Topic 5. **Processes of regeneration. Wound healing. Adaptation processes.**
Processes of adaptation Regeneration and reparation. Wound healing.

1. Name the successive phases (stages) of compensatory-adaptive processes. P=3
2. Define compensation. P=2
3. Define hypertrophy. P=2
4. Define hyperplasia. P=2
5. List the types of hypertrophy. P=4
6. In what organs the development of vicarious hypertrophy is possible. P=5
7. List the main ultrastructural changes in cardiomyocytes at the stage of formation of myocardial hypertrophy. P=6
8. Give a description of the change in the ratio of the volumes of mitochondria and myofibrils in different stages of myocardial hypertrophy compared with the norm P=5
9. Name the main mechanisms of development of decompensation of a hypertrophied heart. P=4
10. Name the types of expansion of the cavities of the ventricles of the heart during its hypertrophy and indicate what clinical stages they correspond to. P=2
11. Define eccentric hypertrophy. P=2
12. Name the diseases in which myocardial hypertrophy develops mainly due to the "right parts" of the heart. P=6
13. Define atrophy. P=2 Intravital decrease in the size of organs, tissues, cells with a weakening of their function. P=2
14. Give the most characteristic examples of atrophy that develops under physiological conditions. P=5
15. Name the causes of local atrophy. P=5
16. List the forms of general atrophy. P=5
17. Name the characteristic macroscopic changes in tissues and internal organs during exhaustion. P=5
18. List the varieties of local atrophy. P=5
19. Name the main manifestations of ontogenesis irregularities that must be distinguished from atrophy. P=3
20. Define regeneration. P=2
21. Name the regulatory mechanisms of regeneration. P=4
22. Name the types of cells according to their ability to regenerate. P=3
23. What are the main types of regeneration. P=3
24. List two main forms of reparative regeneration. P=2
25. Define restitution. P=2
26. Define substitution. P=3
27. Name the organs, which are characterized by regenerative hypertrophy mainly in the form of intracellular hyperplasia of ultrastructures. P=3

28. List the organs whose regenerative hypertrophy is carried out mainly due to cell hyperplasia. P=6
29. Name the forms of pathological regeneration. P=4
30. What is metaplasia? P=6
31. Name the layer of granulation tissue. P=6
32. Specify the main forms of wound healing according to I.V. Davydovsky. P=4
33. Name the stages of primary bone union formation. P=3
34. Name the stages of wound healing by primary intention. P=4
35. Name the stages of wound healing by secondary intention. P=5

Situational tasks

1. An autopsy revealed a pronounced cicatricial narrowing of the esophagus and an ocher-yellow shade of subcutaneous fatty tissue, a decrease in the size of internal organs, a decrease in the volume of skeletal muscles, a brown color of the liver and myocardium on the section. Name the pathological process that reveals the essence of the described changes, explain its cause, name the changes in the liver and myocardium P=4
2. The patient had a vascular malformation - non-closure of the arterial (Botallov) duct. At the end of the disease, cyanosis, edema, ascites, hydrothorax, hydropericardium appeared, and the patient died. Name the state of the heart cavities found at the autopsy, describe the changes in the myocardium and their predominant localization. State the cause of death. P=5
3. A dense focus of cheesy necrosis surrounded by connective tissue was found in the lungs at autopsy. Microscopic examination revealed deposits of calcium salts in the focus, and bone in the inner layers of the connective tissue capsule. Name the described changes and explain the mechanism of bone formation. P=4
4. After a burn, raised, dense cyanotic-red scars formed on the skin of the thigh. Name these formations P=1 Specify the type of regeneration P=2

Topic 6. **Inflammation. Concept and biological essence. General information about inflammation. Acute inflammation.** The doctrine of inflammation. General information. Exudative inflammation.

1. List the pathogenetic factors of inflammation. P=5
2. List the physical factors that cause inflammation. P=4
3. List the biological factors of inflammation that are of the greatest importance. P=5
4. Name the characteristic clinical and laboratory signs of systemic inflammatory response syndrome (SIRS). P=4
5. Name the types of the most frequent acute catarrhs. P=5
6. List and name in Latin the clinical signs of inflammation. P=5

7. Name the inflammation of the spleen, lymph nodes, kidneys, muscles, bile ducts, appendix. P=6
8. Name the inflammation of the brain tissue, peripheral nerve, meninges, frontal sinus, hair follicle. P=5
9. Name the inflammation of the artery wall. Designate the inflammation of each shell separately and all together. P=5
10. List the morphological forms of inflammation. P=2
11. Define the term "exudative inflammation". P=3
12. List the types of exudative inflammation. P=7
13. In what tissues and organs is serous inflammation most often localized? P=4
14. List the tissues and organs where serous inflammation occurs. P=4
15. Name a characteristic feature of purulent inflammation and explain what causes it. P=2
16. List the varieties of fibrinous inflammation. P=2
17. Describe the croupous inflammation: a) localization, b) depth of the lesion, c) macroscopic picture, d) integrity of the mucous membrane. P=4
18. Describe diphtheritic inflammation: a) localization, b) depth of the lesion, c) macroscopic picture, d) integrity of the mucous membrane. P=4
19. Give a figurative name of the heart in fibrinous pericarditis and name the diseases and pathological conditions in which this process develops. P=5
20. Name the diseases and pathological conditions in which fibrinous pericarditis develops. P=5
21. List the outcomes of fibrinous inflammation. P=6
22. What is pus? P=5
23. Name the varieties of purulent inflammation. P=3
24. Define the term "abscess". P=6
25. From what layers is the wall of a chronic abscess built? P=3
26. What is a swell abscess (swell)? P=2
27. Name the most common outcomes of abscess. P=3
28. List the ways of spreading phlegmon. P=4
29. Define the term "empyema" P=4
30. Name the organs where empyema may develop. P=3
31. Name the diseases in which hemorrhagic inflammation develops. P=3
32. Define catarrhal inflammation (catarrh). P=3
33. List the forms of chronic catarrhal inflammation. P=2
34. Name the possible outcomes of inflammation. P=8
35. Define inflammation (according to I.V. Davydovsky). P=11
36. Name the characteristic clinical and laboratory signs of systemic inflammatory response syndrome (SIRS) P=4
37. What is the basis of SIRS? P=4
38. By what morphological processes is alteration expressed in inflammation? P=2

