Examination questions on pathology – Dentistry

- 1. **Pathology:** 1) definition, 2) tasks, 3) objects and methods 4) place in medical science and practice, 5) levels of study of pathological processes.
- 2. **Death:** 1) definition, 2) classification 3) characteristic of clinical death, 4) characteristic of biological death, 5) signs of death and post-mortem changes.
- 3. **Dystrophy:** 1) definition, 2) causes 3) mechanisms of development, 4) morphologic characteristic of dystrophies, 5) classification of dystrophies.
- 4. **Parenchymatous protein dystrophies:** 1) cause, 2) morphology and outcomes of granular dystrophy, 3) morphology and outcome of hydropic degeneration, 4) morphology and outcomes of hyaline droplet degeneration, 5) morphology and outcomes of keratin dystrophy.
- 5. **Parenchymatous fatty degeneration:** 1) cause, 2) histochemical methods of fat identification, 3) gross and microscopic characteristic of fatty degeneration of myocardium, 4) gross and microscopic characteristic of fatty degeneration of liver 5) outcomes of fatty degeneration.
- 6. **Parenchymatous carbohydrate dystrophy:** 1) cause, 2) histochemical methods of carbohydrates identification, 3) carbohydrate dystrophy associated with glycogen metabolism, 4) carbohydrate dystrophy associated with metabolic disorders of glycoproteins, 5) outcomes of carbohydrate dystrophy.
- 7. **Mesenchymal protein dystrophy:** 1) definition and classification, 2) etiology and morphogenesis of mucoid swelling, 3) morphology and outcome of mucoid swelling 4) etiology and morphogenesis of fibrinoid swelling, 5) morphology and outcome of mucoid swelling.
- 8. **Hyalinosis:** 1) definition, mechanism of development, classification, 2) preceding pathological processes 3) morphology of vessels hyalinosis, 4) morphology of connective tissue hyalinosis 5) outcome and functional significance of hyalinosis.
- 9. **Mesenchymal fatty degeneration:** 1) definition and classification, 2) definition, causes and mechanisms of obesity, 3) morphology of obesity, 4) lipomatosis, 5) morphology of impaired cholesterol metabolism.
- 10. **Mixed dystrophies:** 1) definition and classification, 2) types of pigments deriving from hemoglobin, 3) causes and morphology of general and local hemosiderosis, 4) types of hematins and associated diseases, 5) causes and morphology of impaired porphyrins metabolism.
- 11. **Mixed dystrophies:** 1) stages of bilirubin metabolism, 2) causes and morphology of prehepatic jaundice, 3) causes and morphology of hepatic jaundice, 4) causes and morphology of pospatic jaundice, 5) morphology of bilirubin encephalopathy.
- 12. **Scurvy and xerophthalmia:** 1) definition, etiology and pathogenesis of scurvy, 2) pathology of scurvy, 3) complications of scurvy, 3) etiology and pathogenesis of xerophthalmia, 5) pathology of xerophthalmia.

- 13. **Rickets:** 1) definition, etiology and pathogenesis, 2) pathology of early rickets, 3) pathology of late rickets, 4) vitamin D deficiency in adults, 5) complications and possible causes of death in rickets.
- 14. **Disorders of calcium metabolism:** 1) calcium metabolism and its regulation, 2) etiology and morphology of metastatic calcification, 3) etiology and morphology of dystrophic calcification, 4) etiology and morphology of metabolic calcification, 5) outcomes and significance of calcification.
- 15. **Concrements (stones):** 1) definition and causes, 2) types and location of stones, 3) mechanism of development, 4) types of bile ducts stones and associated pathology, 5) types of urinary tract stones and associated pathology.
- 16. **Necrosis and apoptosis:** 1) definition of necrosis and apoptosis, their differences, 2) stages of necrosis development, 3) gross and microscopic signs of necrosis, 4) classification of necrosis, 5) outcomes and significance of necrosis.
- 17. **Gangrene and infarction:** 1) definition and causes of gangrene, 2) types of gangrene and their morphology, 3) definition and causes of infarction, 4) types of infarction and their morphology, 5) outcomes of gangrene and infarction.
- 18. **Arterial hyperemia:** 1) definition and classification, 2) types of physiological arterial hyperemia, 3) types of pathological arterial hyperemia, 4) morphology of pathological arterial hyperemia, 5) outcomes and significance of pathological arterial hyperemia.
