorchiasis
№	krok 2012, 2009
topic	General doctrine of inflammation. Exudative inflammation. The morphology of exudative inflammation
task	A 55-year-old man had been suffering from chronic glomerulonephritis. He died from chronic renal failure. Macroscopical examination revealed on the surface of epicardium and pericardium some greyish-white villous depositions. After their removal dilated and plethoric vessels were uncovered. What process took place in the pericardium?
correct answer	Fibrinous inflammation
B	Organization
C	Proliferative inflammation
D	Haemorrhagic inflammation
E	Arterial hyperemia
№	krok 2012, 2011, 2010
topic	Infectious and parasitic diseases. Characterization of the infectious process. Intestinal infectious diseases.

task	Autopsy of a man, who died from typhoid fever on the 5th day of disease, revealed the following changes: aggregated follicles of ileum were enlarged and plethoric; they protruded over the mucous membrane, and multiple sulci and convolutions could be seen on their surface. Histological examination revealed plethority and edema of tissues, presence of granulomas composed of big cells with light cytoplasm and containing typhoid bacilli. These local changes are compliant with the following period of typhoid fever:
correct answer	Stage of medullary swelling
B	Stage of necrosis
C	Stage of ulcer healing
D	Stage of clean ulcers
E	Stage of ulceration
№	krok 2012
topic	Tuberculosis
task	Autopsy of a man who had 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 by tuberculous granulation tissue and the external one was made by 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 2012, 2010, 2009
topic	Systemic connective tissue disease with autoimmunization.
task	Autopsy of a 68-year-old man who died from chronic cardiac insufficiency revealed deformed, thickened, conjoined cusps of mitral valve. Along the edge of joining there were small (1-2 mm) thrombs. What form of endocarditis caused development of chronic cardiac insufficiency?
correct answer	Recurrent verrucous
B	Diffuse
C	Acute verrucous
D	Fibroplastic
E	Polypoulcerous
№	krok 2012, 2011
topic	Nomenclature and morphological features of tumors from epithelium.

task	A 57-year-old patient experiences periodical uterine haemorrhages. Diagnostic biopsy of lining of uterus has revealed among the blood elements some glandular complexes of different forms and sizes made by atypic cells having hyperchromic nuclei with multiple mitoses (including pathological ones). What is the most likely diagnosis?
correct answer	Adenocarcinoma
B	Uterus fibromyoma
C	Chorioepithelioma
D	Glandular endometrium hyperplasia
E	Endometritis
№	krok 2012
topic	Diseases of the female and male reproductive system.
task	Histologic analysis of uterus mucous membrane revealed twisting glands, serrated and spined, 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, 2008
topic	Processes of adaptation and compensation.
task	Examination of a 40-year-old man ill with stenosing (without metastases) esophageal carcinoma revealed the following changes: atrophy of skeletal muscles and fatty tissue. His skin is sallow, epidermis is attenuated, heart has grown smaller. Myocardium and liver are brown. What is the most probable diagnosis?
correct answer	Alimentary cachexia
B	Myasthenia
C	Cancerous cachexia
D	Brown atrophy
E	Addison's disease
№	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, 2008
topic	Pathomorphology of the immune system. Reactions and mechanisms of hypersensitivity. The autoimmune disease. Immunodeficiency States.
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
topic	Atherosclerosis and arteriosclerosis. Coronary heart disease.
task	Morphological examination of an amputated gangrenous extremity revealed that the lumen of femoral artery was constricted due to stony, partly ulcerated plaques with obturating thrombi. What is the most likely diagnosis?
correct answer	Atherosclerosis
B	Obliterating endarteriitis
C	Non-specific aortoarteriitis
D	Obliterating thromboangiitis
E	Nodular periarteritis
№	krok 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 for about 300 ml of thick yellow-greenish liquid. What pathologic process was revealed in the peritoneal cavity?

correct answer	Fibrinous suppurative peritonitis
B	Serous peritonitis
C	Fibrinous serous peritonitis
D	Peritoneal commissures
E	Fibrinous haemorrhagic peritonitis
№	krok 2012
topic	diseases of the salivary glands
task	A 67-year-old patient underwent extraction of a tumour of the right parotid region. Macroscopical examination revealed a soft encapsulated node up to 35 cm in diameter, the tissue was whitish-grey and included many small cysts. Microscopical examination revealed that the duct structures of large diameter were lined with bilayer prismatic epithelium, they had eosinophilic cytoplasm, the duct lumens contained papillary structures, the stroma was infiltrated with lymphocytes, there were some solitary lymphoid follicles. Specify the kind of tumour:
correct answer	Adenolymphoma
B	Pleomorphic adenoma
C	Mucoepidermal tumour
D	Monomorphic carcinoma
E	Adenocystic carcinoma
№	krok 2012, 2011
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, tuberous 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, 2011, 2010
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, 2009
topic	Diseases of the respiratory system.
task	Autopsy revealed that the upper lobe of the right lung was enlarged, grey, airless; surface of incision was dripping with turbid liquid; pleura had a lot of fibrinous plicae. Microscopical examination of alveoles revealed exudate containing neutrophils, desquamated alveolocytes and fibrin fibres. Bronchus wall was intact. What is the most probable diagnosis?
correct answer	Croupous pneumonia
B	Interstitial pneumonia
C	Pulmonary abscess
D	Focal pneumonia
E	Influenzal pneumonia
№	krok 2012
topic	diseases of the pulp and periapical tissues of the tooth
task	A 35-year-old patient with chronic periodontitis underwent excision of a cyst 3 cm in diameter found at a root the 15th tooth. Histological examination revealed that it had thin wall formed by mature connective tissue infiltrated by lymphocytes and plasmatic cells. Its internal surface was lined with multilayer pavement epithelium with no signs of keratinization; the cavity contained serous exudate. What is the most likely diagnosis?
correct answer	Radicular cyst
B	Follicular cyst
C	Primordial cyst
D	Cherubism
E	Follicular ameloblastoma
№	krok 2012, 2010

topic	Morphology of reversible and irreversible damage of cells and tissues. Intracellular accumulation of proteins, carbohydrates and lipids.
task	Histological examination of myocardium of a 47-year-old patient with rheumatic heart disease (section material) revealed some big visually empty vacuoles within the cardiomyocytes. They turn black when stained with osmic acid, and yellow-red when stained with sudan III. What pathological process is it?
correct answer	Adipose degeneration
B	Hyaline drop degeneration
C	Hydropic degeneration
D	Carbohydrate degeneration
E	Dysproteinosis
№	krok 2012
topic	diseases of hard tooth tissues
task	A 20-year-old patient has multiple yellow-brown and black erosions of tooth enamel. The teeth crumble and break, some of them are decayed. Make a diagnosis:
correct answer	Fluorosis
B	Deep caries
C	Teeth erosion
D	Acidic necrosis of teeth
E	-
№	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
topic	Proliferative inflammation. Specific inflammation. Granulomatosis

task	A 32-year-old patient who lives in the countryside consulted a doctor about a painful swelling and a fistula in the submandibular region. Examination revealed an infiltration with a fistula discharging thick pus and containing white granules. On dissection the infiltration tissues turned out to be dense, yellow-green and had honeycomb structure because of multiple abscesses. What is the most likely diagnosis?
correct answer	Actinomycosis
B	Tuberculosis
C	Lepra
D	Syphilis
E	Submandibular abscess
№	krok 2012
topic	Pathomorphology of the immune system. Reactions and mechanisms of hypersensitivity. The autoimmune disease. Immunodeficiency States.
task	A 45-year-old male died from disseminated tuberculosis. On autopsy the symptoms of tuberculosis were confirmed by both microscopical and histological analyses. All the affected organs had epithelioid cell granulomas with caseous necrosis in the centre. What kind of hypersensitivity reaction underlies the process of granuloma development?
correct answer	Delayed
B	Antibody-dependent cytotoxicity
C	Complement-dependent cytotoxicity
D	Anaphylactic
E	Immune complex
№	krok 2011
topic	children infections
task	Such presentations as catarrhal conjunctivitis, pharyngitis, laryngotracheobronchitis, white spots on the buccal mucosa in the region of lower premolar teeth, maculopapular rash on face, body and extremities are typical for the following disease:
correct answer	Measles
B	Spotted fever
C	Scarlet fever
D	Meningococcal infection
E	Influenza
№	krok 2011
topic	diseases of the pulp and periapical tissues of the tooth

task	A male patient consulted a dentist about an acute toothache. Examination revealed a carious cavity in the upper premolar on the right. The carious cavity reaches the pulp. What is the most likely caries complication causing the toothache?
correct answer	Pulpitis
B	Periodontitis
C	Parodontitis
D	Tooth erosion
E	–
№	krok 2011
topic	Nomenclature and morphological features of tumors from epithelium.
task	A 46-year-old inveterate smoker has a white crateriform ulcer with dense edges in the right corner of mouth. Eosine staining and microscopical examination revealed cords of atypical multilayer epithelium ingrowing into the adjacent tissues and making clusters. In the centre of these clusters some roundish pink concentric formations can be seen. What is the most likely diagnosis?
correct answer	Keratinizing squamous cell carcinoma
B	Basal cell carcinoma
C	Squamous cell nonkeratinous carcinoma
D	Leukoplakia
E	Adenocarcinoma
№	krok 2011
topic	Infectious and parasitic diseases. Characterization of the infectious process. Intestinal infectious diseases.
task	Autopsy of a 42-year-old man revealed a distinctly dilated lumen of small intestine filled with rice-water-like liquid. The intestine wall was edematous with lots of petechial haemorrhages on the mucosa. What infectious disease is the described enteritis typical for?
correct answer	Cholera
B	Dysentery
C	Salmonellosis
D	Amebiasis
E	Typhoid fever
№	krok 2011
topic	Atherosclerosis and arteriosclerosis. Coronary heart disease.

task	Shortly before death a patient got an electrocardiographically based diagnosis of acute myocardial infarction. Autopsy revealed that the myocardial cavity contained 200 ml of liquid blood and 400 g of clots; the posterior wall of the left ventricle had a perforation up to 2 cm long. What complication of myocardial infarction is it?
correct answer	Myocardial rupture with cardiac tamponade
B	Stone heart
C	Haemorrhagic pericarditis
D	Exudative pericarditis
E	Idiopathic myocarditis
№	krok 2011
topic	jaw disease
task	A 45-year-old female patient underwent an excision of 2,5x2 cm large tumour located in the region of submandibular salivary gland. Microscopic examination revealed that it consisted of glandular structures and contained solid epithelial complexes as well as mucoid, chondroid and myxoid foci. Specify this tumour:
correct answer	Polymorphous adenoma
B	Salivary gland carcinoma
C	Ameloblastoma
D	Osteoclastoma
E	Cementoma
№	krok 2011
topic	For pituitary disease. Diabetes mellitus. Diseases of the thyroid gland. Diseases of the adrenal glands.
task	Autopsy of a 67-year-old man who died after presenting with hypoglycemic coma revealed some areas of connective tissue growth and necrosis foci, atrophy of Langerhans islets in pancreas. What disease might have induced such changes in pancreas?
correct answer	Diabetes mellitus
B	Mucoviscidosis
C	Acute pancreatitis
D	Cancer of the head of pancreas
E	Pancreas hypoplasia
№	krok 2011
topic	Morphology of reversible and irreversible damage of cells and tissues. Extracellular accumulation of proteins, carbohydrates and lipids.

task	While examining an extracted stomach a researcher revealed that its antral part along the lesser curvature had a deep, roundish, evenedged defect up to 1,5 cm in diameter reaching the myenteron. In the defect floor one could see a dense semitransparent area resembling of a hyaline cartilage. Specify the process observed in the floor of the mucosa defect?
correct answer	Local hyalinosis
B	Amyloidosis
C	Mucoid swelling
D	Fibrinoid changes
E	General hyalinosis
№	krok 2011
topic	Processes of adaptation and compensation.
task	10 years ago a patient underwent extraction of his right kidney on account of a tumour. After that the volume of his left tumour grew by 50%. What process was developed in the kidney?
correct answer	Vicarious hypertrophy
B	Neurohumoral hypertrophy
C	Pseudohypertrophy
D	Functional hypertrophy
E	Hypertrophic enlargement
№	krok 2011
topic	Diseases of the esophagus, stomach and intestines.
task	A removed vermiform appendix was sent for a histological analysis. The appendix was enlarged, with thickened walls and dull plethoric serous membrane covered by coagulated fibrin. After dissection some pus could be seen. Microscopical examination revealed vascular congestion, edema of all the layers and their diffuse infiltration with leukocytes. Specify the form of acute appendicitis:
correct answer	Flegmonous
B	Apostematous
C	Simple
D	Superficial
E	Gangrenous
№	krok 2011
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	Lymphocyte-mediated cytolysis
E	Granulomatosis
№	krok 2011, 2010
topic	The General doctrine about the tumors. Morphological features of tumor tissues derived mesenchyme.
task	A 40-year-old male patient had a tumour-like formation 8x7 cm large on his neck. A surgeon removed it only partially because of close connection with large vessels. Microscopical examination revealed marked cellular and tissue atypism, lipoblasttype cells in different stages of maturity, with polymorphism and nuclear hyperchromia, pathological mitoses, necrosis foci. Specify the histological form of the tumour:
correct answer	Liposarcoma
B	Lipoma
C	Fibroma
D	Fibrosarcoma
E	Hibernoma
№	krok 2011
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 irregularly-shaped 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 2011, 2010