39. What is a transudate? P=1
40. What is morphologically characteristic of acute inflammation? P=1
41. What is morphologically characteristic of chronic inflammation? P=1
42. What is the manifestation of serous inflammation of the skin? P=2
43. What determines the development of this or that form of fibrinous inflammation on the membranes? P=2
44. What is a pyogenic membrane? P=2 Pyogenic membrane - abscess membrane that produces pus. P=2
45. What is the name of the abscess membrane that produces pus and what layer of granulation tissue does it correspond to? P=2
46. Name the layers of the wall of an acute abscess. P=2
47. Name the ways of spreading of purulent inflammation during infection generalization. P=3
48. Specify the clinical significance of purulent inflammation. P=2
49. What factors determine the outcome of purulent inflammation? P=4
50. Name all possible complications and outcomes of purulent inflammation. P=10

Situational tasks

1. An autopsy of the cranial cavity revealed: the pia mater is sharply full-blooded, thickened, saturated with yellowish-greenish semi-liquid masses. The brain tissue is swollen, with multiple petechiae. What is your diagnosis? Name the pathogen. P=4
2. The appendix is enlarged in size, the serous membrane is dull, full-blooded, with a fibrinous coating. The wall on the incision is thickened, the mucous membrane with focal hemorrhages, pus is released from the lumen. What is your diagnosis? P=2
3. In a person who died from uremia in the stomach, small and large intestines, the mucosa is swollen, uneven blood supply, with membranous overlays of a grayish color, ulcerated in places. What is your diagnosis? P=4
4. A stone was found in the cystic duct. The wall of the gallbladder is thinned. It has a hole through which pus is released into the abdominal cavity. In the abdominal cavity there is a large amount of turbid brownish liquid. The peritoneum is dull with fibrinous overlays, plethoric. Cause of death? P=7
5. An autopsy of a patient who died from chronic renal failure revealed changes in the heart: the leaves of the heart shirt are dull, between the epicardium and the pericardium there are fibrin in the form of threads. What pathological process is found in the heart? P=2 Give a figurative name of the heart during this process. P=1 What auscultatory sign is typical for this lesion? P=1
6. During laparotomy, a thickened appendix with a dull peritoneum covered with dirty green films was found in a patient. In the lumen of the removed process is a green viscous liquid. Make a diagnosis. P=2 Determine the morphological form

and variety of the pathological process. P=2 Define the type of pathological process. P=2
7. As a result of a burn, a 38-year-old woman had blisters with cloudy liquid contents and a sharp hyperemia of the surrounding tissues on her face skin. Determine the morphological form of the process. P=2 Name the liquid inside the bubble, its composition. P=4 List the possible outcomes of the process. P=2

Topic 6. Productive inflammation, general characteristics, its types. immunopathological processes.

1. Define productive (proliferative) inflammation. P=4
2. List the causes of productive inflammation. P=4
3. List the forms of productive inflammation along the course. P=2
4. Name the cells that appear in the focus of productive inflammation. P=7
5. List the types of productive inflammation. P=3
6. How can the formation of polyps and genital warts be explained? P=3
7. What is the morphological manifestation of the formation of polyps and genital warts? P=2
8. Name the typical localization of inflammatory polyps. P=1
9. Name the typical localization of inflammatory genital warts. P=1
10. Expand the essence of productive inflammation around animal parasites and foreign bodies. P=3
11. List the cells of the inflammatory infiltrate during productive inflammation around animal parasites. P=4
12. What is characteristic of chronic inflammation? P=2
13. What are mononuclear cells in chronic inflammation? List them. P=4
14. List the main cells of the inflammatory infiltrate in chronic inflammation. P=3
15. What is the characteristic feature of chronic inflammation, in contrast to acute. P=2
16. What is interstitial inflammation? P=2
17. Name the feature of interstitial inflammation in the acute phase (P=2) and explain what it is connected with (P=3).
18. In what organs is interstitial inflammation most common? P=4
19. Name a typical outcome of interstitial inflammation. P=1
20. What characterizes granulomatous inflammation? P=3
21. Name the conditions necessary for the formation of a granuloma. P=3
22. Define a granuloma. P=1
23. What kind of immunity is granuloma? P=1
24. List the infectious diseases in which granulomatous inflammation has an acute course. P=5
25. List the types of granulomas by etiology and specificity. P=5
26. In what diseases do non-infectious diseases occur (develop)?

