

**Credit Questions on Human anatomy for the 2-nd semester
first year students Medical Faculty for International Students
(specialty "Dentistry")**

(approved at the meeting of the department of 20.11.2025, №4)

**CARDIOVASCULAR SYSTEM.
LYMPHOID SYSTEM.**

1. General characteristic of cardiovascular system. Systemic and pulmonary circulation.
2. Heart: the topography, the external structure. Chambers and valves of the heart.
3. The structure of the wall of the heart: endocardium, myocardium and epicardium. Conduction system of the heart: bundles and nodes, topography, the functional significance.
4. Pericardium: fibrous, serous. Pericardial cavity. Blood supply and innervation of the heart.
5. Aorta: departments, level of bifurcation. The branches of aortic arch.
6. Parietal and visceral branches of thoracic and abdominal parts of the aorta.
7. External carotid artery: branches, areas of blood supply.
8. Maxillary artery: parts, branches, areas of blood supply.
9. The internal carotid artery: branches, areas of blood supply.
10. Subclavian artery: parts, branches, areas of blood supply.
11. The principles of the structure of arterial, venous vessels of extremities.
12. The blood supply of the brain: sources, arterial circle of the brain, the functional significance of the dampers.
13. Brain viens. Dural venous sinuses. Emissary and diploic veins.
14. The main facial veins: the topography of facial and retromandibular veins, tributaries, anastomoses.
15. Pterygoid venous plexus: the topography, the sources of formation, anastomosis.
16. Anterior, external and internal jugular veins, tributaries, anastomoses.
17. The portal vein. The functional value of the portal system.
18. Superior vena cava: topography, the sources of formation. Azygos and hemiazygos viens, tributaries.
19. Inferior vena cava: topography, parietal and visceral tributaries. Cava- caval and portacaval anastomosis (shunt).
20. Thoracic and right lymphatic ducts: the sources of formation, topography, location, the confluence to venous system.
21. Secondary lymphoid organs. The lymph nodes of head and neck. Classification, topography.

**NERVOUS SYSTEM. SENCE ORGANS.
ENDOCRINE GLANDS.**

22. Nervous system: topographic and anatomical and functional classification, significance for the body.
23. Spinal cord: skeletotopy, external structure. Anterior and posterior roots. Cauda equina. Spinal segment.
24. Spinal cord: gray and white matter. Central canal. Meninges.
25. Brain: parts. Medulla oblongata: the boundaries, external and internal structure.
26. The fourth ventricle: the walls, connection to other cavities of the brain and the subarachnoid space.
27. Pons: borders, the external structure, the nuclei of gray matter.
28. Cerebellum: external and internal structure, cerebellar peduncles.
29. Mesencephalon: tectal plate, cerebral peduncles. Cerebral aqueduct. Topography of gray matter nuclei.
30. Diencephalon: thalamus, metathalamus, epithalamus, hypothalamus. The third ventricle: connection to other cavities of the brain.
31. Telencephalon. Surfaces, lobes, the main fissures and gyri of the brain hemisphere. Location of the cerebral hemisphere functions.
32. Basal ganglia, white matter. White matter of the cerebral hemisphere.
33. Lateral ventricle: parts, location, connection to other cavities of the brain. Production and the way of circulation of cerebrospinal fluid.
34. Classification of conduction pathways. The general principle of structure sensitive (afferent) and motor (efferent) conduction pathways.
35. Dura mater structure: folds, localization dural venous sinuses. Confluence sinuum.
36. Arachnoid and pia mater. Subarachnoid space. Production and the way of circulation of cerebrospinal fluid.
37. Spinal nerves: the branches, areas of division, the plexuses formation.
38. Cervical plexus: sources of formation, branches, areas of innervation.
39. Cranial nerves: general morphological and functional characteristics, classification.
40. The oculomotor (III), trochlear (IV), abducens (VI) nerves: the nuclei, the exit site of the brain and the skull, the branches, regions of innervation.
41. The trigeminal (V) nerve: the nuclei, the roots, the ganglion, the overall plan of branching.
42. Ophthalmic (V1) nerve: branches, areas of innervation.
43. Maxillary (V2) nerve: branches and areas of innervation.
44. Mandibular (V3) nerve: branches and areas of innervation.
45. Facial and intermediate (VII) nerve: the nuclei, the localization in the brainstem, Branches, areas of innervation.
46. Glossopharyngeal (IX) nerve: the nucleus, the exit site of the brain and the skull, sensory ganglions, branches, regions of innervation.
47. Vagus (X) nerve: the nucleus, the exit site of the brain and the skull, branches, areas of innervation.
48. Accessory (XI) and hypoglossal (XII) nerve: the nucleus, the exit site of the brain and the skull, branches, areas of innervation.
49. Autonomic (vegetative) division of peripheral nervous system: general principles of structure and function; morphological and functional differences