topic	Kidney Disease.
task	Examination of a kidney tissue sampling revealed leukocyte infiltration of interstitial tissue; military abscesses; dystrophic tubules filled with desquamated epithelium and leukocytes. What is the most likely diagnosis?
correct answer	Pyelonephritis
B	Glomerulonephritis
C	Pyelitis
D	Necrotic nephrosis
E	Nephrolithiasis
№	krok 2011
topic	Diseases of the respiratory system.
task	A section of pulmonary tissue has a large-meshed look due to the sacciform and cylindric dilatation of the bronchi; microscopical examination of the bronchial wall reveals a leucocytal infiltration with neutrophil prevalence; elastic, muscle fibers as well as cartilage plates are partly destroyed and replaced by the connective tissue. The adjacent pulmonary tissue has inflammation foci, fibrosis areas, vascular sclerosis and signs of emphysema. The right ventricle hypertrophy is present. What is the most likely diagnosis?
correct answer	Multiple bronchiectasis
B	Pulmonary emphysema
C	Interstitial pneumonia
D	Pneumofibrosis
E	Chronic bronchitis
№	krok 2011
topic	Sepsis. Syphilis.
task	A 25-year-old man has a saucer-shaped ulcer 0,8 cm in diameter on the upper left surface of tongue. The ulcer's floor and edges are dense with smooth and glistening surface, painless on palpation. Microscopical examination of the ulcer floor revealed an infiltration consisting of lymphoid, plasmatic and epithelioid cells with a lot of vessels affected by endovasculitis. What is the most likely diagnosis?
correct answer	Primary syphilis
B	Decubital ulcer
C	Cancerous ulcer
D	Tuberculosis
E	Setton's aphtha
№	krok 2011, 2010

topic	diseases of the pulp and periapical tissues of the tooth
task	A 35-year-old patient with chronic periodontitis underwent excision of a cyst 3 cm in diameter found at a root of the 15th tooth. Histological examination revealed that it had thin wall formed by mature connective tissue infiltrated by lymphocytes and plasmatic cells. Its internal surface was lined with multilayer pavement epithelium with no signs of keratinization; the cavity contained serous exudate. What is the most likely diagnosis?
correct answer	Radicular cyst
B	Follicular cyst
C	Primordial cyst
D	Cherubism
E	Follicular ameloblastoma
№	krok 2010
topic	diseases of hard tooth tissues
task	A chemical industry worker complains about enamel wear. Objectively: generalized destruction of dental crowns along with replacing dentin formation. What is the most likely diagnosis?
correct answer	Necrosis of hard tooth tissues
B	Dental erosion
C	Wedge-shaped defects
D	Fluorosis
E	Median caries
№	krok 2010
topic	Atherosclerosis and arteriosclerosis. Coronary heart disease.
task	Autopsy of a 70-year-old man who died from cardiac insufficiency revealed deformed and constricted coronary arteries. The artery section shows that the intimal surface is stony hard and fragile. It is also whitish, with nodular appearance. What stage of atherosclerosis is it?
correct answer	Atherocalcinosis
B	Liposclerosis
C	Atheromatosis
D	Lipoidosis
E	Ulceration
№	krok 2010
topic	Infectious and parasitic diseases. Characterization of the infectious process. Intestinal infectious diseases.

task	Autopsy of an aged man who had been suffering from acute intestinal upset for the last 2 weeks revealed the following changes in the rectum and sigmoid colon: mucous membrane surface was coated with brown-green film. The intestine wall was thickened, and its cavity was extremely constricted. Microscopical examination revealed variously deep penetrating necrosis of mucous membrane; necrotic masses contained fibrin fibers and bore signs of leukocytic infiltration. What is the most likely diagnosis?
correct answer	Fibrinous colitis
B	Catarrhal colitis
C	Ulcerative colitis
D	Follicular collitis
E	-
№	krok 2010, 2008
topic	children infections
task	A 5 y.o. child had a temperature rise up to 40° C, acute headache, vomiting, anxiety, chill. 4 days later there appeared hemorrhagic skin eruption, oliguria and adrenal insufficiency that caused death. Bacteriological examination of smears from the child's pharynx revealed meningococcus. What disease form was revealed?
correct answer	Meningococcemia
B	Meningococcal meningitis
C	Meningoencephalitis
D	Meningococcal nasopharyngitis
E	-
№	krok 2010
topic	Tuberculosis
task	Autopsy of a man, who died from acute posthaemorrhagic anaemia resulting from pulmonary haemorrhage, revealed the following: macroscopically - lung apexes were deformed, their section showed multiple whitish-grey foci 10-15 mm in diameter and multiple pathological cavities up to 15 mm in diameter with dense walls. Microscopically: the cavity walls presented proliferation of the connective tissue infiltrated by epithelioid cells, multicellular giant cells and lymphocytes. What is the most likely diagnosis?
correct answer	Secondary fibrocavernous tuberculosis
B	Primary tuberculosis without signs of progress
C	Progressing tuberculosis complex
D	Hematogenic disseminated pulmonary tuberculosis
E	Hematogenic miliary pulmonary tuberculosis
№	krok 2010, 2009

topic	For pituitary disease. Diabetes mellitus. Diseases of the thyroid gland. Diseases of the adrenal glands.
task	A 40 year old female patient has enlarged thyroid gland. On palpation the gland is dense, its surface is slightly tuberos. Histological examination of gland sample revealed diffuse infiltration of tissue by the cells, formation of lymphoid follicles. What disease is it?
correct answer	Autoimmune thyroiditis
B	Endemic goiter
C	Sporadic goiter
D	Diffuse toxic goiter
E	Riedel's disease
№	krok 2010, 2009
topic	Violation of hemostasis. Thrombosis, disseminated intravascular coagulation. Embolism.
task	A patient with fracture of femoral bone in the area of surgical neck got symptoms of acute dextroventricular insufficiency as a result of pulmonary embolism. What type of embolism is it?
correct answer	Fat
B	Metastatic
C	Gas
D	Air
E	Tissue
№	krok 2010, 2009
topic	General doctrine of inflammation. Exudative inflammation. The morphology of exudative inflammation
task	A 40 year old male patient died from cerebral edema. In anamnesis the face carbuncle was registered. Autopsy revealed hyperemia and edema of cerebral tissue. White matter of the left hemisphere had two cavities 6x5,5 and 5x4,5 cm large filled with yellowish-green cream-like fluid. Walls of the cavities were built up by nerve tissue with irregular rands. What complication of carbuncle was it?
correct answer	Acute abscesses
B	Chronic abscesses
C	Empyema
D	Colliquative necroses
E	Cysts
№	krok 2010
topic	periodontal disease

task	During examination of a 36-year-old woman a dentist revealed a formation in form of a nodule up to 0,8 cm in diameter, of dark brown-red colour, soft, on a wide base. The formation was found on the buccal surface of gum in the region of the 2nd molar. Histological examination revealed that the formation had plenty of sinusoid vessels and a lot of roundish mononuclear and big multinuclear cells; in some parts accumulations of hemosiderin granules could be found. What is the most likely diagnosis?
correct answer	Giant-cell epulis
B	Root granuloma
C	Angiomatous epulis
D	Ameloblastoma
E	Mandibular osteoclastoma
№	krok 2010
topic	Liver Disease
task	Liver puncture biopsy in a patient with hepatocellular insufficiency revealed vacuolar, ballooning degeneration of hepatocytes, necrosis of single cells, Councilman's bodies, infiltration of portal and lobular stroma mainly by lymphocytes and macrophages with a small number of polymorphonuclear leukocytes. What is the most likely diagnosis?
correct answer	Acute viral hepatitis
B	Chronic persisting hepatitis
C	Chronic active hepatitis
D	Autoimmune hepatitis
E	Alcoholic hepatitis
№	krok 2010
topic	Morphology of reversible and irreversible damage of cells and tissues. Intracellular accumulation of proteins, carbohydrates and lipids.
task	A 25-year-old patient with clinical presentations of nephrotic syndrome underwent puncture biopsy of a kidney. Microscopical examination revealed expansion of the epithelium cells of proximal nephron tubules, vacuoles containing transparent liquid in the cytoplasm, peripheral deviation of the nucleus. What degeneration was revealed in the tubule epithelium?
correct answer	Hydropic
B	Granular
C	Adipose
D	Keratinization
E	Hyaline drop
№	krok 2010

topic	Nomenclature and morphological features of tumors from epithelium.
task	Histological examination of a microspecimen presenting a malignant lung tumour revealed that the tumor consisted of lymphocyte-like cells forming any structures. Stroma is mildely marked, there are a lot of mitoses and necroses. What tumour is it?
correct answer	Small cell carcinoma
B	Fibroma
C	Squamous cell nonkeratinous carcinoma
D	Squamous cell keratinous carcinoma
E	Adenocarcinoma
№	krok 2010
topic	diseases of the pulp and periapical tissues of the tooth
task	In spring a patient experiences petechial haemorrhages, loosening of teeth, high liability to colds. A doctor supposes hypobitaminosis C. In this respect loosening of teeth can be explained by:
correct answer	Structural failure of collagen in the periodontal ligaments
B	Structural change of glycosaminoglycan
C	Increased permeability of periodont membranes
D	Mechanical damage of teeth
E	Disturbed oxidation-reduction process in the periodont
№	krok 2010, 2008
topic	Leukemias (leukemia) and lymphomas.
task	Autopsy of a 35 y.o. woman revealed not only enlargement of many lymph nodes but also enlarged spleen weighting 600,0. Its incision showed that it was heterogeneous, dark red, dense with greyish-yellow necrotic areas up to 1 cm in diameter (porphyritic spleen). What disease can be assumed?
correct answer	Lymphogranulomatosis
B	Chronic lymphoid leukosis
C	Chronic myeloid leukosis
D	Cancer metastases
E	Lymphosarcoma
№	krok 2010, 2008
topic	diseases of the pulp and periapical tissues of the tooth

task	Examination of a 60 y.o. man's oral cavity revealed the following changes: the 26th and 27th tooth are covered with metallic crowns that plunge deep into the gums. There is a parodontal pouch 0,7 cm deep between them containing some pus. Gingival papillae of these teeth are hyperemic, edematic, cyanotic, bleed as a reaction to touching by a dental explorer. X-ray picture shows resorption of interdental septa of 1/2 of tooth root. What is the most probable diagnosis?
correct answer	Local parodontitis
B	Hypertrophic gingivitis
C	Chronic catarrhal gingivitis
D	Generalized parodontitis
E	–
№	krok 2009
topic	children infections
task	Autopsy of a dead patient revealed that pia mater was dull, there were greenish-yellow overlays covering almost all convexital surface of cerebral hemispheres. Histological examination revealed extreme hyperemia of maters along with diffuse leukocytic infiltration. What is the most probable diagnosis?
correct answer	Meningococcal infection
B	Measles
C	Anthrax
D	Tuberculosis
E	Influenza
№	krok 2009
topic	Liver Disease
task	Examination of puncture biopsy material of liver revealed dystrophy of hepatocytes, their necrosis and sclerosis along with disturbance of beam and lobulous structure and formation of pseudolobules of regeneration nodes. What is the most probable diagnosis?
correct answer	Liver cirrhosis
B	Chronic hepatosis
C	Chronic hepatitis
D	Progressing massive liver necrosis
E	Acute hepatitis
№	krok 2009
topic	children infections

task	A 6 year old child was delivered to the hospital because of measles pneumonia. On the mucous membrane of a cheek a dentist revealed an ill-defined greish area 2x2,5 cm large. Soft tissues are edematic and foul-smelling. The most probable diagnosis of the dentist should be:
correct answer	Noma
B	Gangrenous stomatitis
C	Pustular stomatitis
D	Phlegmonous stomatitis
E	Ulcerous stomatitis
№	krok 2009
topic	jaw disease
task	A patient has deformation of jaw bones. Histological examination revealed there growth of fibrocellular tumour-like ill-defined tissue with primitive osteogenesis. What disease are these presentations typical for?
correct answer	Fibrous dysplasia
B	Ameloblastoma
C	Osteosarcoma
D	Eosinophilic granuloma
E	Parathyroid osteodystrophy
№	krok 2009, 2008
topic	Morphology of reversible and irreversible damage of cells and tissues. Extracellular accumulation of proteins, carbohydrates and lipids.
task	A 42 year old patient who had been suffering from chronic granulomatous periodontitis and chronic purulent osteomyelitis of his lower jaw for 8 years died from chronic renal insufficiency. What complication of purulent osteomyelitis has developed in kidneys?
correct answer	Amyloidosis
B	Hyalinosis
C	Adipose degeneration
D	Atrophy
E	Necrosis of epithelium of convoluted tubules
№	krok 2009
topic	children infections

task	A 5 year old child has the following symptoms: body temperature up to 40° C, acute headache, vomiting, anxiety, shiver. 4 days later there appeared hemorrhagic skin rash, oliguria and adrenal insufficiency that caused death. Bacteriological examination of pharyngeal smears revealed meningococcus. What form of meningococcal infection was it?
correct answer	Meningococcemia
B	Meningococcal meningitis
C	Meningoencephalitis
D	Meningococcal nasopharyngitis
E	-
№	krok 2009
topic	Nomenclature and morphological features of tumors from melaniebrady tissue.
task	A 75 year old male patient consulted a surgeon about a brown nonhealing ulcer of shin. Examination of biopsy material revealed diffuse growth of polymorphic atypic cells with brown pigment in their cytoplasm. Pearls reaction was negative. There were also a lot of pathological mitoses and foci of tissue necrosis. What is the most probable diagnosis?
correct answer	Melanoma
B	Local hemosiderosis
C	Intradermal nevus
D	Trophic ulcer
E	Skin cancer
№	krok 2009
topic	Circulatory disorders: hyperemia, ischemia, infarction, hemorrhage, hemorrhage, stasis, plasturgie. Shock. Violation of lymph circulation.
task	Autopsy of a man who had been suffering from hypertension revealed in his brain a cavity with rubiginous walls. What event preceded development of these changes?
correct answer	Haematoma
B	Diapedetic haemorrhages
C	Ischemic infarction
D	Plasmorrhagias
E	Abscess
№	krok 2009
topic	Pathomorphology of the immune system. Reactions and mechanisms of hypersensitivity. The autoimmune disease. Immunodeficiency States.