granulomas? P=3
27. What granulomas are isolated depending on the level of exchange of cellular elements? P=2
28. Name the types of granulomas based on the characteristics of the reaction of the immune system. P=2
29. What types of granulomas are distinguished based on morphological features? P=3
30. List the stages of granuloma morphogenesis. P=4
31. Explain the origin of epithelioid cells P=2
32. What tissue change at the site of infection can precede the growth of granulation tissue around it? P=1
33. What granulomas are called specific? P=5
34. What diseases are characterized by specific granulomas? P=4
35. Describe tuberculous granuloma: a) average size (P=1), b) cellular composition (P=3), c) nature of necrosis (P=1).
36. Name the cells specific for tuberculosis. P=1
37. What is the role of Pirogov-Langhans giant multinucleated cells? P=1
38. What are Pirogov-Langhans cells and what disease are they typical for? P=2
39. Explain the origin of Pirogov-Langhans cells. P=1
40. What is the morphological difference between Pirogov-Langhans cells and multinucleated giant cells of foreign bodies? P=2
41. Name the possible outcomes of tuberculous granuloma depending on the immune status. P=2
42. Give the characteristics of syphilitic granuloma: a) name (P=1), b) average size (P=1), c) cellular composition (P=3), d) character of necrosis (P=1).
43. Name the cells specific for syphilitic gumma. P=1
44. What is gummous infiltrate?
45. What method can be used to detect spirochete pallidum in a cell infiltrate? P=1
46. What cells are specific for leproma? P=1 Describe their morphological structure. P=3
47. What cells are specific for scleroma? Describe their morphology, what are they called by the author? P=4
48. Name the outcomes of productive inflammation. P=5
49. List the five main conditions of the immune system against which pathological processes develop. P=5
50. Name the terms for the main pathological changes in the lymph nodes. P=6
51. Describe the pathomorphological changes in biopsy specimens of lymph nodes during antigenic stimulation with a humoral type of immune response. P=4
52. Describe pathomorphological changes in biopsy specimens of lymph nodes during antigenic stimulation with a cellular type of immune response. P=4
53. Name the main reactions (functions) of innate immunity. P=3

54. Name the main components of the innate immunity system involved in inflammation and anti-virus protection. P=4
55. Name 4 types of hypersensitivity reactions. P=4
56. Describe the main pathohistological changes in organs observed during a hypersensitivity reaction of the cytotoxic type. P=4
57. Describe the main pathohistological changes in the organs observed in the hypersensitivity reaction of the immunocomplex type. P=3
58. Describe the pathohistological changes in organs observed during a cell-type hypersensitivity reaction - HRT. P=4
59. Describe the role of autoimmune reactions in a healthy body. P=4

Situational tasks.

1. An encapsulated bladder filled with a clear liquid was found during surgery in the liver. Microscopically, in the capsule, there are foci of cell infiltration with an admixture of eosinophilic leukocytes, in areas adjacent to the chitinous membrane of the cystic formation, giant cells of foreign bodies. What is the name of this cystic formation with a chitinous membrane? P=1 As a result of what process did the capsule form? P=2 Define this process P=4
2. Microscopic examination revealed inflammatory cell infiltrates from histiocytes, fibroblasts, lymphoid and plasma cells in the myocardial stroma. What diagnosis follows from the available data? P=3 What are the possible outcomes P=1
3. An autopsy revealed miliary tuberculosis of the lungs.
Give the name of the rounded formations found during microscopic examination. P=1 Describe the microscopic structure of these formations. P=4 Define these formations. P=3
4. Lung tissue biopsy revealed granulomas composed of lymphoid, epithelioid and giant Pirogov-Langhans cells. In the center is an area of caseous necrosis. Diagnose the pathological process. P=2 What is the presumed etiology of the process? P=1 Name the possible outcomes. P=3
5. Computed tomography revealed a pathological process in the brain in the form of a rounded focus with a diameter of 4 cm. Syphilis was diagnosed during an in-depth clinical examination. Name the pathological process in the brain. P=2 Describe its histological structure. P=3
6. An autopsy revealed: the heart is enlarged, flabby, the myocardium is grayish in color. Histologically: myocardial stroma is edematous, diffusely infiltrated with lymphocytes, plasma cells and single neutrophils. Make a diagnosis. P=3
7. The patient complains of increasing suffocation. The otolaryngologist found a tuberous thickening and thickening of the mucous membrane of the nose and larynx. Made a biopsy. Microscopic examination revealed gross mucosal sclerosis and foci of productive inflammation, consisting of plasma, epithelioid, lymphoid cells and large macrophages with light cytoplasm. Make a diagnosis on the basis of

macro- and micro pictures. P=1 Name the type of productive inflammation P=1 What is the name of the cells characteristic of this disease according to the author? P=1
8. An autopsy revealed: the pia mater of the base of the brain was edematous, thickened, millet-like nodules are located along the vessels in the membrane. Make a diagnosis. P=2 Give the Latin name for the nodules, considering their size. P=1 What tissue reaction are the detected nodules a manifestation of? P=1
9. An autopsy of a person who died from tuberculosis revealed multiple grayish nodules the size of millet in the lungs, liver, kidneys, and spleen. Describe the histological structure and cellular composition of the detected foci of inflammation. P=4 Which cells are typical for these foci. P=1
10. An autopsy in the liver revealed single foci up to 1-2 cm in diameter, dense, pinkish in color, surrounded by a fibrous capsule. The preliminary diagnosis is syphilitic granulomas. What are syphilis granulomas called? P=1 Name the period of the disease. P=1 Confirm the diagnosis with a microscopic picture. P=4

Topic 7. Tumors, general information. Definitions of the concept and spread of the tumor. Mesenchymal tumors. Tumors of epithelial origin. Tumors of the nervous and melanin-forming tissues.