- 19. **Venous hyperemia (congestion):** 1) definition and classification, 2) causes and morphology of acute systemic venous congestion, 3) causes and morphology of chronic systemic venous congestion, 4) causes and morphology of local venous congestion, 5) outcomes.
- 20. **Heart failure:** 1) causes of acute and chronic heart failure, 2) morphology of acute heart failure, 3) liver pathology in chronic heart failure, 4) lung pathology in chronic heart failure, 5) changes in or organs and serous cavities in chronic heart failure.
- 21. **Thrombosis:** 1) definition and contrast to post-mortem coagulation, 2) stages of thrombus formation and their characteristics, 3) causes and pathogenesis of thrombosis, 4) classification and morphology of thrombi, 5) outcomes.
- 22. **Embolism:** 1) definition, 2) types of embolism, 3) classification of emboli, 4) types of solid emboli, 5) outcomes of embolism.
- 23. **Bleeding:** 1) definition, 2) classification, 3) causes, 4) morphology of variants, 5) significance and outcomes.
- 24. **Inflammation:** 1) definition and etiology, 2) terminology and classification, 3) phases and their morphology, 4) regulation of inflammation, 5) outcomes.
- 25. **Serous inflammation:** 1) definition; 2), causes, 3) localization, 4) morphology, 5) significance and outcome.
- 26. **Catarrh:** 1) definition and causes, 2) types, 3) localization, 4) morphology, 5) significance and outcome.
- 27. **Fibrinous inflammation:** 1) definition and causes, 2) types, 3) localization, 4) morphology, 5) significance and outcome.

- 28. **Purulent inflammation:** 1) definition and causes, 2) types, 3) localization, 4) morphology, 5) significance and outcome.
- 29. **Productive** (**proliferative**) **inflammation:** 1) etiology, 2) morphology of productive inflammation with formation of polyps and genital warts, 3) morphology of interstitial inflammation, 4) morphology of granulomatous inflammation, 5) significance and outcomes of productive inflammation.
- 30. **Specific proliferative inflammation:** 1) etiology and common features, 2) morphology of tissue reactions in tuberculosis, 3) types and structure of tuberculous granulomas, 4) difference between gummas and tuberculous granulomas, 5) outcomes.
- 31. **Syphilis:** 1) definition, etiology and pathogenesis, 2) morphology of first period of acquired syphilis, 3) morphology of second period of acquired syphilis, 4) morphology of third period of acquired syphilis, 5) morphology of late congenital syphilis.
- 32. **Hypersensitivity, type I:** 1) rapidity of development, participating immunoglobulins, 2) chemical mediators, 3) cells involved in tissue damage, 4) diseases based on type I hypersensitivity, 5) pathology.
- 33. **Hypersensitivity, type II:** 1) rapidity of development, participating immunoglobulins, 2) chemical mediators, 3) types, 4) mechanism of receptor dysfunction, 5) diseases re based on type II hypersensitivity.
- 34. **Hypersensitivity, type III:** 1) rapidity of development, participating immunoglobulins, 2) chemical mediators, 3) cells involved in tissue damage, 4) pathology, 5) diseases based on type III hypersensitivity.
- 35. **Hypersensitivity, type IV:** 1) rapidity of development, participating immunoglobulins, 2) chemical mediators, 3) cells involved in tissue damage, 4) diseases based on type IV hypersensitivity, 5) pathology.
- 36. **Autoimmune diseases:** 1) definition, 2) classification, 3) examples of organ-specific diseases, 4) examples organ non-specific diseases, 5) possible causes of organ-specific diseases.
- 37. **Regeneration:** 1) definition and types, 2) morphogenesis and regulation of regeneration, 3) physiological regeneration, 4) types of reparative regeneration, examples, 5) abnormal regeneration, examples.
- 38. **Regeneration of connective tissue:** 1) types, origin and stages 2) morphology of stage 1, 3) morphology of the stage 2, 4) outcomes, 5) abnormal regeneration.
- 39. **Regeneration of bone and cartilage tissue:** 1) factors that influence the bone regeneration, 2) morphology of regeneration in uncomplicated bone fracture, 3) morphology and causes of secondary bone union, 4) bone regeneration under adverse conditions, 5) regeneration of cartilage tissue.
- 40. **Wound healing:** 1) factors that influence the healing process, 2) morphology of epithelial defect healing, 3) morphology of healing under a scab, 4) morphology of wound healing by primary intention, 5) morphology of wound healing by secondary intention.

- 41. **Atrophy:** 1) definition and classification, 2) causes of physiological and pathological atrophy, 3) morphology of general atrophy (cachexia), 4) types and morphology of local atrophy, 5) significance and outcomes atrophy.