task	A 10 year old child underwent Mantoux test (with tuberculin). 48 hours later there appeared a papule up to 8 mm in diameter on the site of tuberculin injection. Tuberculin injection caused the following hypersensitivity reaction:
correct answer	IV type hypersensitivity reaction
B	Arthus reaction
C	Seroreaction
D	Atopic reaction
E	II type hypersensitivity reaction
№	krok 2009
topic	Atherosclerosis and arteriosclerosis. Coronary heart disease.
task	Microscopical examination of coronary artery of a 53 year old dead man revealed luminal narrowing of the vessel because of fibrous plaque mixed with lipides. The most probable form of atherosclerosis is:
correct answer	Liposclerosis
B	Lipoidosis
C	Atheromatosis
D	Ulceration
E	-
№	krok 2009
topic	Pathomorphology of the immune system. Reactions and mechanisms of hypersensitivity. The autoimmune disease. Immunodeficiency States.
task	A 30 year old woman has been continuously using lipstick with a fluorescent substance that led to development of a limited erythema on the prolabium, slight peeling, and later small transversal sulci and fissures. Microscopical examination of the affected zone revealed in the connective tissue sensibilized lymphocytes and macrophages, effects of cytolysis. What type of immunological hypersensitivity has developed on the lip?
correct answer	IV type (cellular cytotoxicity)
B	I type (reagin type)
C	II type (antibody cytotoxicity)
D	III type (immune complex cytotoxicity)
E	Granulomatosis
№	krok 2009
topic	Leukemias (leukemia) and lymphomas.

task	Examination of a tissue sample of enlarged cervical lymph nodes taken from a young woman revealed proliferation of lymphocytes, reticular cells, macrophages, big and small Hodgkin's cells, multinuclear Sternberg-Reed cells. There were also multiple eosinophils, single foci of caseous necrosis of the node tissue. What is the most probable diagnosis?
correct answer	Lymphogranulomatosis
B	Tuberculosis
C	Acute leukosis
D	Lymphosarcoma
E	Metastasis of lung cancer
№	krok 2009
topic	periodontal disease
task	A dentist was examining oral cavity of a 9 year old child in the buccal surface of gingiva in the area of the lower canine he revealed a red, soft, node-like formation 1 cm in diameter that started immediately bleeding when touched. Microscopical examination revealed that this formation consisted of many small vessels like venules and capillaries separated by thin layers of connective tissue, with focal infiltration by lymphoid and plasmatic cells. Such changes are typical for:
correct answer	Angiomatous epulis
B	Capillary hemangioma
C	Radicular granuloma
D	Fibrous epulis
E	Papilloma
№	krok 2009
topic	tumors and tumor-like processes in the oral cavity
task	Roentgenological examination of mandible of a 27 year old man revealed a focus of osseous tissue destruction. Histological examination revealed a tumour consisting of odontogenous epithelium cords, immature connective tissue and dysplastic dentin rests. What tumour is it?
correct answer	Dentinoma
B	Ameloblastic fibroodontoma
C	Odontoameloblastoma
D	Odontogenous fibroma
E	Complex odontoma
№	krok 2009
topic	Sepsis. Syphilis.

task	A 23 year old man got perforation of hard palate. There was also a solid well-defined formation. Post-operative microscopical examination of this formation revealed a large focus of caseous necrosis surrounded by granulation tissue with endovasculitis and cellular infiltrate consisting mainly of plasmocytes but also of lymphocytes and epithelioid cells. What is the most probable diagnosis?
correct answer	Syphilis
B	Tuberculosis
C	Scleroma
D	Sarcoma
E	Lepra
№	krok 2009
topic	diseases of the lips, tongue and soft tissues of the oral cavity
task	A 60 year old patient complains of tongue burning, excessive salivation and glossalgia effects that came 5 days after he started using a metal dental bridge. Objectively: mucous membrane of oral cavity is edematic and hyperemic. What form of stomatitis is it?
correct answer	Catarrhal
B	Purulent
C	Ulcerous
D	Gangrenous
E	Fibrinous
№	krok 2009
topic	diseases of the pulp and periapical tissues of the tooth
task	The 16th tooth of a patient is missing. X-ray picture shows in the depth of alveolar process rarefaction of bone and a well-defined cavity that contained the underdeveloped tooth crown. Microscopical examination revealed that the cavity wall was lined with stratified squamous epithelium and enclosed within a fibrous capsule. Make a diagnosis:
correct answer	Follicular gnathic cyst
B	Radicular gnathic cyst
C	Cyst of the incisive canal
D	Cystic ameloblastoma of jaw
E	Primordial gnathic cyst
№	krok 2009
topic	diseases of the pulp and periapical tissues of the tooth

task	Roentgenological examination of a patient revealed a cyst enclosing a tooth in its cavity in the area of the premolar. Microscopical examination revealed that the cyst wall consisted of connective tissue and was lined with multilayer squamous epithelium. What is the most probable diagnosis?
correct answer	Follicular cyst
B	Radicular cyst
C	Primordial cyst
D	Eosinophilic granuloma
E	Epulis
№	krok 2009
topic	General doctrine of inflammation. Exudative inflammation. The morphology of exudative inflammation
task	Microscopic examination of periodontium revealed plethoric vessels, edema of connective tissue along with infiltration by single neutrophils. What type of exudative inflammation in the periodontium is it?
correct answer	Serous
B	Purulent
C	Putrid
D	Fibrinous
E	Catarrhal
№	krok 2008
topic	Pathomorphology of the immune system. Reactions and mechanisms of hypersensitivity. The autoimmune disease. Immunodeficiency States.
task	A patient has a skin defect as a result of an extensive burn. In order to mask this defect the surgeons transplanted a skin flap from other body part of this patient. What type of transplantation is it?
correct answer	Autotransplantation
B	Explantation
C	Allotransplantation
D	Xenotransplantation
E	Homotransplantation
№	krok 2008
topic	Systemic connective tissue disease with autoimmunization.
task	Autopsy of a 34 y.o. man who died from rheumatism revealed that epicardium surface was villous and covered with grey films that can be easily removed. After their removal the surface is edematic and plethoric. What is the most probable diagnosis?

correct answer	Fibrinous pericarditis
B	Purulent pericarditis
C	Hemorrhagic pericarditis
D	Proliferative pericarditis
E	Catarrhal pericarditis
№	krok 2008
topic	Children infections
task	A 5 y.o. girl has high temperature and sore throat. Objectively: soft palate edema, tonsills are covered with grey films that can be hardly removed and leave deep bleeding tissue injuries. What disease is the most probable?
correct answer	Pharyngeal diphtheria
B	Vincent's angina
C	Lacunar angina
D	Infectious mononucleosis
E	Necrotic angina
№	krok 2008
topic	jaw disease
task	A patient has deformed jaw bones. Histological examination revealed in the place of bones the growth of cellularfibrous tumour-like tissue with primitive osteogenesis without distinct borders. What disease are these symptoms typical for?
correct answer	Fibrous dysplasia
B	Ameloblastoma
C	Osteosarcoma
D	Eosinophilic granuloma
E	Parathyroid osteodystrophy
№	krok 2008
topic	Sepsis. Syphilis.
task	Soft palate arches were taken for bioptic examination because of suspected tumour (macroscopical examination revealed an ulcer with dense floor). Biopsy revealed necrosis of mucous membrane along with infiltration of submucous layer by lymphocytes, epithelioid cells, plasmatic cells, single neutrophils. There is also evident endo-and perivasculitis. What disease are the described changes typical for?
correct answer	Primary syphilis
B	Aphthous stomatitis

C	Ulcerative stomatitis
D	Ulcerative necrotic stomatitis (Vi-ncent's stomatitis)
E	Pharyngeal diphtheria
№	krok 2008
topic	diseases of hard tooth tissues
task	During morphological examination of pulp floor three zones can be clearly differentiated: the one of softened dentin, sclerotic dentin, replacing dentin. What stage of caries are these changes typical for?
correct answer	Median caries
B	White spot stage
C	Superficial caries
D	Deep caries
E	Chronic caries
№	krok 2008
topic	diseases of the lips, tongue and soft tissues of the oral cavity
task	Mucous membrane of a patient's oral cavity has a greyish-white focus, the mass is dense and protrudes above the mucous membrane. Histological examination revealed hyperkeratosis, parakeratosis and acanthosis of epithelium in this area. What pathological process was revealed in the mucous membrane?
correct answer	Leukoplakia
B	Hyalinosis
C	Leukoderm
D	Local tumourous amyloidosis
E	Focal ichthyosis
№	krok 2008
topic	Circulatory disorders: hyperemia, ischemia, infarction, hemorrhage, hemorrhage, stasis, plasturgie. Shock. Violation of lymph circulation.
task	A patient with closed fracture of humeral bone was bandaged with plaster. The next day the injured hand became swollen, cyanotic and cold. What disorder of peripheral blood circulation are these symptoms typical for?
correct answer	Venous hyperemia
B	Arterial hyperemia
C	Ischemia
D	Thrombosis

E	Embolism
№	krok 2008
topic	Pathomorphology of the immune system. Reactions and mechanisms of hypersensitivity. The autoimmune disease. Immunodeficiency States.
task	A surgeon used novocaine as an anaesthetic during surgical manipulations. minutes after it the patient became pale, he got dyspnea and hypotension. What type of allergic reaction is it?
correct answer	Anaphylactic
B	Cytotoxic
C	Immune complex
D	Stimulating
E	Cell-mediated
№	krok 2008
topic	Regeneration and reparation. Sclerosis.
task	A patient ill with diabetes mellitus went through an operation on account of abscess in the area of posterior part of his neck. The wound healing lasted for a month and a half; the wound constantly discharged pus. On the site of the healed wound there appeared an irregular scar. In what way did the wound healing take place?
correct answer	By secondary intention
B	Under the crust
C	By epithelization
D	By primary intention
E	By combined intention
№	krok 2008
topic	periodontal disease
task	Examination of a 10 y.o. child revealed on the alveolar submandibular process a fixed tumourous mass 1,5 cm in diameter closing premolar crown on the vestibular side. Mucous membrane of its surface is reddish-brown, it bleeds as a reaction to a slight mechanical intervention. Biopsy results: the mass consists of small size vessels separated by thin layers of connective tissue and infiltrated by plasmocytes, mucous membrane is here and there ulcered. What is the most probable diagnosis?
correct answer	Angiomatous form of epulis
B	Gingival fibromatosis
C	Giant cell form of epulis
D	Hypertrophic gingivitis

E	Fibrous form of epulis
№	krok 2008
topic	Atherosclerosis and arteriosclerosis. Coronary heart disease.
task	Microscopic examination during autopsy of a 70 y.o. man who had been ill with atherosclerosis for a long time and died from cardiovascular insufficiency revealed in the abdominal area of aorta some dense oval fibrous plaques with lime deposition in form of dense brittle plates. What stage of atherosclerosis morphogenesis is it?
correct answer	Atherocalcinosis
B	Liposclerosis
C	Atheromatosis
D	Ulceration
E	Lipoidosis
№	krok 2008
topic	Atherosclerosis and arteriosclerosis. Coronary heart disease.
task	A patient who had been suffering from a renal disease for many years died from uremia. Autopsy revealed that the kidneys were abnormally small, dense, fine-grained, light grey. What are the kidneys with such changes called?
correct answer	Arteriolosclerotic
B	Contracted
C	Mottled
D	Sebaceous
E	-
№	krok 2008
topic	diseases of the pulp and periapical tissues of the tooth
task	Histological examination of periapical tissue taken from a patient who has been suffering from chronic periodontitis for a long time revealed a granulation tissue interlaced by taeniae of squamous cell epithelium and encircled within a fibrous capsule. What is the most probable diagnosis?
correct answer	Composite granuloma
B	Abscessing periodontitis
C	Granulating periodontitis
D	Simple granuloma
E	Cystic granuloma
№	krok 2008

topic	diseases of hard tooth tissues
task	Examination of a tooth revealed a large cavity in its crown. The floor of this cavity is formed by a thin layer of softened dentin that separates this cavity from the pulp. What is the most probable diagnosis?
correct answer	Deep caries
B	Median caries
C	Superficial caries
D	Pulpitis
E	Periodontitis
№	krok 2008
topic	Nomenclature and morphological features of tumors from epithelium.
task	Microscopical examination of a surgical specimen (an ulcerated part of a lip) revealed in the connective tissue of mucous membrane near the borders and under the floor of the ulcer some epithelial complexes consisting of atypic multistratal epithelium with accumulations of bright pink concentric formations. What pathology is it?
correct answer	Squamous cell keratinous carcinoma
B	Squamous cell nonkeratinous carcinoma
C	Transitional cell carcinoma
D	Basal cell carcinoma
E	Papilloma
№	krok 2008
topic	diseases of the pulp and periapical tissues of the tooth
task	Roentgenological examination of a patient revealed a cyst in the area of a premolar that contained a tooth in its cavity. Microscopical examination reveals that the cyst wall is represented by connective tissue and lined with multistratal squamous cell epithelium. Specify the diagnosis:
correct answer	Follicular cyst
B	Radicular cyst
C	Primordial cyst
D	Eosinophilic granuloma
E	Epulis
№	krok 2008
topic	diseases of the lips, tongue and soft tissues of the oral cavity

task	A 9 y.o. child has been taking antibiotics on account of bronchopneumonia for a long time. There appeared pain and burning in the area of mucous mebrane of his lips and tongue. Objectively: mucous membrane of lips and tongue has caseous and grey plaques that can be easily removed by a spatula leaving hyperemia foci on their spot. Microscopical examination of the plaques revealed mycelium. What is the most probable diagnosis?
correct answer	Candidous cheilitis
B	Exfoliative cheilitis
C	Leukoplakia
D	Contactant allergic cheilitis
E	Manganotti's cheilitis
№	krok 2007
topic	Pathomorphology of the immune system. Reactions and mechanisms of hypersensitivity. The autoimmune disease. Immunodeficiency States.
task	The influence of negative factors upon an organism results in the thymus change that is accompanied by mass loss of thymocytes, their drive out to the peripheral organs, proliferation of epithelioreticulocytes. How is this phenomemon called?
correct answer	Accidental thymus involution
B	Age thymus involution
C	Thymus hypotrophy
D	Thymus dystrophy
E	Thymus atrophy
№	krok 2007
topic	morphological features of the dentition and oral organs
task	In course of embryogenesis maxillary and mandibular processes grew together with a delay. What development anomalies should be expected in this case?
correct answer	Macrostomia
B	Microstomia
C	Cleft palate
D	Gothic palate
E	Cleft of superior lip
№	krok 2007
topic	Diseases of the esophagus, stomach and intestines.