1. Define a tumor. P=5
2. Name the main theories of tumor growth. P=6
3. What are the main principles of classification of tumors. P=3
4. What is tumor progression? P=3
5. Describe the concept of "biological atypism" of a tumor. P=5
6. What is anaplasia (cataplasia)? P=1
7. List the types of atypism of the tumor cell P=4
8. List the main morphological signs of cellular atypia (changes in the nucleus). P=5
9. List all possible types of tumor growth. P=7
10. List the types of tumor growth depending on the degree of differentiation. P=3
11. What is appositional tumor growth? P=3
12. What is the difference between the concepts of "exophytic" and "endophytic" tumor growth? P=2
13. What do the terms "unicentric" and "multicentric" tumor growth mean? P=2
14. List the ways of tumor metastasis. P=4
15. List the general pathological processes that occur with "secondary changes" in tumors. P=5
16. Define fibroma. P=2
17. What is a lipoma? P=2
18. What is a capillary hemangioma? P=2

19. Describe the microscopic structure of a capillary hemangioma. P=4
20. What is leiomyoma? Indicate the degree of cell maturity, the nature of atypism, the nature of tumor growth in relation to surrounding tissues, the possibility of metastasis. Name the malignant counterpart. P=7
21.What is chondrosarcoma? Give a clinical and anatomical characteristic (type of atypism, type of growth, possibility of metastasis and recurrence). P=6
22. List the varieties of hemangiomas. P=3 Name the malignant analogue of hemangioma. P=1 Hemangiosarcoma. P=1
23. Define liposarcoma. P=2
24. List tumors from smooth and striated muscles. P=4
25. What is fibrosarcoma? Describe its microscopic structure, the nature of growth in relation to surrounding tissues. P=6
26. Characterize a benign tumor according to the following features: a) degree of cell maturity, b) type of atypism, c) type of growth in relation to surrounding tissues, d) ability to metastasize, e) possibility of recurrence after removal of the tumor. P=5
27. Characterize a malignant tumor according to the following features: a) degree of cell maturity, b) type of atypism, c) type of growth in relation to surrounding tissues, d) ability to metastasize, e) possibility of recurrence after removal of the tumor. P=5
28. Describe papilloma according to the following points: a) histogenesis; b) degree of maturity of tumor cells; c) type of atypia; d) the appearance of the tumor; e) malignant counterpart. P=5
29. Name the organs in which papillomas are most common. P=3
30. List the microscopic varieties of adenomas. P=6
31. Name the malignant analogue of adenoma. P=1
32. Give a brief definition of the concept of "cancer". Name the most characteristic way of cancer metastasis. P=3
33. Explain the impossibility of primary cancer of the spleen, bone. P=2
34. Specify the localization of the first hematogenous metastases: a) stomach cancer; b) pancreatic cancer; c) cancer of the sigmoid colon; d) uterine cancer. P=4
35. Name the organs whose cancers most often metastasize to the bones. P=5
36. Describe the microscopic picture of epidermal keratinizing cancer. P=5
37. List the macroscopic forms of lung cancer. P=6
38. Name the microscopic varieties of lung cancer. P=3
39. Name the features of oat cell lung cancer. P=3
40. Explain the occurrence of haemopthoe in patients with lung cancer. P=2
41. Name the most common localization of esophageal cancer. P=3
42. Name the background diseases for esophageal cancer. P=4
43. Name the complications of esophageal cancer associated with germination into adjacent organs and ulceration of the tumor. P=7
44. List the most common background diseases for stomach cancer. P=3

45. Name the precancerous conditions of the epithelium for gastric cancer. P=2
46. List the macroscopic varieties of stomach cancer. P=6
47. Explain why the development of epidermal cancer in the stomach is possible. P=3
48. Indicate 3 retrograde lymphogenous metastases of stomach cancer and name the scientists who described them. P=3
49. Explain the occurrence of maelena in patients with stomach cancer. P=2
50. List the types of nevi. P=5
51. Name melanoma synonyms. P=3
52. Name the localization of melanoma. P=5
53. Name the process preceding the development of melanoma. P=1
54. Name the ways of melanoma metastasis. P=2
55. What groups are CNS tumors divided into? P=2
56. Name the histological types of astrocytomas. P=3
57. Name the most common types of meningovascular tumors. P=2
58. Name the tumors of the peripheral nervous system. P=4
59. What is Recklinghausen's disease (neurofibromatosis)? P=3
60. List the most common benign tumors in children. P=2
61. What is tumor reversion? At what age does it occur? P=3
62. What are tumors that develop from embryonic tissues called? P=1

Situational tasks

1. Microscopic examination of a biopsy taken from the tissue of the upper lip revealed a tumor built from intertwining capillaries and not having clear boundaries with the surrounding tissues. The tumor is removed within diseased tissues. P=3 Name the tumor and possible complication after its removal.
2. An autopsy revealed many large bloody nodes in the lungs. The soft tissues of the right thigh were germinated with tumor tissue without clear boundaries with extensive hemorrhages and foci of necrosis. Microscopically, the structure of the tumor of the soft tissues of the thigh and nodes in the lungs is of the same type - atypical cells of the vascular wall, extensive vascular cavities and fields of necrosis were found. What is your diagnosis? Explain the relationship between a hip tumor and nodules in the lungs. State the cause of death. P=4
3. An autopsy revealed a tumor resembling fish meat in the region of the left thigh. The tumor grows from the femur, sprouting surrounding tissues. Make a diagnosis based on the macroscopic picture. What is the route of metastasis of such a tumor, and where are its first metastases located? What is its overall effect on the body. P=5
4. The patient died due to symptoms of cachexia. At autopsy, a tumor was found in the stomach in the form of a large node on a wide base, outwardly similar to a mushroom cap. Microscopic examination revealed that the tumor was built from atypical epithelial cells that form atypical glandular structures that grow through