- 42. **Hypertrophy, organization, reorganization and tissue metaplasia:** 1) definition, causes and types of hypertrophy, 2) morphology of hypertrophy types, 3) morphology of organization, 4) morphology tissues reorganization 5) definition and morphology of metaplasia.
- 43. **Tumor:** 1) definition and basic features, 2) gross appearance, size and secondary changes in tumor, 3) morphology of tumor parenchyma, 4) morphology of tumor stroma, 5) types and characteristics of morphological atypia.
- 44. **Tumor:** 1) types of tumor growth according to differentiation and their characteristics, 2) types of tumor growth relative to the lumen of the hollow organ, according to the number of foci, 3) types of tumor atypia, 4) morphological characteristics of the tissue atypia, 5) morphological characteristics of the cell atypia.
- 45. **Tumor:** 1) general characteristics of benign tumors, 2) general characteristics of malignant tumors, 3) features of tumors with locally invasive growth, examples, 4) definition of "relapse", 5) definition of "metastasis", routes of metastasis.
- 46. **Tumor:** 1) theory of tumor progression, 2) background pretumorous processes, 3) actual pretumorous processes 4) facultative and obligate precancer, examples, 5) tumor histogenesis.
- 47. **Tumor:** 1) clinical and anatomical types of tumors, their general characteristics, 2) international classification of tumors, principles of its construction, 3) theories of tumor origin, 4) immune reaction of the organism to the tumor, 5) progression of tumors.
- 48. **Organ non-specific epithelial tumors:** 1) definition and morphology of papilloma, 2) types and morphology of adenoma, 3) definition of "cancer", "carcinoma in situ", 4) morphology of squamous cell carcinoma and adenocarcinoma, 5) morphology of undifferentiated cancers.
- 49. **Organ-specific epithelial tumors:** 1) definition and histogenesis of seminoma, 2) morphology and routes of metastasis of seminoma, 3) morphology of hydatidiform mole and chorionepithelioma, 4) types and morphology of benign renal tumors, 5) types and morphology of malignant renal tumors.
- 50. **Benign mesenchymal tumors:** 1) types and morphology of benign tumors of fibrous tissue, 2) types and morphology of benign tumors of muscle tissue, 3) types and morphology of benign vascular tumors, 4) morphology of benign tumors of the synovial and mesothelial tissue, 5) types and morphology of benign tumors of bone and cartilage tissues.
- 51. **Sarcoma:** 1) definition and classification, 2) types and morphology of malignant tumors of fibrous and fatty tissue, 3) types and morphology of malignant tumors of muscle tissue, 4) types and morphology of malignant tumors of blood vessels, synovial cells and mesothelial tissue, 5) morphology of malignant tumors of bone and cartilage tissues.
- 52. **Melanocytic tumors:** 1) definition and types of nevi, 2) morphology of various types of nevi, 3) definition and localization of melanoma, 3) morphological characteristics of melanoma, 5) routes of metastasis and causes of death in melanoma.

- 53. **Neuroectodermal tumors:** 1) classification, characteristic morphological structures and metastasis, 2) types and morphology of astrocytic tumors, 3) types and morphology of oligodendroglial, ependymal and choroid plexus tumors, 4) types and morphology of neuronal tumors, 5) types and morphology of embryonic tumors.
- 54. **Anemia:** 1) definition, etiology and pathogenesis, 2) classification, 3) general morphological characteristics, 4) causes and morphology of acute post-hemorrhagic anemia, 5) causes and morphology of chronic posthemorrhagic anemia.
- 55. **Leukemia:** 1) definition and etiology, 2) classification, 3) general morphological characteristics, 4) distinctions from leukemoid reactions, 5) complications and causes of death.
- 56. **Acute leukemia:** 1) definition, 2) classification, 3) general morphological characteristics, 4) morphology of acute myeloid leukemia, 5) complications and causes of death.
- 57. **Chronic leukemia:** 1) classification, 2) general morphological characteristics, 3) chronic myelocytic leukemia morphology 5) morphology of chronic lymphocytic leukemia, 5) complications and causes of death.
- 58. **Hodgkin's lymphoma (lymphogranulomatosis):** 1) definition and classification, 2) gross changes of lymphoid tissue, 3) microscopic changes, characteristic cells, 4) morphology of variants, 5) complications and causes of death.