task	Histologic examination revealed a big number of polymorphonuclear leukocytes in all layers of appendix; hyperemia, stases. What disease are these symptoms typical for?
correct answer	Phlegmonous appendicitis
B	Gangrenous appendicitis
C	Superficial appendicitis
D	Simple appendicitis
E	Chronic appendicitis
№	krok 2007
topic	Diseases of the esophagus, stomach and intestines.
task	Opening of a patient's abdominal cavity revealed for about 2,0 L of purulent fluid. Peritoneum is dull, greyish, serous tunic of intestines has grayish layers that can be easily removed. It is most likely to be:
correct answer	Fibrinopurulent peritonitis
B	Hemorrhagic peritonitis
C	Serous peritonitis
D	Tuberculous peritonitis
E	-
№	krok 2007
topic	Sepsis. Syphilis.
task	Tissue sample of soft palate arches that was taken because a tumor was suspected (microscopic analysis revealed an ulcer with dense fundus) revealed mucous membrane necrosis, submucous layer was infiltrated by lymphocytes, epithelioid cells, plasmocytes, solitary neutrophils. There was also evident endovasculitis and perivasculitis. What disease are these changes typical for?
correct answer	Primary syphilis
B	Aphthous stomatitis
C	Ulcerative stomatitis
D	Vensan's ulcerative-necrotic stomatitis
E	Faucial diphteria
№	krok 2007
topic	For pituitary disease. Diabetes mellitus. Diseases of the thyroid gland. Diseases of the adrenal glands.
task	Histological examination of thyroid gland of a man who died from cardiac insufficiency accompanied by hypothyroidism revealed diffuse infiltration of the gland by lymphocytes and plasmocytes with formation of lymphoid follicles, as well as atrophy of parenchyma and growth of connective tissue. What is the most probable diagnosis?

correct answer	Autoimmune Hashimoto's thyroiditis
B	Adenoma of thyroid gland
C	Purulent thyroiditis
D	Thyrotoxic goiter
E	-
№	krok 2007
topic	Viral airborne infection. HIV infection. Rabies.
task	Post-mortem examination of a 5 year old boy who died from acute pulmonary and cardiac insufficiency revealed the following: serohemorrhagic tracheobronchitis with some necrotic areas of mucous membrane, multiple foci of hemorrhagic pneumonia in lungs. What disease is in question?
correct answer	Influenza
B	Measles
C	Scarlet fever
D	Diphtheria
E	Croupous pneumonia
№	krok 2007
topic	Diseases of the respiratory system.
task	Macroscopic examination of lung tissue revealed some areas of excessive airiness with small bubbles, histological examination registered thinning and rupture of alveolar septa and formation of big multiform cavities. What disease was revealed in the lung?
correct answer	Pulmonary emphysema
B	Multiple bronchiectasis
C	Cavernous tuberculosis
D	Chronic bronchitis
E	Fibrosing alveolitis
№	krok 2007
topic	Atherosclerosis and arteriosclerosis. Coronary heart disease.
task	Examination of coronary arteries revealed atherosclerotic plaques with calcification that close the lumen by 1/3. The muscle contains multiple small whitish layers of connective tissue. What process was revealed in myocardium?
correct answer	Diffuse cardiosclerosis
B	Tiger heart
C	Postinfarction cardiosclerosis

D	Myocarditis
E	Myocardium infarction
№	krok 2007
topic	Tuberculosis
task	Microscopic analysis of tissue sampling from patient's skin reveals granulomas that consist of epithelioid cells surrounded mostly by T-lymphocytes. Among epithelioid cells there are solitary giant multi-nuclear cells of Pirogov-Langhans type. In the centre of some granulomas there are areas of caseous necrosis. Blood vessels are absent. What disease are the described granulomas typical for?
correct answer	Tuberculosis
B	Syphilis
C	Leprosy
D	Rhinoscleroma
E	Glanders
№	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	Examination of a child who has recently recovered from measles revealed in the soft tissues of cheeks and perineum some inaccurate, edematic, red-and-black, slightly fluctuating areas. What complication is it?
correct answer	Humid gangrene
B	Dry gangrene
C	Gas gangrene
D	Pressure sore
E	Trophic ulcer
№	krok 2007
topic	Children infections
task	On the 5th day of illness a 12 year old child who was treated in the infectious department on account of influenza felt severe headache, sickness, dizziness, got meningeal signs. The child died 24 hours later from increasing brain edema. Dissection of cranial cavity revealed that pia maters of brain are edematic, plethoric, saturated diffusively with bright red liquid. Convolutions and sulci of brain are flattened. What influenza complication is in question?
correct answer	Hemorrhagic meningitis
B	Cerebral hemorrhage
C	Venous hyperemia of brain membranes

D	Suppurative leptomeningitis
E	Serous meningitis
№	krok 2007
topic	Sepsis. Syphilis.
task	Mucous membrane of the right palatine tonsil has a painless ulcer with smooth lacquer fundus and accurate edges of cartilaginous consistency. Microscopically: inflammatory infiltrate that consists of lymphocytes, plasmocytes, a small number of neutrophils and epithelioid cells; endovasculitis and perivasculitis. What disease is in question?
correct answer	Syphilis
B	Actinomycosis
C	Tuberculosis
D	Pharyngeal diphtheria
E	Necrotic (Vincent's) tonsillitis
№	krok 2007
topic	Leukemias (leukemia) and lymphomas.
task	A 22 year woman has enlarged lymphatic ganglions. Histological analysis of a ganglion revealed lymphocytes, histiocytes, reticular cells, small and great Hodgkin's cells, multinuclear Reed-Sternberg cells, solitary foci of caseous necrosis. What disease are these changes typical for?
correct answer	Lymphogranulematosis
B	Lymphosarcoma
C	Chronic leukemia
D	Acute leukemia
E	Cancer metastasis
№	krok 2007
topic	Nomenclature and morphological features of tumors from epithelium.
task	A 57 year old patient has periodic uterine bleedings. Diagnostic endometrectomy was performed. Biopsy material contains among the blood elements some glandular complexes of different sizes and forms that consist of atypic cells with hyperchromic nuclei and multiple mitoses (including pathological ones). What is the most probable diagnosis?
correct answer	Adenocarcinoma
B	Fibromyoma of uterus
C	Chorioepithelioma
D	Glandular hyperplasia of endometrium

E	Endometritis
№	krok 2007
topic	Circulatory disorders: hyperemia, ischemia, infarction, hemorrhage, hemorrhage, stasis, plasturgie. Shock. Violation of lymph circulation.
task	Autopsy of a man who suffered from essential hypertension revealed a cavity with rust-coloured walls in the cerebral substance. What preceded the appearance of these changes?
correct answer	Hematoma
B	Diapedetic hemorrhages
C	Ischemic infarction
D	Plasmorrhagias
E	Abscess
№	krok 2007
topic	General doctrine of inflammation. Exudative inflammation. The morphology of exudative inflammation
task	During the histologic lung analysis of a man who died from cardiac insufficiency the inflammation focuses were revealed. Alveoles were full of light-pink fluid, here and there with pinkish fibers that formed a close-meshed reticulum with a small number of lymphocytes. What type of exudate is present in lungs?
correct answer	Serofibrinous
B	Hemorrhagic
C	Serous
D	Purulent
E	Fibrinous
№	krok 2007
topic	Pathomorphology of the immune system. Reactions and mechanisms of hypersensitivity. The autoimmune disease. Immunodeficiency States.
task	A 38 year old patient died during intractable attack of bronchial asthma. Histological examination revealed mucus accumulations in bronchi's lumen, a lot of mast cells (labrocytes) in bronchi's wall, some of these cells are degranulated, there are also many eosinophils. Name pathogenesis of these changes in bronchi:
correct answer	Atopy, anaphylaxis
B	Cytotoxic, cytolytic effect of antibodies
C	Immune complex mechanism
D	Cell-mediated cytolysis

E	Granulematosis
№	krok 2007
topic	Diseases of the esophagus, stomach and intestines.
task	In course of gastric endoscopy the biopsy material of mucous membrane was taken. Its histological examination revealed the following: mucous membrane is intact, thickened, edematic, hyperemic, with small droplike hemorrhages, coated with thick mucus. Name the form of acute gastritis:
correct answer	Catarrhal
B	Erosive
C	Fibrinous
D	Purulent
E	Necrotic
№	krok 2007
topic	Pathomorphology of the immune system. Reactions and mechanisms of hypersensitivity. The autoimmune disease. Immunodeficiency States.
task	A 10 year old child was subjected to Mantoux test (with tuberculine). 48 hours later a papule up to 8 mm in diameter appeared on the site of tuberculine injection. What type of hyperresponsiveness reaction has developed after tuberculine injection?
correct answer	Hyperresponsiveness reaction type IV
B	Reaction of Arthus phenomenon type
C	Reaction of serum sickness type
D	Atopic reaction
E	Hyperresponsiveness reaction type II
№	krok 2007
topic	Leukemias (leukemia) and lymphomas.
task	Examination of a 16 year old boy revealed enlarged submandibular and cervical lymph nodes. The boy was subjected to biopsy. Microscopic examination of lymph nodes revealed: typical structure is obliterated, cell population is heterogenous, there are big cells with multilobe nuclei, multiple big mononuclear cells, eosinophilic and neutrophilic leukocytes, lymphocytes, besides that, there are necrotic areas and foci of sclerosis. What is the most probable diagnosis?
correct answer	lymphogranulomatosis
B	Lymph node hyperplasia
C	Granulomatous lymphadenitis
D	Suppurative lymphadenitis

E	Non-Hodgkin's lymphoma
№	krok 2019:
topic	Molecular-pathomorphic bases of the immune response. Immune system in the prenatal and postnatal periods. Pathology of immune processes: amyloidosis, hypersensitivity reactions, transplant rejection reaction. Immune deficiency. Autoimmune diseases.
task	Autopsy of a 7-year-old child, who died of uncompensated congenital heart disease, revealed increase in mass and volume of the thymus. On microscopy thymus structure is normal. What pathologic process had occurred in the thymus?
correct answer	Congenital thymomegaly
B	Accidental involution
C	Thymic dysplasia
D	Thymic agenesis
E	Thymoma
№	krok 2019:
topic	Violation of hemostasis: hemorrhagic syndrome, thrombosis, DIC-syndrome. Embolism. Thromboembolism of the pulmonary artery, tanatogenesis.
task	A 60-year-old woman with hepatocirrhosis developed hemorrhagic syndrome. What mechanism leads to the development of this condition?
correct answer	Decreased synthesis of prothrombin and fibrinogen
B	Emergence of neurotoxins in the blood
C	Reduction of hepatic glycogen stores
D	Increased portal venous pressure
E	Deceased blood oncotic pressure
№	krok 2019:
topic	Violation of hemostasis: hemorrhagic syndrome, thrombosis, DIC-syndrome. Embolism. Thromboembolism of the pulmonary artery, tanatogenesis.
task	A 28-year-old patient complains of frequent gingival hemorrhages. Blood test revealed the clotting factor II (prothrombin) deficiency. What phase of blood coagulation is impaired in this patient?
correct answer	Thrombin generation
B	Fibrinolysis
C	-
D	Vascular-platelet haemostasis
E	Clot retraction