the wall of the stomach. What is your diagnosis based on the macro- and microscopic picture? P=3
5. Microscopic examination of bronchobiopsy revealed a tumor built from nested accumulations of atypical cells of stratified squamous epithelium with characteristic "pearls". What is your diagnosis? P=3 Explain the possibility of developing a tumor of this structure in the bronchi. P=3
6. Microscopic examination of the resected area of the mammary gland with a rounded dense node revealed proliferation of glandular epithelium cells forming glandular tubules. The latter have a bizarre shape due to the invagination of connective tissue sprouts into their lumen. No signs of cellular atypia were found. Name the tumor. P=2
7. An autopsy revealed metastases of a cancerous tumor in the liver. Considering that we are talking about the first hematogenous metastases, in which organs of the abdominal cavity should look for the primary tumor? P=3
8. During palpation of the abdominal cavity in the region of the right kidney, an undisplaced formation was found in an infant. On ultrasound in the medulla of the right adrenal gland, a small tumor focus in the capsule is revealed. In blood and urine tests, elevated levels of catecholamines are noted. What is your preliminary diagnosis? P=1 Confirm the diagnosis with a histological description. P=2
9. An autopsy revealed a variegated tumor in the white matter of the cerebral hemispheres without clear boundaries with the surrounding tissues. A thorough histological examination revealed that the tumor was built from mature atypical glial cells of various shapes. Fields of necrosis and hemorrhages were noted in the tumor tissue. What is your diagnosis? Explain the variegated appearance of the tumor. P=3
10. An autopsy revealed a tumor node with indistinct borders, a variegated appearance with multiple hemorrhages, in the white matter of the temporal region of the left hemisphere. Microscopic examination of the tumor revealed cells of various sizes with different shapes and sizes of nuclei. There are foci of necrosis and hemorrhage. What tumor was found and what group of CNS tumors does it belong to? P=2 Name the possible way of tumor metastasis. P=1
11. An autopsy of a child's corpse revealed a tumor in the cerebellum that does not have clear boundaries with the surrounding tissues. Microscopic examination revealed an immature ectodermal tumor. Make a diagnosis, taking into account the age of the deceased and the extremely low degree of differentiation of tumor cells. P=1 Describe in more detail the microscopic picture of the tumor. P=4
12. A 52-year-old patient came to the clinic with complaints about the presence of a formation on the tip of the tongue, difficulty in chewing, periodically appearing bleeding phenomena. When examining the oral cavity, a lumpy blue-purple formation is determined at the tip of the tongue, soft in texture, painless. Make a preliminary diagnosis. P=2

Topic 7. Tumors and tumor-like lesions of the salivary glands**.**

1. Classify tumors of the salivary glands according to histogenesis P=2
2. Name the most common localization of tumors of the salivary glands P=1
3. Name the main benign tumors of the salivary glands. P=4
4. What morphological components does a pleomorphic adenoma consist of? P=2
5. What is the epithelial component of pleomorphic adenoma? P=5
6. What is the mesenchymal-like component of pleomorphic adenoma? P=6
7. Describe the chondroid zone of pleomorphic adenoma P=3
8. Histogenesis of lymphomatous papillary cystadenoma (Worthin's tumor)? P=3
9. Describe the microscopic picture of lymphomatous papillary cystadenoma (Worthin's tumor) P=6
10. List the main malignant tumors of the salivary glands. P=6
11. Name the onco-nosological units of a malignant mixed tumor of the salivary gland. P=3
12. Name the subtypes of undifferentiated salivary gland cancer. P=3
13. Name the most common etiological factor of mucoepidermoid cancer P=1
14. Describe the microscopic picture of mucoepidermoid cancer. P=3
15. Name the histological types of acinar cell carcinoma P=4
16. Describe the micropicture of a solid type of acinar cell carcinoma. P=3
17. Describe the micropicture of the microcystic type of acinar cell carcinoma. P=5
18. Describe the micropicture of the cystic-papillary type of acinar cell carcinoma. P=3
19. Describe the micropicture of the follicular type of acinar cell carcinoma. P=2
20. Name the histological types of adenoid cystic cancer P=3
21. Describe the micropicture of the cribriform type of adenocystic cancer. P=4
22. Describe the micropicture of a solid type of adenocystic cancer. P=5
23. Describe the micropicture of the tubular type of adenocystic cancer. P=3
24. What clinical symptom is typical for an adenoid cystic tumor? P=1 Explain what it is connected with. P=1
25. Name the most common benign non-epithelial tumors of the jaw glands. P=3
26. Name reactive tumor-like lesions of the salivary glands. P=4
27. Clinical manifestations of tumor-like manifestations of the salivary glands P=2
28. What morphological process is typical for Mikulich's disease? P=2
29. What is the outcome of Mikulich's disease P=2
30. Etiology of sialosis. P=3
31. Morphological characteristics of sialosis. P=3
32. Name the types of sialosis according to the mechanism of development. P=3
33. Name the outcome of sialosis P=1 salivary gland lipomatosis. P=1
34. What is morphologically characterized by oncocytosis? P=2
35. What is necrotizing sialometaplasia? P=1
36. What is the most common localization of necrotizing sialometaplasia? P=1

