1. Research methods used in anatomy.
2. The importance of anatomy in the interpretation of ultrasound, MRI and NMR data.
3. Anatomy of Ancient Egypt and Ancient Greece. Hippocrates and his contribution to anatomy.
4. Galen and his contribution to anatomy.
5. Hippocrates and his contribution to the development of anatomy.
6. . Avicenna and his contribution to anatomy
7. Leonardo da Vinci, his contribution to anatomy.
8. Andreas Vesalius and his contribution to the development of anatomy.
9. N.I. Pirogov and the essence of his discoveries in human anatomy. Three laws of N.I. Pirogov.
10. G.M. Iosifov and D.A. Zhdanov are the founders of modern lymphangiology.
11. V.P.Vorobiev is an outstanding anatomist. The importance of V.P.Vorobiev's works in neuromorphology.
12. V.N.Tonkov is the founder of X-ray anatomy. His contribution to the study of collateral circulation.
13. V.A. Betz and his contribution to anatomy.
14. P.F. Lesgaft as a representative of the functional direction in anatomy. The importance of P.F. Lesgaft's works in the development of physical education.
15. Outstanding anatomists of Russia: P.A. Zagorsky, I.V. Buyalsky, D.N. Zernov.
16. Buyalsky and his contribution to anatomy.
17. A.P. Protasov, N.I. Shein, E.O. Mukhin, N.M. Maksimovich-Ambodik, their contribution to anatomy.
18. Modern schools and trends in anatomy, its outstanding representatives (V.V. Kupriyanov, M.R. Sapin, L.L. Kolesnikov).
19. History of the Department of Human Anatomy of the Astrakhan State Medical Academy.
20. Evolution of the musculoskeletal system in the process of human development.
21. Principles of structural organization of bone, sources of bone growth. Classification of bones.
22. Principles of structural organization of the muscular system. Classification of muscles.
23. Individual variability of organs. Anatomy of the facial skull at stages of ontogenesis.
24. Formation of the facial skull at the stages of human ontogenesis. Facial areas, their boundaries.
25. Development of the facial skull. The first and second visceral arches, their derivatives.
26. Development of the brain skull. Individual, gender and age characteristics of the skull (timing of fontanelle closure). Variants and anomalies of the skull. Criticism of the racist theory in craniology.
27. Functional anatomy of the sphenoid bone. Vessels and nerves passing through the openings of the sphenoid bone.
28. The temporal bone, its parts, openings, canals, their contents.
29. The lower jaw, its parts, canals, openings, muscle attachment sites. Buttresses of the lower jaw and their significance.
30. Anatomy of the lower jaw. Anatomical basis for the most common fractures of the lower jaw.
31. Temporomandibular joint: structure. Muscles acting on this joint, their blood supply and innervation.
32. Muscles that provide movement of the lower jaw, their blood supply, innervation.
33. The system that provides movement in the temporomandibular joint.
34. Connections of the skull bones, types of sutures.
35. Temporal and infratemporal fossae, their walls, communications and contents.
36. Pterygopalatine fossa and its contents.
37. Nasal cavity. Nasal passages.
38. Paranasal sinuses. Their connection with the nasal cavity.
39. The orbit. The canals and fissures of the orbit, their contents.
40. Muscles of the orbital region. Blood supply, innervation.
41. The outer surface of the base of the skull. Openings, canals, their contents.

42. The internal surface of the base of the skull, cranial fossae, their boundaries. Openings, canals of the cranial fossae, their contents.
43. Anatomy of the anterior cranial fossa.
44. Anatomy of the middle cranial fossa.
45. Anatomy of the posterior cranial fossa.
46. Functional anatomy of facial muscles, their blood supply, innervation.
47. Muscles of the neck associated with the hyoid bone, their blood supply and innervation.
48. Deep muscles of the neck, their function, blood supply, innervation.
49. Suboccipital muscles: their topography, function, blood supply, innervation.
50. Functional anatomy of the submandibular triangle of the neck.
51. Anatomy of the lateral triangle of the neck.
52. Projection of organs, nerves and vascular bundles in the area of the triangles of the neck.
53. Fascia of the neck according to V.N. Shevkunenko.
54. Cellular spaces of the neck, their boundaries and topography.
55. Anatomy of the visceral cellular space of the neck.
56. Vertebrae: structure in different parts of the spine, variants and anomalies. Muscles acting on these joints, their blood supply, innervation.