№	krok 2019:
topic	Morphological changes of cells as a response to stress and toxic injury (parenchymatous / cellular degeneration). Cellular dystrophy: hyaline-droplet, hydrophobic, fat.
task	A 35-year-old woman is diagnosed with faucial diphtheria. The patient died with signs of acute heart failure. On autopsy: heart cavities are enlarged in the diameter, heart muscle is dull, flaccid, striped on section, with yellowish areas under the endocardium. What type of degeneration was detected in cardiac hystiocytes?
correct answer	Fatty '
B	Hydropic
C	Ballooning
D	Hyaline droplet
E	Carbohydrate
№	krok 2019:
topic	Diseases of the respiratory organs.
task	Macroscopic examination of lung tissue revealed areas of high airiness with small bubbles. Histological examination revealed thinning and rupture of alveolar septa accompanied by formation of large diversiform cavities. What disease was revealed in the lung?
correct answer	Pulmonary emphysema
B	Chronic bronchitis
C	Cavernous tuberculosis
D	Fibrosing alveolitis
E	Multiple bronchiectasis
№	krok 2019:
topic	Diseases of the esophagus, stomach and intestines, liver and pancreas.
task	On histological examination of biopsy material taken from the liver of a woman, who for a long time had been suffering from viral hepatitis type B, the pathologist detected diffuse hepatic fibrosis with formation of porto-portal and porto- central fibrotic septa and disturbance of the liver lobular structure (development of pseudolobules). What process can be characterized by the given morphological changes?
correct answer	Hepatic cirrhosis
B	Hepatocellular carcinoma
C	Cholestasis
D	Acute hepatitis
E	Chronic hepatitis

№	krok 2019
topic	Proliferative (productive) inflammation: with the formation of warts exacerbated, around animal parasites, intermediate productive inflammation, granulomatous inflammation. Specific proliferative inflammation.
task	Chronic inflammation of gingiva resulted in excessive growth of connective tissue fibers. What cell elements are leading in the development of this condition?
correct answer	Fibroblasts
B	Fibrocytes
C	Macrophages
D	Osteoclasts
E	Osteoblasts
№	krok 2019:
topic	Diseases of the salivary glands - clinical and morphological features of the salivary gland inflammatory diseases, autoimmune diseases, salivary gland disease, tumors and tumor-like diseases of the salivary glands.
task	After facial trauma the patient developed a buccal hematoma. What salivatory gland has its outflow blocked by the hematoma?
correct answer	Parotid
B	Submandibular
C	Lingual
D	Buccal
E	Sublingual
№	krok 2019:
topic	Diseases of hard tooth tissues (caries, noncarious lesions), pulpitis, periodontitis, periostitis, osteomyelitis of the jaw bones.
task	Several hours after the dental trauma the tooth pulp presents with hyperemic vessels, marked tissue edema with isolated neutrophils, lymphocytes, and minor dystrophic changes of nerve fibers. Make the diagnosis:
correct answer	Serous pulpitis
B	Granulating pulpitis
C	Suppurative pulpitis
D	Gangrenous pulpitis
E	Fibrous pulpitis
№	krok 2019:
topic	Periodontal diseases, inflammatory diseases of the lips, tongue, ash, oral mucosa. Disorders of the face, neck and organs of the oral cavity

task	Microscopy of a plaque-like structure extracted from the lateral surface of the tongue of a man with dentures revealed significant thickening of the epithelial layer along with processes of parakeratosis, hyperkeratosis, and acanthosis; in the connective tissue there are small round cell infiltrations. Make the diagnosis of the given pathological state:
correct answer	Leukoplakia
B	Chronic glossitis
C	Atrophic (Hunter's) glossitis
D	Chronic stomatitis
E	Ichthyosis
№	krok 2019:
topic	Pathomorphology of cumulation of products of disturbed metabolism. Disturbances of iron metabolism and metabolism of hemoglobinogenic pigments, Pathomorphological manifestations of disturbance of formation of melanin, exchange of nucleoproteins and copper. Swab (calcinosis) of tissues. The formation of stones.
task	Due to trauma the patient's parathyroid glands have been removed, which resulted in inertness, thirst, sharp increase of neuromuscular excitability. Metabolism of the following substance is disturbed:
correct answer	Calcium _f
B	Molybdenum
C	Zinc
D	Manganese
E	Chlorine
№	krok 2019:
topic	Tumors and tumor-like processes of the organs of the cavity of the mouth and jaw bones: odontogenic and neodontogenic tumors, papilloma, cancer of the oral cavity, precancerous changes (leukoplakia), nonepithelial tumors, tumors of the jaw bones (osteoblastoclastoma, osteoma, osteosarcoma, fibrous dysplasia, cherubimism), jaw cysts (follicular cyst, keratocyst, cyst eruptions).
task	A 3-year-old child presents with facial deformation that was gradually developing over the course of 6 months and manifests as symmetrical enlargement of both mandibular angles. Microscopy shows the space between the bone trabeculae to be filled with connective tissue that contains numerous blood vessels and smaller primitive bone trabeculae. What disease is the most likely in this case?
correct answer	Cherubism
B	Eosinophilic granuloma
C	Fibroma
D	Osteosarcoma,

E	Giant-cell tumor of the bone
№	krok 2019
topic	Acute systemic circulatory disorders (acute coronary insufficiency, shock) and systemic circulatory disorders in chronic heart failure and their consequences. Regional disorder of blood circulation (hyperemia, ischemia, plasmorrhagia, bleeding and hemorrhage). Violation of the formation and circulation of lymph. Violation of ion-osmotic and water balance, acid-base state.
task	Autopsy of a man, who died suddenly with signs of acutely disturbed cerebral circulation, revealed aneurysm rupture of the medial cerebral artery and a round cavity 4 cm in diameter filled with blood in his frontal lobe. Name this type of hemorrhage:
correct answer	Hematoma
B	Hemorrhagic infiltration
C	Petechiae
D	Contusion
E	-
№	krok 2019
topic	Morphological changes of the extracellular matrix (stroma) as a response to damage (stromal-vascular dystrophy). Pathomorphology of accumulation of complex proteins (hyalinosis) and lipids. Depletion of the body.
task	A man, who for a long time has been suffering from chronic mandibular osteomyelitis, died of chronic kidney disease. Autopsy revealed large lardaceous kidneys. What process had occurred in the kidneys?
correct answer	Renal amyloidosis
B	Arterial nephrosclerosis
C	Necrotic nephrosis
D	Contracted kidney
E	Glomerulonephritis
№	krok 2019:
topic	Arteriosclerosis and atherosclerosis. Coronary heart disease.
task	During autopsy of the patient, who died of cardiovascular insufficiency, the patient's right foot is darkly colored. The vessels of the patient's thigh are partially obstructed by grayish-red clots. On the vessel walls there are yellowish-gray spots and fibrous plaques, some of which are of stony density. What clinicopathological type of atherosclerosis was complicated in the patient?
correct answer	Atherosclerosis of lower extremities
B	Atherosclerosis of aorta
C	Vascular intestinal atherosclerosis
D	Cerebral atherosclerosis

E	Renal atherosclerosis
№	krok 2019
topic	Hypertension and arteriosclerosis. Hypertonic disease and symptomatic arterial hypertension.
task	On autopsy of a 69-year-old woman, who for a long time had been suffering from hypertension, the pathologist determined that both of her kidneys are dense, markedly diminished, with fine-grained surface. These changes are indicative of:
correct answer	Hypoplasia
B	Senile renal atrophy
C	Compression atrophy
D	Dysfunctional atrophy
E	Atrophy due to inadequate blood supply-
№	krok 2019
topic	Inflammation: causes, morphogenesis. Pathomorphology of exudative inflammation.
task	Autopsy of a 72-year-old man with recurrent transmural myocardial infarction revealed his epicardium and pericardium membranes to be swollen, thickened, coarse, as if covered in hair. Name the type of inflammation that occurred in the cardiac membranes:
correct answer	Croupous
B	Serous
C	Diphtheritic
D	Catarrhal
E	Suppurative
№	krok 2019:
topic	Molecular-pathomorphologic bases of the immune response. Immune system in the prenatal and postnatal periods. Pathology of immune processes: amyloidosis, hypersensitivity reactions, transplant rejection reaction. Immune deficiency. Autoimmune diseases.
task	Differentiation of B-lymphocytes into plasma cells leads to synthesis of immunoglobulins that ensure specific immune response of the body. Differentiation of B-lymphocytes takes place in the following organ of immune system:
correct answer	Red bone marrow
B	Thymus
C	Thyroid gland
D	Liver'
E	Tonsils
№	krok 2019

topic	Pathomorphology of cumulation of products of disturbed metabolism. Disturbances of iron metabolism and metabolism of hemoglobinogenic pigments, Pathomorphological manifestations of disturbance of formation of melanin, exchange of nucleoproteins and copper. Swab (calcinosis) of tissues. The formation of stones.
task	A 20-year-old woman came to the doctor with complaints of general weight loss, loss of appetite, weakness, skin discoloration resembling bronze tan. In addition to hyperpigmentation, examination in the hospital revealed bilateral adrenal tuberculosis. What substance leads to skin hyperpigmentation, when accumulated excessively?
correct answer	Melanin'
B	Hemozoin
C	Adrenochrome
D	Bilirubin
E	Lipofuscin
№	krok 2019:
topic	Kidney disease
task	A 49-year-old man presents with facial edema, significant proteinuria, hypoproteinemia, dysproteinemia, and hyperlipidemia. What provisional diagnosis can be made?
correct answer	Nephrotic syndrome
B	Urolithiasis
C	Cystitis
D	Pyelonephritis
E	Prostatitis
№	krok 2019
topic	General concepts of human infectious pathology. Classification of infectious diseases. Intestinal infectious diseases.
task	Autopsy of a 46-year-old man, who had untreated enteric infection and died of sepsis, revealed the following: perirectal phlegmon, multiple ulcers of the rectum and sigmoid colon, some of which are perforated; mucosa of these intestinal segments is thickened and covered with firmly attached grayish films. What is the most likely disease in this case?
correct answer	Dysentery
B	Amebiasis
C	Typhoid fever
D	Cholera
E	Tuberculosis
№	krok 2019

topic	Tuberculosis.
task	Autopsy of a 52-year-old man revealed changes in his lungs: there is a segmented area of caseous necrosis in the upper right lung; the segments merge with each other. The lung is enlarged, dense, yellowish- colored on section; there are fibrinous films on the pleura. Name the type . of tuberculosis:
correct answer	Caseous pneumonia
B	Infiltrative tuberculosis
C	Acute cavernous tuberculosis
D	Tuberculoma
E	Cirrhotic tuberculosis
№	krok 2019
topic	Pathomorphology of cumulation of products of disturbed metabolism. Disturbances of iron metabolism and metabolism of hemoglobinogenic pigments, Pathomorphological manifestations of disturbance of formation of melanin, exchange of nucleoproteins and copper. Swab (calcinosis) of tissues. The formation of stones.
task	A patient came to the doctor with complaints of general weakness and sleep disturbances. Objectively the patient's skin is yellow. In blood there is increased concentration of direct bilirubin and bile acids. Acholic stool is observed. What condition can be characterized by these changes?
correct answer	Parenchymatous jaundice
B	Familial nonhemolytic (Gilbert's) syndrome
C	Mechanical jaundice
D	Hemolytic jaundice
E	Chronic cholecystitis
№	krok 2019
topic	Periodontal diseases, inflammatory diseases of the lips, tongue, ash, oral mucosa. Disorders of the face, neck and organs of the oral cavity
task	During examination of the oral cavity at the vestibular surface of the lower right incisor there was detected a rounded growth on the thin pedicle. Histologically: in the connective tissue there are numerous thin-walled sinusoids, hemorrhage areas, hemosiderin foci, and giant cells resembling osteoclasts. Make the diagnosis:
correct answer	Giant cell epulis
B	Angiomatous epulis
C	Gingival fibromatosis
D	Cavernous hemangioma

E	Granular cell ameloblastoma
№	krok 2019
topic	Diseases of the respiratory organs.
task	A 45-year-old man with a history of left-sided croupous pneumonia died of multiple traumas received as the result of a car accident. On autopsy in the lower lobe of his left lung its posterolateral wall is attached to the chest wall with fibrous adhesions. The lobe is diminished, dense, fleshy on section, grayish-pink in color; its pieces sink, when placed in water. Histological analysis reveals diffuse excessive growth of fibrous connective tissue in these areas. Name this complication of croupous pneumonia:
correct answer	Carneous degeneration
B	Emphysema
C	Atelectasis
D	Abscess
E	Gangrene
№	krok 2018
topic	Morphological changes of the extracellular matrix (stroma) as a response to damage (stromal-vascular dystrophy). Pathomorphology of accumulation of complex proteins (hyalinosis) and lipids. Depletion of the body
task	A man, who for a long time has been suffering from chronic mandibular osteomyelitis, died of chronic kidney disease. Autopsy revealed large lardaceous kidneys. What process had occurred in the kidneys?
correct answer	Renal amyloidosis
B	Arterial nephrosclerosis
C	Glomerulonephritis
D	Necrotic nephrosis
E	Contracted kidney
№	krok 2018
topic	Diseases of the respiratory organs.
task	Macroscopic examination of lung tissue revealed areas of high airiness with small bubbles. Histological examination revealed thinning and rupture of alveolar septa accompanied by formation of large diversiform cavities. What disease was revealed in the lung?
correct answer	Pulmonary emphysema
B	Multiple bronchiectasis
C	Cavernous tuberculosis
D	Chronic bronchitis
E	Fibrosing alveolitis