37. Causes of development of necrotizing sialometaplasia? P=2

Situational tasks

1. A 62-year-old man went to the dentist about a long-term painless formation in the right parotid salivary gland. From the anamnesis it is known that he considers himself ill for five years, when he first discovered a nodule in the right parotid region. Two years ago marked the growth of education. Examination revealed a movable tumor node about 5 cm in diameter, soft-elastic consistency, painless. An operation was performed to remove the tumor, which had a dense fibrous capsule. The section contained areas of cartilaginous tissue and cysts, small foci of hemorrhages. Make a preliminary diagnosis. P=1
2. A 40-year-old patient complained of a neoplasm in the area of the left parotid salivary gland, dryness of the oral cavity, crunching and clicking in the temporomandibular joint. According to the patient, the formation was discovered by a doctor during a medical examination three years ago, does not increase in size, does not bother. In the lower pole of the left parotid salivary gland, a formation is determined, 3.0-3.5 cm in size, the mobility of which is somewhat limited, the surface is bumpy, densely elastic in consistency, palpation is painless, the skin is not changed and freely gathers into a fold, mouth opening is free. Make a preliminary diagnosis. P=1

3. Patient, 50 years old, surgically removed tumor of the left parotid salivary gland. On macroscopic examination, the neoplasm is represented by a whitish-yellow nodule with a bumpy surface in the capsule. The tumor is cut with difficulty due to the presence of areas of cartilage-like tissue. Histological examination revealed duct-like and trabecular structures, solid fields with a large number of myoepithelial cells, as well as structures with a small number of cells, with the presence of a chondroid component. What is your diagnosis? P=1

4. Patient A., aged 42, was admitted to the department of head and neck tumors with a diagnosis of metastasis of adenocystic carcinoma of the left parotid salivary gland to the lymph nodes of the neck on the left. Name the characteristic features for this tumor. P=2

Topic 7. Tumors of the jaw bones.

1. Give the classification of tumors of the jaw bones according to the degree of cell differentiation. P=2
2. Give a classification of tumors of the jaw bones according to histogenesis P=2
3. Origin of odontogenic tumors. P=1
4. Classification of odontogenic tumors according to histogenesis P=3
5. Define ameloblastoma. P=5
6. Name the most typical localization of ameloblastoma P=2

7. Describe the macroscopic picture of ameloblastoma. P=3
8. Name the macroscopic forms of ameloblastoma. P=2
9. Describe the solid form of ameloblastoma. P=4
10. Describe the polycystic form of ameloblastoma. P=5
11. List the histological variants of ameloblastoma. P=5
12. Name the most common histological variants of ameloblastoma. P=2
13. Describe the microscopic picture of plexiform ameloblastoma. P=5
14. Name a special type of ameloblastoma. P=1
15. Describe the features of single cystic ameloblastoma. P=3
16. Describe the microscopic picture of an adenomatoid odontogenic tumor. P=3
17. Name the localization of Pindborg's tumor P=3
18. Macroscopic picture of Pindborg's tumor P=3
19. Name benign odontogenic tumors of mesenchymal origin. P=2
20. Name the source of development of odontogenic myxoma of the jaws. P=1
21. Describe the macroscopic picture of odontogenic myxoma of the jaws. P=4
22. What is fibromyxoma? P=2
23. Name benign odontogenic tumors of mixed epithelial-mesenchymal origin. P=2
24. Describe the structure of ameloblastic fibroma. P=2
25. Name the predominant localization of ameloblastic fibroma P=2
26. Describe the macroscopic picture of ameloblastic fibroma P=3
27. Define ameloblastic fibroma. P=5
28. Name the causes and period of occurrence of odontoma P=2
29. What is the composition of odontoma P=3
30. Macroscopic picture of odontoma. P=2
31. The structure of a complex odontoma P=3
32. Structure of mixed odontoma P=4
33. Localization of mixed odontomas P=2
34. Localization of complex odontomas. P=2
35. What are cementomas? P=2
36. Name the characteristic feature of cement. P=3
37. Name the varieties of cement P=2
38. Describe the microscopic picture of benign cementoblastoma. P=3
39. Describe the microscopic picture of an ossifying fibroma. P=2
40. The structure of ameloblastic fibroma. P=3
41. What is a simple odontoma. P=1
42. What is a complex odontoma. P=1
43. Name malignant odontogenic tumors P=3
44. Name the benign non-odontogenic tumors affecting the jaw bones P=4
45. Name the malignant non-odontogenic tumors affecting the jaw bones P=3
46. Definition of chondroma. P=2

47. Name two groups of chondromas indicating the type of growth in the jaw bones. P=4
48. Histogenesis of chondromas of the jaw bones. P=1
49. Specify typical areas of chondroma localization. P=3
50. Describe the microscopic picture of chondroma. P=3
51. Definition of osteoma. P=2
52. Types of osteomas by structure. P=3
53. Specify the most common location of osteoma P=1
54. Describe the microscopic structure of an osteoma. P=3
55. Specify the histogenesis of fibrosarcoma. P=3
56. Name the histological variants of osteosarcoma. P=2
57. Describe histologically the osteoblastic variant of osteosarcoma. P=3
58. Describe histologically the osteolytic variant of osteosarcoma. P=3
59. Define chondrosarcoma. P=2
60. Name the localization of chondrosarcoma of the jaw bones P=1
61. Describe the macroscopic picture of chondrosarcoma of the jaw bones. P=4
62. Describe the microscopic picture of chondrosarcoma of the jaw bones. P=5
63. Name the variants of hemangioma of the jaw bones P=2
64. What is a combined hemangioma of the jaw bones? P=3
65. Name the histological variants of fibroma of the jaw bones. P=7
66. What is intraosseous neurofibroma of the jaw bones? P=3
67. What is an isolated hemangioma of the jaw bones? P=2
68. Definition of osteoblastoma. P=2