- 59. **Atherosclerosis:** 1) definition, types of arteriosclerosis, 2) etiology and pathogenesis, 3) macroscopic types of atherosclerotic lesions, 4) microscopic stages of morphogenesis 5) clinical and morphological forms.
- 60. Clinical and morphological forms of atherosclerosis: 1) morphology of aortic atherosclerosis, 2) morphology of renal artery atherosclerosis 3) morphology of intestine arteries atherosclerosis, 4) morphology of extremities arteries atherosclerosis, 5) causes of death in these forms of atherosclerosis.
- 61. **Arterial hypertension:** 1) definition and types, 2) symptomatic hypertension, 3) names and morphology of the 1st and 2nd stages of benign hypertension, 4) name and morphology of the 3rd stage of benign hypertension; 5) complications and the causes of death.
- 62. **Strokes:** 1) definition, etiology and pathogenesis, classification, 2) morphology of transient cerebral ischemia, 3) morphology of ischemic stroke, 4) morphology of hemorrhagic stroke, 5) complications, causes of death and outcomes.
- 63. **Coronary (ischemic) heart disease (CHD):** 1) definition, etiology and pathogenesis, classification, 2) morphology of ischemic myocardial dystrophy 3) morphology of myocardial infarction, outcomes, 4) morphology of cardiosclerosis in CHD, 5) causes of death.
- 64. **Rheumatism:** 1) definition, etiology and pathogenesis, 2) stages of connective tissue disorganization (alteration), 3) morphology of specific inflammatory response, 4) morphology of non-specific inflammatory response, 5) causes and features of sclerosis in rheumatism.
- 65. **Rheumatoid arthritis:** 1) morphology of 1st stage synovitis, 2) morphology of 2nd stage synovitis, 3) morphology of 3rd stage of synovitis, 4) morphology of visceral lesions, 5) complications and causes of death.

- 66. **Periarteritis nodosa and Sjogren syndrome:** 1) definition, etiology and pathogenesis, 2) localization of lesions, 3) morphology of vascular changes, 4) morphology of organ lesions, 5) oral pathology in Sjogren syndrome.
- 67. **Lobar pneumonia:** 1) definition, synonyms, etiology and pathogenesis, 2) stages and their morphology, 3) pulmonary complications, 4) extrapulmonary complications, 5) causes of death.
- 68. **Focal pneumonia:** 1) definition, etiology and pathogenesis, 2) morphological characteristics, 3) morphological features depending on age, 4) morphological features depending on etiology, 5) complications and causes of death.
- 69. **Influenza:** 1) etiology and pathogenesis, 2) morphology of mild influenza, 3) morphology of moderate influenza, 4) morphology of severe influenza, 5) complications and causes of death.
- 70. **Chronic non-specific pulmonary diseases:** 1) classification, 2) bronchitis associated mechanism, 3) pneumonia associated mechanism, 4) pneumonitis associated mechanism, 5) major complications and causes of death.
- 71. **Angina (tonsillitis):** 1) definition, etiology and pathogenesis, 2) classification, 3) morphology and differential diagnosis of various forms, 4) local complications, 5) systemic complications.
- 72. **Gastritis:** 1) etiology and pathogenesis, 2) morphology of acute gastritis, 3) classification of chronic gastritis, 4) morphology of chronic gastritis, 5) complications and outcomes of gastritis.
- 73. **Stomach and duodenal ulcer disease:** 1) etiology and pathogenesis, 2) morphology of acute gastric ulcer, 3) morphology of chronic gastric ulcer, 4) morphology of chronic duodenal ulcer, 5) complications.
- 74. **Appendicitis:** 1) etiology and pathogenesis, 2) classification, 3) morphology of various forms of acute appendicitis, 4) morphology of chronic appendicitis, 5) complications.
- 75. **Viral hepatitis:** 1) etiology and pathogenesis, 2) direct and indirect markers, 3) clinical and anatomical forms, 4) morphology of acute viral hepatitis, 5) outcomes, complications and causes of death.
- 76. **Chronic hepatitis:** 1) definition and classification, 2) morphological signs of chronic hepatitis activity, 3) morphological characteristics of stages in chronic hepatitis, 4) morphology of chronic viral hepatitis, 5) complications, outcomes and causes of death.
- 77. **Hepatosis** (**liver dystrophy**): 1) definition, etiology and classification, 2) morphology of toxic liver degeneration (massive hepatic necrosis), 3) morphology and causes of death in toxic liver degeneration, 4) morphology of liver steatosis, 5) complications and outcomes of steatosis.