- from the somatic part of nervous system. Division by sympathetic and parasympathetic part, their structural and functional differences.
50. Morphological and functional features of the sympathetic division of autonomic division of peripheral nervous system.
 51. Cervical region of the sympathetic trunk: ganglions, branches and areas of innervation.
 52. Morphological and functional features of the parasympathetic division of autonomic division of peripheral nervous system.
 53. External ear: pinna, external auditory canal, tympanic membrane. Structure, function, blood supply, innervation.
 54. Middle ear: tympanic cavity walls, auditory tube, departments. Blood supply, innervation.
 55. Internal ear: structure of the bone and the membranous labyrinth. Vestibulocochlear nerve (VIII). Pathway of auditory and statokinetic analyzers.
 56. Eyeball: the structure of the fibrous, vascular and retina.
 57. Transparent structure of the eye. Production and drainage of aqueous humor.
 58. Accessory eyeball structures: extraocular muscles of the eyeball, eyelids, conjunctiva, the lacrimal apparatus. Optic (II) nerve, conduction path of the visual analyzer.
 59. The pituitary gland, thyroid and parathyroid glands, adrenal glands: the topography, the general morphological and functional characteristics.

DIGESTIVE SYSTEM.

60. Oral vestibule: borders, fornix, mucosal folds. The lips structure. Innervation, blood supply, lymphatic drainage.
61. Oral cavity proper: walls, borders. The hard palate structure, the relief of the mucous membrane. Innervation, blood supply.
62. Soft palate: structure, function. The muscles of the soft palate. Innervation, blood supply of mucosa and muscles.
63. Tongue: functions, parts, the relief of the mucous membrane. Internal and external muscles of the tongue. Innervation, blood supply, lymphatic drainage.
64. General morphological and functional characteristics of the teeth. Parts of the tooth: the root, the neck, the crown. The cavity of the crown, root canal. Blood supply and innervation of the teeth, lymphatic drainage.
65. Parotid, submandibular and sublingual glands: structure, topography of ducts, innervation, blood supply and lymphatic drainage.
66. Pharynx: functions, topography, departments, wall structures. Waldeyer's lymphatic ring of pharynx. Innervation, blood supply and lymphatic drainage.
67. Esophagus: topography, departments, wall structures. Innervation, blood supply, lymphatic drainage.
68. Stomach: topography, the macroscopic structure. Innervation, blood supply, lymphatic drainage.
69. Small intestine: functions, topography, departments, layer by layer structure of wall. Innervation, blood supply.
70. The colon: functions, topography, departments, the features of wall structure. Innervation, blood supply.
71. Liver: function, topography, structure, fissures of visceral surface, its contents.

72. Portal and classical lobules of liver. Characteristics of blood circulation of liver.
73. Gall bladder: structure, pathway elimination of bile. Innervation, blood supply gall bladder.
74. Pancreas: topography, structure. Excretory ducts. Innervation, blood supply.
75. Parietal and visceral peritoneum, the peritoneal cavity. The derivatives of the peritoneum: greater and lesser omentum, mesentery, recess, folds.

RESPIRATORY SYSTEM.

76. External nose: parts, nasal cartilages. The nasal cavity: functions, structure of the walls, the nasal conchae and nasal meatuses, connection with paranasal sinuses. Innervation, blood supply, lymphatic drainage.
77. Paranasal sinuses: location, communication with the nasal cavity, functions, maxillary sinus. The ratio of the maxillary sinus to the roots of maxillary teeth.
78. Larynx: functions, topography, structure. Laryngeal cavity. Innervation, blood supply, lymphatic drainage.
79. Trachea, bronchi: function, topography, the macroscopic structure of the trachea and different caliber bronchi. Innervation, blood supply and lymphatic drainage.
80. Lungs: functions, the macroscopic structure. Innervation, blood supply and lymphatic drainage.
81. Pleura, departments, cavity, pleural sinuses. Blood supply, innervation of the pleura. Mediastinum: the division into parts. Mediastinum organs.

URINARY AND REPRODUCTIVE SYSTEM.

82. Kidneys: topography, function, macroscopic structure. Nephron structure. Blood supply, innervation of the kidney.
83. Ureter, urinary bladder, urethra (male and female). Function, topography, structure, blood supply, innervation. Sphincter location.
84. Functional morphology of the internal and external male genitalia. Ways of seminal fluid elimination.
85. Functional morphology of the internal and external female reproductive organs.