Situational tasks

1. A 50-year-old patient complained of a painless swelling in the lower jaw on the right, which appeared 5 years ago, which slowly increases, painless. The lower jaw on the right is significantly thickened, painless, in places it has a dense texture. The skin over the thickening in color is not changed, mobile. During X-ray examination, rarefaction of the bone tissue area in the region of the body of the lower jaw on the right with clear boundaries is determined, resembling a polycystic formation. Make a preliminary diagnosis. P=1
2. Patient D., 22 years old, after the examination was diagnosed with "True cementoma" of the left upper jaw. Specify the possible localization of the pathological process. P=1 Localization in the area of the roots of the first molar of the lower jaw. P=1 Describe the possible macroscopic picture of this disease. P=3 Macroscopically, the cementoma is represented by a lobed, densely elastic tissue with small calcifications. P=3 Describe the possible microscopic picture of this disease. P=3
3. A 20-year-old patient complains of swelling in the region of the lower jaw on the left. In the picture of the lower jaw in the left lateral projection, at the level of

the angle and branch, an intense shadow is determined (in density it corresponds to a tooth) bordered by rounded protrusions and resembles a mulberry, and then a strip of clearing, sclerosis. Preliminary diagnosis? P=2
4. A 61-year-old patient complained of severe facial asymmetry that appeared 8 years ago. Objectively: a fusiform thickening of the lower jaw, the skin over the swelling is not changed in color, it is taken in a fold. Palpation is painless. The submandibular lymph nodes are slightly enlarged. On the radiograph, a number of rounded cavities 0.6x1 are determined; 1x2 and 1x1.5 cm. They are separated from each other by bony partitions. Make a diagnosis. P=2
5. A 45-year-old patient, after a clinical examination and incisional biopsy, was diagnosed with a single-cystic ameloblastoma of the body of the lower jaw in the region of 4.6, 4.7, 4.8 teeth (impressive sizes). What is the peculiarity of this tumor? P=2
6. A 24-year-old girl, during the treatment of periodontitis of the 3.6 tooth, underwent an X-ray examination for diagnostic purposes. The radiograph revealed the presence of a homogeneous rounded shadow with clear boundaries, which in its density approached the density of the tooth tissues. On the periphery, the formation is surrounded by a zone of enlightenment, up to 1 mm thick. Your preliminary diagnosis. P=1
7. Patient, 35 years old, was treated for acute purulent pulpitis of 3.4 teeth. Control radiography in the area of the missing 3.5 tooth revealed a homogeneous shadow of irregular shape with clear boundaries, which in its density approached the tissues of the tooth. On the periphery, the formation is surrounded by a zone of enlightenment. The diagnosis was made: solid odontoma of the body of the lower jaw on the left. What structures does a solid odontoma consist of? P=2.
8. A 25-year-old patient, at the level of 3.6, 3.7, 3.8 teeth, has a bumpy, dense swelling of the jaw, a focus of destruction with clear contours, cellular. Puncture yielded a cloudy whitish liquid. Make a diagnosis. P=1
9. A 45-year-old man had a tumor removed. Histological description: the stroma consists of connective tissue, the parenchyma consists of epithelial strands with cylindrical and stellate cells. What is this neoplasm? P=1
10. The patient went to the doctor with complaints about the presence of deformation of the lower jaw. The patient is disturbed by aching pains. The teeth on the lower jaw are intact. The surface of the deformation is smooth, dense to the touch, painless. On the radiograph there is a focus of homogeneous rarefaction of the bone tissue of a rounded shape with relatively clear boundaries. Petrificats are in the center of the hearth. After removal of the tumor, it was revealed that it consists of coarse fibrous connective tissue. What diagnosis will you establish for the patient? P=1
11. The patient went to the doctor with complaints about the presence of a painful deformity of the body of the lower jaw, which appeared about two months ago. Radiologically, a focus of rarefaction of the bone tissue is rounded with indistinct

boundaries. During the revision of the pathological focus, a dense tumor tissue of gray color was revealed. What diagnosis will you establish for the patient? P=1
12. The patient went to the doctor with complaints about the presence of a painless deformity of the body of the lower jaw, which has existed for several years. Surrounding soft tissues are not changed. During the diagnostic puncture of the neoplasm, hemolyzed blood was obtained. On the radiograph there is an alternation of areas of compaction and rarefaction of bone tissue in the area of the pathological focus. What is the preliminary diagnosis for the patient? P=1

Topic 8. Pathology of cells blood, bone marrow. Diseases of the organs of the lymphoid system. Tumors of the blood system. Leukemias. Hodgkin's lymphoma (lymphogranulomatosis). Pathomorphology of non-Hodgkin's lymphomas.