- 78. **Liver cirrhosis:** 1) definition and etiology, 2) classification, 3) morphology of portal cirrhosis, 4) morphology of postnecrotic cirrhosis; 5) causes of death.
- 79. **Glomerulonephritis:** 1) definition, 2) etiology and pathogenesis, 3) classification, 4) morphological characteristics, 5) causes of death and complications.

- 80. **Acute necrotizing nephrosis (acute renal failure):** 1) etiology and pathogenesis, 2) stages and gross changes, 3) name and morphology of 1st stage, 4) name and morphology of 2nd and 3rd stages, 5) complications and outcomes.
- 81. **Pyelonephritis:** 1) definition, etiology and pathogenesis, 2) morphology of acute pyelonephritis, 3) morphology of chronic pyelonephritis, 4) complications, 5) outcomes.
- 82. **Goiter:** 1) definition and classification principles, 2) types depending on gross morphology and histology, 3) morphological characteristics parenchymatous goiter, 4) morphological characteristics of colloid goiter, 5) morphology of Graves' disease (diffuse toxic goiter, Basedow disease).
- 83. **Diabetes mellitus:** 1) etiology and classification. 2) diabetic microangiopathy and macroangiopathy, 3) changes in organs (kidney, liver), 4), complications and causes of death, 5) diabetic embryopathy and fetopathy.
- 84. **Bacterial dysentery:** 1) etiology and pathogenesis, 2) morphology of local changes, 3) morphology of systemic changes, 4) features of present-day dysentery, 5) causes of death and complications.
- 85. **Salmonellosis:** 1) etiology and pathogenesis, 2) clinical and anatomical forms, 3) morphology, 4) complications, 5) causes of death.
- 86. **Diphtheria:** 1) etiology and pathogenesis, 2) clinical and anatomical forms, 3) morphology of local changes, 4) morphology of systemic changes, 5) complications and causes of death, pathomorphosis.
- 87. **Scarlet fever:** 1) etiology and pathogenesis, 2) clinical and anatomical forms, 3) morphology of local changes, 4) morphology of systemic changes, 5) complications and causes of death, pathomorphosis.
- 88. **Measles:** 1) etiology and pathogenesis, 2) lungs changes in uncomplicated measles, 3) lungs changes in complicated measles, 4) systemic changes, 5) outcomes, complications, causes of death.
- 89. **Meningococcal infection:** 1) etiology and pathogenesis, 2) clinical and anatomical forms, 3) morphology of meningitis, 4) morphology of meningococcemia, 5) complications and causes of death.
- 90. **Sepsis:** 1) definition and pathogenesis, etiology, 2) clinical and anatomical forms, 3) morphology of septic focus, 4) morphology of septicopyemia 5) morphology of septicemia.
- 91. **Infectious (septic) endocarditis:** 1) etiology and pathogenesis, 2) classification, 3) gross and microscopic changes in heart valves, 4) changes in other organs, 5) outcomes and complications.
- 92. **Bacteriemic** (**septic**) **shock:** 1) definition, etiology, clinical manifestations, 2) the most characteristic site of entry, 3) factors of invasion, 4) morphology, 5) causes of death.
- 93. **Tuberculosis:** 1) etiology, routes of infection, 2) clinical classification, 3) morphological classification, 4) pathomorphosis and paraspecific reaction, 5) causes of death.

- 94. **Fungal infections:** 1) general characteristics, etiology, 2) morphology of actinomycosis, 3) morphology of digestive tract candidiasis, 4) morphology of pulmonary and urinary tract candidiasis, 5) morphology of generalized form.
- 95. **Congenital malformations:** 1) definition and etiology, 2) critical periods, 3) teratogenetic period, 4) basic cellular mechanisms of teratogenesis, 5) terminology.
- 96. **Congenital malformations:** 1) facial malformations, 2) dental malformations, 3) jaw bones malformations, 4) Pierre Robin syndrome, premaxillary agenesis (ethmocephaly), 5) anomalies of pharyngeal arches.
- 97. **Dental caries:** 1) definition, etiology and pathogenesis; 2) morphology of initial stage (pigmented stain stage); 3) morphology of superficial caries; 4) morphology of middle and deep caries; 5) features of dental caries in children.
- 98. **Non-carious dental lesions:** 1) etiology and morphology of abfraction (wedge-shaped defect); 2) etiology of dental fluorosis; 3) degrees of fluorosis and their morphology; 4) morphology of dental erosion; 5) morphology acid necrosis.