№	krok 2018
topic	Regeneration. Structural fundamentals of physiological adaptation of organs and cells. Morphology of the processes of accommodation of cells. Compensatory-adaptive processes.
task	On autopsy of a 69-year-old woman, who for a long time had been suffering from hypertension, the pathologist determined that both of her kidneys are dense, markedly diminished, with finegrained surface. These changes are indicative of:
correct answer	Atrophy due to inadequate blood supply
B	Compression atrophy
C	Senile renal atrophy
D	Dysfunctional atrophy
E	Hypoplasia
№	krok 2018
topic	Kidney disease
task	Autopsy of a man who died of ethylene glycol poisoning revealed that his kidneys are slightly enlarged, edematic; their capsule can be easily removed. Cortical substance is broad and light gray. Medullary substance is dark red. What pathology did this man develop?
correct answer	Necrotic nephrosis
B	Acute pyelonephritis
C	Acute glomerulonephritis
D	Acute tubular-interstitial nephritis
E	Lipoid nephrosis
№	krok 2018
topic	Morphological changes of cells as a response to stress and toxic injury (parenchymatous / cellular degeneration). Cellular dystrophy: hyaline-droplet, hydrophobic, fat
task	A 35-year-old woman is diagnosed with faucial diphtheria. The patient died with signs of acute heart failure. On autopsy: heart cavities are enlarged in the diameter, heart muscle is dull, flaccid, striped on section, with yellowish areas under the endocardium. What type of degeneration was detected in cardiac hystiocytes?
correct answer	Fatty
B	Carbohydrate
C	Ballooning
D	Hyaline droplet
E	Hydropic
№	krok 2018

topic	Regeneration. Structural fundamentals of physiological adaptation of organs and cells. Morphology of the processes of accommodation of cells. Compensatory-adaptive processes.
task	A patient has deep lacerated wound with uneven edges. The wound is suppurating; its edges present with moist granulation tissue that does not protrude above the wound level. Name the type of wound healing:
correct answer	Healing by secondary intention
B	Healing by primary intention
C	Healing under the scab
D	Direct closure of the epithelial defect
E	Wound organization
№	krok 2018
topic	Tumors and tumor-like processes of the organs of the cavity of the mouth and jaw bones: odontogenic and neodontogenic tumors, papilloma, cancer of the oral cavity, precancerous changes (leukoplakia), nonepithelial tumors, tumors of the jaw bones (osteoblastoclastoma, osteoma, osteosarcoma, fibrous dysplasia, cherubimism), jaw cysts (follicular cyst, keratocyst, cyst eruptions).
task	Microscopy of a plaque-like structure extracted from the lateral surface of the tongue of a man with dentures revealed significant thickening of the epithelial layer along with processes of parakeratosis, hyperkeratosis, and acanthosis; in the connective tissue there are small round cell infiltrations. Make the diagnosis of the given pathological state:
correct answer	Leukoplakia
B	Ichthyosis
C	Chronic stomatitis
D	Chronic glossitis
E	Atrophic (Hunter's) glossitis
№	krok 2018
topic	Inflammation: causes, morphogenesis. Pathomorphology of exudative inflammation
task	A patient developed a tender red nodule in the lower jaw area. Histologically there is accumulation of purulent exudate in several hair follicles. What clinicopathological type of inflammation is observed?
correct answer	Carbuncle
B	Phlegmon
C	Furuncle
D	Abscess
E	Hypostatic abscess
№	krok 2018

topic	Acute systemic circulatory disorders (acute coronary insufficiency, shock) and systemic circulatory disorders in chronic heart failure and their consequences. Regional disorder of blood circulation (hyperemia, ischemia, plasmorrhagia, bleeding and hemorrhage). Violation of the formation and circulation of lymph. Violation of ion-osmotic and water balance, acid-base state.
task	Autopsy of a man, who died suddenly with signs of acutely disturbed cerebral circulation, revealed aneurysm rupture of the medial cerebral artery and a round cavity 4 cm in diameter filled with blood in his frontal lobe. Name this type of hemorrhage:
correct answer	Hematoma
B	Petechiae
C	Hemorrhagic infiltration
D	Contusion
E	-
№	krok 2018
topic	Periodontal diseases, inflammatory diseases of the lips, tongue, ash, oral mucosa. Disorders of the face, neck and organs of the oral cavity
task	During examination of the oral cavity at the vestibular surface of the lower right incisor there was detected a rounded growth on the thin pedicle. Histologically: in the connective tissue there are numerous thin-walled sinusoids, hemorrhage areas, hemosiderin foci, and giant cells resembling osteoclasts. Make the diagnosis:
correct answer	Giant cell epulis
B	Granular cell ameloblastoma
C	Angiomatous epulis
D	Gingival fibromatosis
E	Cavernous hemangioma
№	krok 2018
topic	Diseases of hard tooth tissues (caries, noncarious lesions), pulpitis, periodontitis, periostitis, osteomyelitis of the jaw bones.
task	During teeth examination on the lateral surface of the first upper molar there was detected a cone-shaped carious cavity with base oriented towards the tooth surface and apex - towards the tooth center. Softened dentin is visible at the floor of the carious cavity. Make the diagnosis:
correct answer	Dentin caries
B	Enamel caries
C	Cement caries
D	Tooth erosion
E	-

№	krok 2018
topic	Diseases of the esophagus, stomach and intestines, liver and pancreas
task	On histological examination of biopsy material taken from the liver of a woman, who for a long time had been suffering from viral hepatitis type B, the pathologist detected diffuse hepatic fibrosis with formation of portoportal and portocentral fibrotic septa and disturbance of the liver lobular structure (development of pseudolobules). What process can be characterized by the given morphological changes?
correct answer	Hepatic cirrhosis
B	Chronic hepatitis
C	Hepatocellular carcinoma
D	Acute hepatitis
E	Cholestasis
№	krok 2018
topic	Molecular-pathomorphic bases of the immune response. Immune system in the prenatal and postnatal periods. Pathology of immune processes: amyloidosis, hypersensitivity reactions, transplant rejection reaction. Immune deficiency. Autoimmune diseases.
task	A patient has been administered conduction anesthesia with novocaine in preparation for tooth extraction. After the anesthesia administration the patient developed swelling and hyperemy around the injection site, skin itch, general fatigue, motor agitation. Name the developed complication:
correct answer	Allergy
B	Idiosyncrasy
C	Tachyphylaxis
D	Drug dependence
E	Inflammation
№	krok 2018
topic	Proliferative (productive) inflammation: with the formation of warts exacerbated, around animal parasites, intermediate productive inflammation, granulomatous inflammation. Specific proliferative inflammation
task	Chronic inflammation of gingiva resulted in excessive growth of connective tissue fibers. What cell elements are leading in the development of this condition?
correct answer	Fibroblasts
B	Osteoblasts
C	Fibrocytes
D	Macrophages

E	Osteoclasts
№	krok 2018
topic	Pathomorphology of cumulation of products of disturbed metabolism. Disturbances of iron metabolism and metabolism of hemoglobinogenic pigments, Pathomorphological manifestations of disturbance of formation of melanin, exchange of nucleoproteins and copper. Swab (calcinosis) of tissues. The formation of stones.
task	A 20-year-old woman came to the doctor with complaints of general weight loss, loss of appetite, weakness, skin discoloration resembling bronze tan. In addition to hyperpigmentation, examination in the hospital revealed bilateral adrenal tuberculosis. What substance leads to skin hyperpigmentation, when accumulated excessively?
correct answer	Melanin
B	Bilirubin
C	Hemozoin
D	Lipofuscin
E	Adrenochrome
№	krok 2018
topic	Diseases of the respiratory organs.
task	A 45-year-old man with a history of left-sided croupous pneumonia died of multiple traumas received as the result of a car accident. On autopsy in the lower lobe of his left lung its posterolateral wall is attached to the chest wall with fibrous adhesions. The lobe is diminished, dense, fleshy on section, grayish-pink in color; its pieces sink, when placed in water. Histological analysis reveals diffuse excessive growth of fibrous connective tissue in these areas. Name this complication of croupous pneumonia:
correct answer	Carneous degeneration
B	Emphysema
C	Gangrene
D	Atelectasis
E	Abscess
№	krok 2018
topic	Diseases of hard tooth tissues (caries, noncarious lesions), pulpitis, periodontitis, periostitis, osteomyelitis of the jaw bones.
task	Oral examination revealed dark yellow and brown spots and stripes on the labial and lingual surfaces of the patient's teeth; more than the half of the dental surface is affected; enamel and dentin are destroyed. What diagnosis is the most likely?
correct answer	Fluorosis
B	Metastatic calcification
C	Dental calculus

D	Cuneiform defect
E	Dystrophic calcification
№	krok 2018
topic	Diseases of hard tooth tissues (caries, noncarious lesions), pulpitis, periodontitis, periostitis, osteomyelitis of the jaw bones.
task	Several hours after the dental trauma the tooth pulp presents with hyperemic vessels, marked tissue edema with isolated neutrophils, lymphocytes, and minor dystrophic changes of nerve fibers. Make the diagnosis:
correct answer	Serous pulpitis
B	Suppurative pulpitis
C	Gangrenous pulpitis
D	Granulating pulpitis
E	Fibrous pulpitis
№	krok 2018
topic	General concepts of human infectious pathology. Classification of infectious diseases. Intestinal infectious diseases.
task	Autopsy of a 46-year-old man, who had untreated enteric infection and died of sepsis, revealed the following: perirectal phlegmon, multiple ulcers of the rectum and sigmoid colon, some of which are perforated; mucosa of these intestinal segments is thickened and covered with firmly attached grayish films. What is the most likely disease in this case?
correct answer	Dysentery
B	Typhoid fever
C	Amebiasis
D	Cholera
E	Tuberculosis
№	krok 2018
topic	Diseases of the respiratory organs.
task	Autopsy of a 52-year-old man revealed changes in his lungs: there is a segmented area of caseous necrosis in the upper right lung; the segments merge with each other. The lung is enlarged, dense, yellowish-colored on section; there are fibrinous films on the pleura. Name the type of tuberculosis:
correct answer	Caseous pneumonia
B	Tuberculoma
C	Infiltrative tuberculosis
D	Cirrhotic tuberculosis
E	Acute cavernous tuberculosis

№	krok 2018
topic	Tumors and tumor-like processes of the organs of the cavity of the mouth and jaw bones: odontogenic and neodontogenic tumors, papilloma, cancer of the oral cavity, precancerous changes (leukoplakia), nonepithelial tumors, tumors of the jaw bones (osteoblastoclastoma, osteoma, osteosarcoma, fibrous dysplasia, cherubimism), jaw cysts (follicular cyst, keratocyst, cyst eruptions).
task	A 3-year-old child presents with facial deformation that was gradually developing over the course of 6 months and manifests as symmetrical enlargement of both mandibular angles. Microscopy shows the space between the bone trabeculae to be filled with connective tissue that contains numerous blood vessels and smaller primitive bone trabeculae. What disease is the most likely in this case?
correct answer	Cherubism
B	Giant-cell tumor of the bone
C	Fibroma
D	Eosinophilic granuloma
E	Osteosarcoma
№	krok 2018
topic	Inflammation: causes, morphogenesis. Pathomorphology of exudative inflammation.
task	Autopsy of a 72-year-old man with recurrent transmural myocardial infarction revealed his epicardium and pericardium membranes to be swollen, thickened, coarse, as if covered in hair. Name the type of inflammation that occurred in the cardiac membranes:
correct answer	Croupous
B	Diphtheritic
C	Serous
D	Suppurative
E	Catarrhal
№	krok 2018
topic	Arteriosclerosis and atherosclerosis. Coronary heart disease.
task	During autopsy of the patient, who died of cardiovascular insufficiency, the patient's right foot is darkly colored. The vessels of the patient's thigh are partially obstructed by grayish-red clots. On the vessel walls there are yellowish-gray spots and fibrous plaques, some of which are of stony density. What clinicopathological type of atherosclerosis was complicated in the patient?
correct answer	Atherosclerosis of lower extremities
B	Cerebral atherosclerosis
C	Atherosclerosis of aorta
D	Vascular intestinal atherosclerosis

E	Renal atherosclerosis
№	krok 2018
topic	Sepsis. Especially dangerous (convection, quarantine) infections. Syphilis
task	During examination of the patient's oral cavity a dentist noticed deformation of the teeth and a crescent indentation on the upper right incisor. The teeth are undersized, barrel-shaped - tooth cervix is wider than its edge. The patient uses a hearing aid, suffers from visual impairment. What type of syphilis affects teeth in such a way?
correct answer	Late congenital
B	Primary
C	Early congenital
D	Secondary
E	Neurosyphilis
№	krok 2018
topic	Molecular-pathomorphic bases of the immune response. Immune system in the prenatal and postnatal periods. Pathology of immune processes: amyloidosis, hypersensitivity reactions, transplant rejection reaction. Immune deficiency. Autoimmune diseases.
task	Autopsy of a 7-year-old child, who died of uncompensated congenital heart disease, revealed increase in mass and volume of the thymus. On microscopy thymus structure is normal. What pathologic process had occurred in the thymus?
correct answer	Congenital thymomegaly
B	Thymoma
C	Thymic agenesis
D	Accidental involution
E	Thymic dysplasia
№	krok 2018
topic	Pathomorphology of cumulation of products of disturbed metabolism. Disturbances of iron metabolism and metabolism of hemoglobinogenic pigments, Pathomorphological manifestations of disturbance of formation of melanin, exchange of nucleoproteins and copper. Swab (calcinosis) of tissues. The formation of stones.
task	A patient came to the doctor with complaints of general weakness and sleep disturbances. Objectively the patient's skin is yellow. In blood there is increased concentration of direct bilirubin and bile acids. Acholic stool is observed. What condition can be characterized by these changes?
correct answer	Mechanical jaundice
B	Hemolytic jaundice
C	Parenchymatous jaundice