1. Name the two main groups of hemoblastoses, taking into account their prevalence in the hematopoietic system, and name each of them specifically. P=2
2. Name the ways of metastasis of tumor cells in hematological malignancies. P=2
3. Define leukemia. P=2
4. Give the main etiological factors of leukemia. P=6
5. What organ is the primary source of tumor cells in leukemia? P=1
6. Types of leukemia depending on the degree of differentiation of tumor (leukemic) cells. P=1
7. List the types of acute leukemia according to cytogenesis. P=2
8. List the forms of leukemia depending on the number of leukocytes and leukemic cells in the peripheral blood. P=4
9. What methods allow differentiating immature blood cells in leukemia P=2
10. What are the foci of accumulation of tumor cells in the organs in leukemia called? P=1
11. What phenomenon is characteristic of the picture of peripheral blood in acute leukemia P=1
12. What form of leukemia is characterized by the Philadelphia chromosome? P=2
13. What causes the development of "tiger heart" in leukemia? P=2
14. List the main varieties of chronic leukemia, taking into account cytogenesis. P=2
15. What chromosomal aberration is typical for chronic myelocytic leukemia? P=1
16. What is the name of the altered bone marrow in myeloid leukemia. P=1
17. List the macroscopic changes in organs in chronic myelogenous leukemia: a) spleen… b) lymph nodes… c) liver… d) bone marrow… P=4
18. Name the macroscopic changes in organs with lymphocytic leukemia: a) spleen…,
b) lymph nodes…, c) bone marrow…. P=3
19. List the most common complications in leukemia, which can be the direct cause of death. P=3 Pneumonia, sepsis, cerebral hemorrhage. P=3

20. Name the main infectious complications in leukemia. P=3 Pneumonia, sepsis, putrefactive processes in mucous membranes. P=3
21. Define lymphogranulomatosis. P=4
22. Give the second name of lymphogranulomatosis. P=1
23. Name the tumor cells in Hodgkin's disease. P=2
24. List the histological variants of Hodgkin's disease. P=4
25. Name the main morphological changes in the spleen in Hodgkin's disease. P=3
26. Give a figurative name to the spleen in Hodgkin's disease. P=1
27. Name the most common localization of Burkitt's tumor. P=2
28. Give the morphological characteristics of the tumor substrate of Burkitt's lymphoma. P=2
29. What type of lymphosarcoma is Burkitt's lymphoma? P=2
30. Name the atypical cells characteristic of Hodgkin's disease. P=2
31. What causes the development of "tiger heart" in leukemia? P=2
32. In what disease is Bence-Jones protein found in urine? P=1
33. What types of leukemias are characterized by leukemic failure? P=1
34. Describe the morphological findings in the tissue of lymph nodes in Hodgkin's lymphoma. P=4
35. Which of the main types of leukemia mainly develops in children? P=1
36. Name the macroscopic changes of organs in lymphocytic leukemia: a) spleen… b) lymph nodes… c) bone marrow… P=3.
37. List the macroscopic changes in organs in chronic myelogenous leukemia: a) spleen… b) lymph nodes… c) liver… d) bone marrow… P=4
38. What protein can be found in the urine of a patient with multiple myeloma? P=1
39. List the most common complications in leukemia, which can be the direct cause of death P=3.
40. What chromosomal aberration is typical for chronic myelocytic leukemia? P=1
41. Name the main morphological changes in the spleen in Hodgkin's lymphoma. Give a figurative name for the spleen in this disease. P=4
42. What organ is the primary source of tumor cells in leukemia? P=1
43. Name the forms of acute leukemia according to the Franco-American-British classification. P=2
44. What is the name of the altered bone marrow in myeloid leukemia. P=1

Situational tasks

1. An autopsy revealed a pyoid bone marrow, a large spleen (5 kg) and an enlarged liver (4 kg). In the blood test, there are 70,000 leukocytes per 1 mm3, the bulk of which are promyelocytes, myelocytes and metamyelocytes. What disease are we talking about? P=3

2. The patient has splenomegaly, hemorrhagic syndrome, peripheral blood is not changed. In the punctate of the sternum, the bone marrow is represented only by myeloblasts. What disease is it, what variant of it, taking into account the state of peripheral blood. P=3
3. An autopsy of an elderly woman revealed numerous petechial hemorrhages in the brain and a focal hemorrhage 1.0 cm in diameter in the medulla oblongata. The bone marrow of the vertebrae and thigh is dense, has a grayish-green tint. Lymph nodes are slightly enlarged. The spleen is sharply enlarged, weighing 3.0 kg. What disease are we talking about? Which syndrome is a manifestation of hemorrhage? What is the immediate cause of the patient's death? P=5
4. A package of dense lymph nodes soldered together was found on the neck of a patient. Microscopic examination of a lymph node biopsy shows proliferation of atypical Reed-Berezovsky-Sternberg cells, Hodgkin cells, eosinophils, plasma and lymphoid cells, as well as areas of sclerosis and necrosis. What disease are we talking about? Name the histological variant of the disease. P=2
Lymphogranulomatosis (Hodgkin's disease). Mixed cell variant. P=2
5. The child has necrotizing gingivitis, tonsillitis. There are multiple hemorrhages on the skin. Peripheral blood contains 150,000 leukocytes per 1 mm3, among which 90% are blast cells. In the bone marrow punctate - lymphoblasts. What is your diagnosis? How to call necrotizing tonsillitis, given the localization of the tonsils? What is the name of the syndrome of multiple hemorrhages, its mechanism? P=5
6. A 29-year-old patient consulted a doctor with complaints of weight loss, skin itching, enlarged cervical lymph nodes. The examination revealed enlargement of the cervical nodes only on one side, other groups of lymph nodes and the spleen were without features. In the blood test, there are signs of anemia, slight leukocytosis, lymphocytopenia, eosinophilia. ESR - 25 mm / hour. Histological examination of the lymph node revealed Reed-Berezovsky-Sternberg cells. What disease can you think of? List other possible causes of swollen lymph nodes. P=5