- 99. **Pulpitis:** 1) definition, etiology and pathogenesis; 2) types and morphology of acute pulpitis; 3) types and morphology of chronic pulpitis; 4) morphology of chronic pulpitis with exacerbation; 5) complications and outcomes of pulpitis.
- 100. **Periodontitis:** 1) definition, etiology and pathogenesis; 2) morphology of acute apical periodontitis; 3) morphology of chronic apical periodontitis; 4) morphology of granulomatous periodontitis; 5) morphology of fibrous periodontitis, complications and outcomes.
- 101. **Inflammatory diseases of jaws:** 1) morphology of osteitis; 2) morphology of acute and chronic periodontitis; 3) morphology of osteomyelitis; 4) etiology and morphology of odontogenic infection; 5) complications and outcomes of inflammatory diseases of jaws.
- 102. **Gingivitis:** 1) definition, etiology and pathogenesis; 2) types and morphology of acute gingivitis; 3) types and morphology of chronic gingivitis; 4) morphology of chronic gingivitis in exacerbation; 5) complications and outcomes of gingivitis.
- 103. **Sialadenitis and sialolithiasis:** 1) definition, etiology and pathogenesis; 2) morphology of sialoadenitis; 3) complications and outcomes of sialoadenitis; 4) etiology and pathogenesis of sialolithiasis; 5) complications and outcomes sialolithiasis.
- 104. Cheilitis, glossitis, stomatitis and premalignant changes: 1) clinical and anatomical forms of cheilitis and their morphology; 2) clinical and anatomical forms of glossitis and their morphology; 3) etiology and morphology of stomatitis; 4) premalignant changes in lips, tongue and soft tissues of oral cavity; 5) types and morphology of leukoplakia.
- 105. **Cysts of jaw bones:** 1) etiology and classification, 2) morphology of primordial cysts; 3) morphology of follicular cysts; 4) morphology of radicular cysts; 4) complications.
- 106. **Tumors of salivary glands:** 1) morphology of pleomorphic and monomorphic adenoma; 2) morphology of adenolymphoma; 3) morphology of mucoepidermoid tumor; 4) morphology of acinar cell tumor; 5) morphology of salivary glands carcinoma.
- 107. Reactive changes in pulp dental plaque, idiopathic progressive parodontolysis: 1) etiology and morphology of blood and lymph circulation disorders, atrophy and degeneration of pulp; 2) etiology and morphology of pulp necrosis, calcification and hyalinosis, pulpar

- cysts; 3) types of pulp stones (denticles) and their morphological characteristics; 4) morphology of dental plaque; 5) definition and morphology of idiopathic progressive parodontolysis.
- 108. **Tumor-like diseases of jaws:** 1) morphology of fibrous dysplasia of jaw bones; 2) morphology cherubism; 3) types and morphology of eosinophilic granuloma; 4) types of epulis and their characteristics; 5) morphology of central giant cell reparative granuloma gingival fibromatosis.
- 109. Classification of tumors and tumor-like processes of jaws and oral cavity: 1) odontogenic tumors; 2) non-odontogenic tumors; 3) morphology of fibrous dysplasia of jaw bones; 4) cherubism morphology; 5) types and morphology of eosinophilic granuloma.
- 110. **Benign odontogenic epithelial tumors:** 1) origin and localization; 2) microscopic characteristics of follicular ameloblastoma; 3) microscopic characteristics of plexiform ameloblastoma; 4) microscopic characteristics acanthomatous, basal cell and granular cell ameloblastoma; 5) morphology of adenomatoid tumor.
- 111. **Malignant odontogenic epithelial tumors:** 1) localization and origin; 2) morphology of odontogenic carcinoma; 3) morphology of primary intraosseous carcinoma; 4) morphology of other malignant epithelial odontogenic tumors; 5) ways of metastasis, complications.
- 112. Odontogenic mesenchymal tumors, odontogenic tumors of mixed origin and odontoma:
 1) histogenesis and localization; 2) types and morphological characteristics of mesenchymal odontogenic tumors; 3) types and morphological characteristics of odontogenic tumors of mixed origin; 4) types and morphology of odontoma; 5) complications.
- 113. **Non-organ-specific non-odontogenic tumors of maxillofacial system:** 1) classification and origin; 2) frequency, localization of osteoblastoclastoma (giant cell tumor); 3) morphology of osteoblastoclastoma; 4) morphology of Burkitt lymphoma; 5) complications.
- 114. **Lip cancer:** 1) etiology, localization and premalignant processes; 2) macroscopic types; 3) microscopic characteristics; 4) ways of metastasis; 5) complications.