D	Familial nonhemolytic (Gilbert's) syndrome
E	Chronic cholecystitis
№	крок 2018
topic	General concepts of human infectious pathology. Classification of infectious diseases. Intestinal infectious diseases.
task	A girl presents with high fever and sore throat. Objectively the soft palate is swollen, the tonsils are covered with gray films that are firmly attached and leave deep bleeding lesions when removed. What is the most likely disease in this case?
correct answer	Pharyngeal diphtheria
B	Pseudomembranous (Vincent's) tonsillitis
C	Lacunar tonsillitis
D	Infectious mononucleosis
E	Necrotic tonsillitis
№	крок 2020
topic	Acute systemic circulatory disorders
task	A postmortem examination of the body of a 59-year-old woman, who died of acute heart failure, detected in the left ventricular wall an irregularly-shaped yellow area, 2.5x2 cm in size, with a doughy consistency. In the corresponding place on the endocardium a thrombus was formed, while on the epicardium there were fibrinous deposits. What was the localization of the infarction in relation to the cardiac wall in this case?
correct answer	Transmural
B	Subendocardial
C	Intramural
D	Subepicardial
E	–
№	крок 2020
topic	Cellular dystrophies: hyaline-droplet , hydropic, fatty.
task	An examination of the oral cavity of a 50-year-old man, who is a long-term smoker, detected on the lingual mucosa an irregularly-shaped whitish plaque. Histologically, there are thickening of the stratified squamous epithelium, parakeratosis, hyperkeratosis, and acanthosis. Specify the type of the pathological process:
correct answer	Leukoplakia
B	Keratoacanthoma
C	Hypertrophic glossitis
D	Avitaminosis A

E	Chronic stomatitis
№	крок 2020
topic	Morphology of cell accommodation processes.
task	A patient died of a cardiopulmonary insufficiency. His heart is enlarged, the wall of his right ventricle is thickened on section, and the cavity is dilated. Characterize the pathological process:
correct answer	Hypertrophy
B	Atrophy
C	Hyperplasia
D	Metaplasia
E	Sclerosis
№	крок 2020
topic	Proliferative (productive) inflammation
task	A patient developed a keloid scar in the area of a purulent skin inflammation (carbuncle). At what stage of inflammation does it occur?
correct answer	Proliferation
B	Primary alteration
C	Exudation
D	Secondary alteration
E	-
№	крок 2020
topic	Diseases of the hard tissues of the tooth
task	A histopathological analysis of the tissues of an extracted tooth shows that a larger part of the dental cavity is filled with the collagen fiber-rich connective tissue and cellular infiltrations that are made up of lymphocytes and plasma cells. What type of pulpitis can be characterized by the described changes?
correct answer	Fibrous pulpitis
B	-
C	Purulent pulpitis
D	Gangrenous pulpitis
E	Granulating pulpitis
№	крок 2020
topic	Benign and malignant epithelial tumors.

task	A skin neoplasm was removed from a patient. The neoplasm is a dense node with a papillary surface that resembles a cauliflower. Microscopically the tumor consists of numerous papillae. Its parenchyma is formed from the covering epithelium with increased number of layers. The epithelium retains the cell polarity, as well as its stratification and intactness of the proper membrane. The tumor stroma is located within the center of the papillae. Make the diagnosis:
correct answer	Papilloma
B	Fibroma
C	Cystadenoma
D	Adenoma
E	Fibroadenoma
№	крок 2020
topic	Clinical and morphological features of the organs of the dental system and oral cavity.
task	The dentist examines a pregnant woman. There are 2 round lesions up to 1 cm in diameter on her oral mucosa. The lesions appeared 3 days ago, they have white-gray surface and red margin. The dentist can make the following diagnosis:
correct answer	Leukoplakia
B	Necrotizing ulcerative stomatitis
C	Aphthous stomatitis
D	Catarrhal stomatitis
E	Gangrenous stomatitis
№	крок 2020
topic	Syphilis.
task	A 23-year-old man developed a perforation in his hard palate. A dense formation with clear margins was detected in this area. After a surgery, microscopy of the excised formation showed there a large focus of caseous necrosis surrounded with a granulation tissue with endovasculitis and a cellular infiltration consisting of lymphocytes and epithelioid cells with predominance of plasma cells. What is the most likely disease in this case?
correct answer	Syphilis
B	Scleroma
C	Sarcoma
D	Tuberculosis
E	Leprosy
№	крок 2020
topic	Diseases of the salivary glands

task	Disturbed endoderm differentiation was detected in an embryo material. This process can lead to developmental changes in the following organs:
correct answer	Salivary glands
B	Stomach
C	Heart
D	Aorta
E	Kidneys
№	крок 2020
topic	Regional circulatory disorders (hyperemia, ischemia, plasmorrhagia, bleeding and hemorrhage).
task	Autopsy of a man, who died suddenly with signs of acutely disturbed cerebral circulation, revealed aneurysm rupture of the medial cerebral artery and a round cavity 4 cm in diameter filled with blood in his frontal lobe. Name this type of hemorrhage:
correct answer	Hematoma
B	Hemorrhagic infiltration
C	-
D	Petechiae
E	Contusion
№	крок 2020
topic	Respiratory diseases.
task	A 38-year-old man with chronic alcoholism died of progressive heart failure. An autopsy shows lobar pleuropneumonia in the lower lobe of the right lung. Histology shows a fibrinous exudate and segmented leukocytes in the alveoli. Determine the stage of croupous pneumonia:
correct answer	Gray hepatization
B	Red hepatization
C	Influx
D	Resolution
E	-
№	крок 2020
topic	Kidney disease.
task	A certain disease of infection- allergic or unknown origin leads to bilateral diffuse or focal non-suppurative inflammation of renal glomerular apparatus with characteristic renal and extrarenal signs. Name this disease:

correct answer	Glomerulonephritis
B	Polycystic renal disease
C	Nephrosclerosis
D	Nephrolithiasis
E	Pyelonephritis
№	крок 2020
topic	Diseases of the hard tissues of the tooth
task	A 1.5-year-old child on examination has deformed legs and foci of thickening in the area of the ribs and wrists. A dentist pointed out the late eruption of teeth, disturbed order of tooth eruption, uneven mineralization of the enamel and dentin, and horizontal configuration of the upper jaw that forms a high-arched palate. What disease developed in this child?
correct answer	Gout
B	Osteoporosis
C	Fluorosis
D	Rickets
E	Sialolithiasis
№	крок 2020
topic	Atherosclerosis and arteriosclerosis.
task	Autopsy of an 86-year-old woman, who suffered from cerebral atherosclerosis, shows Insufficient blood supply
correct answer	Insufficient blood supply
B	Caused by physico-chemical factors
C	Dysfunctional
D	Pressure-induced
E	Neurogenic
№	крок 2020
topic	Acute systemic circulatory disorders
task	Lower limbs of a patient with varicose veins were examined. The patient's legs are cyanotic and pastose, skin temperature is low, single petechiae are observed. What disturbance of hemodynamics is it?
correct answer	Obstruction ischemia
B	Venous hyperemia
C	Compression ischemia
D	Arterial hyperemia

E	Thromboembolism
№	крок 2020
topic	Hypothalamo-pituitary disorders
task	After examination, the signs of acromegaly were detected in a patient. What endocrine gland is involved in this pathological process?
correct answer	Adenohypophysis
B	Adrenal glands
C	Pineal gland
D	Neurohypophysis
E	Thyroid gland
№	крок 2020
topic	Diseases of the hard tissues of the tooth
task	An examination of tooth 16 revealed a cavity on its masticatory surface. The cavity has a narrow opening and is filled with softened dentin. Microscopically, there are bacteria in the dilated dentinal canaliculi, some canaliculi are destroyed, the cavities merge together into caverns, decalcification of enamel and dentin occurs without formation of the replacement dentin. Make the diagnosis:
correct answer	Acute deep dental caries
B	Chronic deep dental caries
C	Chronic superficial dental caries
D	Acute superficial dental caries
E	Dental caries at the stage of white spot lesions
№	КРОК1 2021
topic	Atherosclerosis
task	Autopsy of a patient, who died of heart failure, shows yellow spots and streaks in the the aortic and coronary intima, as well as gray-yellow plaque, protruding from the intima surface. The plaque is focally ulcerated and presents with hemorrhages, thrombi, and calcified foci. Such vascular alterations are characteristic of:
correct answer	Atherosclerosis
B	Syphilitic mesaortitis
C	-
D	Essential hypertension
E	Periarteritis nodosa
№	КРОК1 2021

topic	Hepatic cirrhosis
task	A 59-year-old man has signs of parenchymal jaundice and portal hypertension. Histology of the puncture biopsy material, obtained from the patient's liver, shows the following: disturbed lobar and trabecular structure, signs of fatly degeneration in a portion of hepatocytes, formation of porto-portal connective tissue septa with pseudolobules and periportal lympho- macrophageal infiltrations. Make the diagnosis:
correct answer	Hepatic cirrhosis
B	Viral hepatitis
C	Toxic dystrophy
D	Alcoholic hepatitis
E	Chronic hepatosis
№	KPOK1 2021
topic	Syphilis
task	A 23-year-old man developed a perforation in his hard palate, a dense formation with clear margins was detected in this area. After a surgery, microscopy of the excised formation shows there a large focus of caseous necrosis surrounded with a granulation tissue with endovasculitis and a cellular infiltration consisting of lymphocytes and epithelioid cells with predominance of plasma cells. What is the most likely disease in this case?
correct answer	Syphilis
B	Sarcoma
C	Tuberculosis
D	Scleroma
E	Leprosy
№	KPOK1 2021
topic	Respiratory diseases
task	Autopsy of the body of a man, who died after 3 weeks of pneumonia, shows acutely enlarged lower lobe of his right lung. The lobe is dense, airless, gray, with fibrin deposits on the pleura. Microscopy shows fibrin and segmented leukocytes in all alveoles of this lobe. Make the diagnosis:
correct answer	Croupous pneumonia
B	Influenza virus pneumonia
C	Fibrinous pleurisy
D	Interstitial pneumonia
E	Focal bronchopneumonia

№	KPOK1 2021
topic	intestinal infectious diseases
task	Rectal microscopy shows large necrotic foci on the mucosa. Necrotic masses are saturated with fibrin, forming a film. Mucosa and submucosa on the periphery of the necrotic foci are hyperemic, swollen, and have hemorrhages and leukocyte infiltrations. What disease can be suspected?
correct answer	Dysentery
B	Typhoid fever v
C	Salmonellosis
D	Amebiasis
E	Cholera
№	KPOK1 2021
topic	immunopathology
task	Autopsy of a 7-year-old child, who died of uncompensated congenital heart disease, revealed increase in mass and volume of the thymus. On microscopy thymus structure is normal. What pathologic process had occurred in the thymus?
correct answer	Congenital thymomegaly
B	Thymic agenesis
C	Thymoma
D	Accidental thymic involution
E	Thymic dysplasia
№	KPOK1 2021
topic	PIGMENTAL DYSTROPHIES
task	A patient came to the doctor with complaints of general weakness and sleep disturbances. Objectively the patient's skin is yellow. In blood there is increased concentration of direct bilirubin and bile acids. Acholic stool is observed. What condition can be characterized by these changes?
correct answer	Parenchymatous jaundice
B	Familial nonhemolytic (Gilbert's) syndrome
C	Chronic cholecystitis
D	Mechanical jaundice
E	Hemolytic jaundice
№	KPOK1 2021
topic	neoplasm

task	A man developed a malignant neoplasm in his tongue. What characteristics of this tumor allow identifying it as malignant?
correct answer	Infiltrating growth
B	Anaplasia
C	Positive Pasteur effect
D	Increased number of mitotic cells
E	Expansive growth
№	KPOK1 2021
topic	Atherosclerosis
task	A 78-year-old woman during physical exertion suddenly developed abdominal pain accompanied by pallor and a drop in blood pressure to as low as 70/40 mm Hg. Death occurred with signs of acute heart failure. Autopsy detected marked atherosclerosis and a sacculatation of vessel wall in the abdominal aorta. The sacculatation is 16 cm in diameter and filled with blood clots. In the wall of the sacculatation there is a fissured perforation. What pathology occurred in the woman's aorta?
correct answer	Aortic aneurysm with rupture
B	Syphilitic mesaortitis
C	Nonspecific aortitis
D	Dysplastic aortic wall
E	-
№	KPOK1 2021
topic	thrombis
task	Autopsy of the body of a man, who died during an abdominal surgery, revealed numerous thrombi in the veins of the lesser pelvis. Clinically, thromboembolic syndrome was detected. Where should the doctor search for the embolus?
correct answer	Veins of the lower extremities
B	Pulmonary arteries
C	Portal vein
D	Left ventricle of heart
E	Brain
№	KPOK1 2021
topic	Respiratory diseases
task	A 38-year-old man with chronic alcoholism died of progressvc heart failure. An autopsy shows lobar pleuropneumonia in the lower lobe of the right lung. Histology shows a fibrinous exudate and segmented leukocytes in the alveoli. Determine the stage of croupous pneumonia:

correct answer	Gray hepatization
B	-
C	Red hepatization
D	Resolution
E	Influx
№	KPOK1 2021
topic	Diseases of the dento-jaw system
task	During removal of a carious tooth, the dental surgeon noticed a soft elastic gray-pink nodule 1.3 cm in diameter in the region of the dental root. Microscopically, the nodule consists of granulation tissue with lymphocytes, plasma cells, mast cells, macrophages, xanthome cells, and fibroblasts. Make the diagnosis:
correct answer	Simple granuloma
B	Epithelial granuloma
C	Eosinophilic granuloma
D	Cystic granuloma
E	Granulating periodontitis
№	KPOK1 2021
topic	Extracellular degeneration
task	Autopsy of the body of a 62-year- old man, who died with progressing signs of heart failure, revealed enlarged heart. The heart is flaccid and its chambers are distended. The myocardium is dull and clay-yellow on section. The endocardium has yellow-white stripes that is especially marked in the papillary muscles. What pathological process is the most likely?
correct answer	Fatty degeneration of the myocardium
B	Cardiosclerosis
C	Dilated cardiomyopathy
D	Fatty heart
E	Myomalacia
№	KPOK1 2021
topic	Infection diseases
task	A patient presents with acute onset of the disease: high fever and enlarged painful spleen. On the 10th day since the onset the patient developed a maculopapular rash on the abdomen. On the 21st day the patient died of peritonitis. Postmortem study of the body shows deep ulcers in the area of necrotic aggregate lymphoid follicles (Peyer's patches) in the ileum of the deceased. One of the ulcers is perforated and diffuse fibrinopurulent peritonitis is observed. What disease can be suspected in this case?

correct answer	Typhoid fever
B	Intestinal amebiasis
C	Dysentery
D	Salmonellosis
E	Cholera
№	KPOK1 2021
topic	Diseases of kidney
task	During kidney microscopy, the pathologist noticed crescent-shaped epithelial formations in the outer layer of the Bowman's capsule in 80% of the glomeruli. He concluded that such clinical presentation corresponds with:
correct answer	Rapidly progressive extracapillary proliferative glomerulonephritis
B	Fibroplastic glomerulonephritis
C	Intracapillary exudative glomerulonephritis
D	Intracapillary proliferative glomerulonephritis
E	Extracapillary exudative glomerulonephritis
№	KPOK1 2021
topic	Infection diseases
task	Autopsy of a 46-year-old man, who had untreated enteric infection and died of sepsis, revealed the following: perirectal phlegmon, multiple ulcers of the rectum and sigmoid colon, some of which are perforated; mucosa of these intestinal segments is thickened and covered with firmly attached grayish films. What is the most likely disease in this case?
correct answer	Dysentery
B	Tuberculosis
C	Cholera
D	Typhoid fever
E	Amebiasis
№	KPOK1 2021
topic	Diseases of the dento-jaw system
task	Microscopy of an extracted tooth shows decreased count and size of odontoblasts and other cells of the dental pulp, with characteristically sclerotic connective tissue that makes up the pulp. What general pathology can be suspected in the dental pulp?
correct answer	Reticular atrophy of the pulp
B	Fatty degeneration
C	Hyalinosis

D	Pulpal hyperplasia
E	Amyloidosis
№	KPOK1 2021
topic	Diseases of the dento-jaw system
task	A patient complains of toothache. Examination revealed a carious cavity that exposes the pulp. What stage of caries is it?
correct answer	Deep caries
B	Chalky lesion
C	Superficial caries
D	Median caries
E	Circular caries
№	KPOK1 2021
topic	Diseases of liver
task	A patient with alcoholism has hepatic cirrhosis. Within the last half a year he developed varicose abdominal veins, splenomegaly, and ascites (portal hypertension syndrome). What complication is the most likely cause of the patient's death?
correct answer	Hemorrhage from the gastrointestinal varices
B	Hypoproteinemia
C	Accelerated hemolysis
D	Hepatolienal syndrome
E	Hepatic encephalopathy
№	KPOK1 2021
topic	Diseases of the dento-jaw system
task	Examination of the oral cavity revealed dark yellow and brown spots on the labial and lingual surfaces of the teeth. The spots cover more than half of the dental surface. Dentin and enamel are destroyed. What is the most likely diagnosis?
correct answer	Caries of enamel
B	Dental erosion
C	Fluorosis
D	Deep caries
E	Cuneiform defects
№	KPOK1 2021
topic	inflammation

task	Autopsy of the body of a 43-year- old man, who died of cardiopulmonary failure, shows a cavity 3 cm in diameter, filled with viscous green-gray content, in the lower lobe of the right lung. Histology shows that the wall of this structure is made of connective tissue and immature granulation tissue, while the lumen contains neutrophilic leukocytes and products of their breakdown. What type of inflammation is it?
correct answer	Chronic abscess
B	Furuncle
C	Acute abscess
D	Empyema
E	Carbuncle
№	KPOK1 2021
topic	immunopathology
task	A child has a congenital immunodeficiency. The cell-mediated immunity is affected, causing frequent viral infections. It is likely to be caused by a disorder of the following organ:
correct answer	Thymus gland
B	Spleen
C	Red bone marrow
D	Lymph nodes
E	Palatine tonsils
№	KPOK1 2021
topic	Diseases of the dento-jaw system
task	A 32-year-old woman underwent removal of a brown fungiform gingival neoplasm. Microscopically, it consists of connective tissue with numerous sinusoidal vessels, large multinucleated cells, and small mononuclear cells. There are small hemorrhages and hemosiderin deposits, as well. What type of neoplasm is it?
correct answer	Angiomatous epulis
B	Gingival fibromatosis
C	Giant-cell epulis
D	Hypertrophic gingivitis
E	Fibromatous epulis
№	KPOK1 2021
topic	genital diseases

task	At autopsy, section of the right ovary shows a round lesion 2.5 cm in diameter with a clear serous fluid, surrounded by a smooth glistening membrane. Which of the following macroscopic lesions best represents the autopsy findings?
correct answer	Cyst
B	Nodule with central necrosis
C	Infiltrate
D	Nodule
E	Ulcer
№1	KPOK 2022
Topic	vascular-stromal dystrophy
Task test	A man, who for a long time has been suffering from chronic mandibular osteomyelitis, died of renal failure. Autopsy shows enlarged yellow-white kidneys that are extremely dense and have a waxy sheen. Light microscopy detected deposits of homogeneous pink masses in the glomerular capillary loops, walls of arterioles and arteries, canalicular basement membrane, and stroma. These deposits color brick-red when stained with Congo red. What process developed in the kidneys?
Correct answer	Secondary amyloidosis
B	Fibrinoid necrosis
C	Primary amyloidosis
D	General hyalinosis
E	Local hyalinosis
№2	KPOK 2022
Topic	special dentistry
Task test	A 26-year-old woman was found to have a tumor of the alveolar process. The tumor manifests as a dense node with clear margins. Histological examination shows homogeneous mononuclear small oval cells mixed with multinucleated giant cells; occasionally bone trabeculae form among the cells. Make the diagnosis:
Correct answer	Giant-cell tumor of the bone
B	Ameloblastoma
C	Eosinophilic granuloma
D	Fibromatous epulis
E	Primordial cyst
№3	KPOK 2022
Topic	epithelial tumors

Task test	Microscopic examination of a surgical biopsy material (part of the lip with an ulcer) shows epithelial complexes composed of atypical stratified epithelium with pathological mitotic figures near the ulcer margins and under the ulcer floor in the connective tissue of mucosa. Within these complexes there are accumulations of bright pink concentric formations. What pathology is it?
Correct answer	Squamous cell keratinous carcinoma
B	Squamous cell nonkeratinous carcinoma
C	Transitional cell carcinoma
D	Papilloma
E	Basal cell carcinoma
№4	KPOK 2022
Topic	special dentistry
Task test	Histological examination of the mandibular bone shows a tumor consisting of fibrous tissue that surrounds basophilic cement-like foci of varying size. Make the diagnosis, what kind of tumor it is:
Correct answer	Cementoma
B	Cemento-ossifying fibroma
C	Giant cementoma
D	Cementoblastoma
E	Odontogenic fibroma
№5	KPOK 2022
Topic	respiratory diseases
Task test	A 2-year-old child with a history of URTI, who died with signs of cardiopulmonary failure, has hyperemic right lung. In segments 2,6, and 10 on the surface and on section there are irregularshaped yellow airless foci, with their size varying from several millimeters to 1 cm. Microscopy shows that in these portions of pulmonary tissue the alveoli, bronchioles, and small bronchi contain exudate with predominance of neutrophils. What is the most likely diagnosis?
Correct answer	Interstitial pneumonia
B	Acute bronchitis
C	Croupous pneumonia
D	Pulmonary abscess
E	Focal pneumonia
№6	KPOK 2022

Topic	special dentistry
Task test	A 45-year-old man had a cyst removed from the region of his gonial angle. The cyst was 1.5 cm in diameter and contained numerous keratinous masses. Histology shows that the cyst wall is thin and formed from mature connective tissue, cyst interior is lined with stratified squamous epithelium with marked parakeratosis and hyperkeratosis. Make the diagnosis:
Correct answer	Primordial cyst
B	Radicular cyst
C	Follicular cyst
D	Follicular ameloblastoma
E	Cherubism
№7	KPOK 2022
Topic	special dentistry
Task test	A 40-year-old woman after installation of artificial crowns on her upper incisors eventually developed a brownish gingival enlargement on the vestibular surface. The enlargement covers the crowns and is 15 mm in diameter. Open biopsy results: under the stratified squamous epithelium of the gums there is a neoplasm consisting of connective tissue with numerous sinusoid vessels, oval mononuclear cells that form osteoid substance, and multinucleated giant cells that destroy the maxillary alveolar ridge. Make the diagnosis:
Correct answer	Giant-cell epulis
B	Fibromatous epulis
C	Angiomatous epulis
D	Eosinophilic granuloma
E	Gingival fibromatosis
№8	KPOK 2022
Topic	immunopathology
Task test	Autopsy of a 2-year-old child, who died of meningitis, shows absence of thymus and T-dependent areas in the peripheral lymphoid tissue. What immunodeficiency syndrome can be characterized by these changes?
Correct answer	Cellular immunodeficiency syndrome
B	Combined immunodeficiency syndrome
C	Humoral immunodeficiency syndrome
D	Secondary immunodeficiency syndrome
E	Cellular immunodeficiency syndrome

№9	KPOK 2022
Topic	Compensation and adaptation
Task test	A patient with essential hypertension presents with significant increase in left ventricular myocardial mass. It is likely to be caused by:
Correct answer	Increased volume of cardiomyocytes
B	Myocardial fluid retention
C	Increased number of cardiomyocytes
D	Proliferation of connective tissue
E	Fatty infiltration of the myocardium
№10	KPOK 2022
Topic	kidney disease
Task test	A 53-year-old patient with a long history of nephrolithiasis underwent nephrectomy. The removed kidney is a thin-walled sac filled with urine. Renal parenchyma is atrophied. Specify this complication of nephrolithiasis:
Correct answer	Hydronephrosis
B	Pyonephrosis
C	Pyelonephritis
D	Nephrosclerosis
E	Multicystic kidney disease
№11	KPOK 2022
Topic	perinatal pathology
Task test	A newborn failed to take his first breath. Autopsy revealed that despite unobstructed airways the lungs of the newborn were unable to stretch. What is the most likely cause of this condition?
Correct answer	Absence of surfactant
B	Pleural thickening
C	Alveolar enlargement
D	Bronchial rupture
E	Bronchial narrowing
№12	KPOK 2022
Topic	Tuberculosis

Task test	A 22-year-old man was brought into the inpatient department with complaints of fever and weakness. One of his enlarged cervical lymph nodes was excised for histological analysis. In the tissues of the lymph node there are necrotic foci surrounded with epithelioid cells, Langhans multinucleated giant cells, and lymphocytes. What disease can be suspected in this case?
Correct answer	Tuberculosis
B	Syphilis
C	Lymphatic leukemia
D	Lymphogranulomatosis
E	Sarcoidosis
№13	KPOK 2022
Topic	Necrosis
Task test	A 38-year-old man suddenly died. Autopsy revealed myocardial infarction in the posterior wall of the left ventricle. What are the most likely changes in myocardiocyte structure that can be revealed microscopically in the infarction focus?
Correct answer	Karyolysis
B	Calcification
C	Protein degeneration
D	Carbohydrate degeneration
E	Adipose degeneration
№14	KPOK 2022
Topic	Thrombosis. Embolism
Task test	A 28-year-old patient had been diagnosed with multifragmental fracture of the right hip. On the third day after the injury he began to complain of pain in the right side of chest, difficult respiration. A day later the death occurred against the background of progressive heart and respiratory failure. Histological study of pulmonary and cerebral blood vessels revealed orange sudanophilic droplets that completely obstructed the vessels of microvasculature. What complication caused the death of the patient?
Correct answer	Fat embolism
B	Thromboembolism
C	Gas embolism
D	Microbial embolism
E	Drug-induced embolism
№15	KPOK 2022
Topic	Parenchymal dystrophies

Task test	Microscopy of a plaque-like structure extracted from the lateral surface of the tongue of a man with dentures revealed significant thickening of the epithelial layer along with processes of parakeratosis, hyperkeratosis, and acanthosis; in the connective tissue there are small round cell infiltrations. Make the diagnosis of this pathological condition:
Correct answer	Leukoplakia
B	Chronic glossitis
C	Atrophic (Hunter's) glossitis
D	Chronic stomatitis
E	Ichthyosis
№16	KPOK 2022
Topic	Necrosis
Task test	Examination of the femur detected suppurative inflammation of compact bone substance and bone marrow with formation of sequestra. What disease causes such changes?
Correct answer	Osteomyelitis
B	Multiple myeloma
C	Periostitis
D	Giant cell tumor of bone
E	Reticulosarcoma
№17	KPOK 2022
Topic	Proliferative inflammation
Task test	Histological examination of a lymph node removed from the posterior triangle of neck of an 18-year-old patient revealed cell agglomerations that included single multinuclear Reed-Stenberg cells, major Hodgkin's cells, minor Hodgkin's cells, and many lymphocytes, single plasmatic cells, and eosinophils. What is the most likely diagnosis?
Correct answer	Lymphogranulomatosis
B	Lymphocytic lymphoma
C	Chronic lymphoid leukemia
D	Burkitt tumor
E	Nodular lymphoma