57. Atlanto-occipital and atlanto-axial joints. Muscles acting on these joints, their blood supply, innervation.
58. Joints of the cervical, thoracic and lumbar vertebrae. The spinal column as a whole. Formation of the curves of the spinal column. Muscles that produce movements of the spinal column, their blood supply and innervation
59. Ribs and sternum, their structure, variants and anomalies. Connections of ribs with vertebrae and sternum, chest as a whole. Forms of chest.
60. Back muscles, their function, blood supply, innervation.
61. Functional anatomy of muscles involved in flexion and extension of the trunk, their blood supply, innervation.
62. Inguinal canal, ontogenesis of the inguinal canal, its contents in men and women.
63. Anatomy of the axillary fossa and its contents. The openings of the axillary fossa and their contents.
64. Shoulder joint: structure, shape, biomechanics, X-ray anatomy. Muscles acting on the shoulder joint, their blood supply, innervation.
65. Elbow joint, its structural features, X-ray anatomy. Muscles acting on this joint, their blood supply and innervation.
66. Bones of the forearm and hand. Time of appearance of ossification points in the wrist.
67. Pelvic bones, their joints. The pelvis as a whole, distinctive features and sizes of the female pelvis.
68. Development and structure of the skeleton of the lower limb. Features of the anatomy of the lower limb as an organ of support and locomotion. Anomalies in the development of the lower limb.
69. Hip joint: structure, X-ray anatomy. Muscles that produce movements in the hip joint, their blood supply and innervation. Developmental anomalies of the hip joint.
70. Anatomy of the gluteal region: muscles, blood supply, innervation. Vessels and nerves of the gluteal region.
71. Muscles of the thigh, their blood supply and innervation. Obturator, femoropopliteal canals, popliteal fossa, their contents.
72. The knee joint. Features of its structure. Muscles that work on it. Their blood supply and innervation.
73. Bones of the foot, their connections. Functional anatomy of the arches of the foot.
74. Muscles and fascia of the foot, blood supply, innervation. Lateral and medial malleolar canals, their contents.
75. Channels of the lower limb, their contents.

76. The concept of a structural unit of an organ. Structural units of the lungs, liver, kidneys, structural features.
77. Ontogenesis of the digestive system. Anomalies of the digestive system.
78. . Development of the oral cavity and maxillofacial region. Developmental anomalies.
79. The oral cavity, its sections. The structure of the lips, cheeks, hard and soft palate, their blood supply and innervation.
80. Sources of tooth formation. Anomalies in tooth development.
81. Change of teeth. Blood supply and innervation of teeth.
82. Dental formula of temporary and permanent teeth, their main differences. Types of physiological bite. Blood supply and innervation of teeth of the upper and lower jaws.
83. General anatomy of teeth. Fixation of teeth. Blood supply and innervation of teeth of the upper and lower jaws.
84. Private anatomy of teeth: distinctive features of teeth, structural features of the teeth of the upper and lower jaws, their relationship to the maxillary sinus and mandibular canal.
85. Anatomy of the soft and hard palate. Blood supply and innervation. Anomalies of the soft and hard palate.
86. Anatomy of the soft palate, blood supply, innervation.
87. Muscles of the floor of the oral cavity, their topography, blood supply, functions and innervation.
88. Tongue, development, structure, blood supply and innervation. Paths of lymph drainage from the tongue.
89. Muscles of the tongue, their blood supply and innervation.
90. Pharynx. Structural features. Blood supply and innervation of the pharynx.
91. Lymphoepithelial ring of the pharynx. Blood supply, innervation
92. Sublingual and submandibular salivary glands: position, structure, excretory ducts, blood supply and innervation.
93. Parotid salivary gland: position, structure, excretory duct, blood supply and innervation.
94. Esophagus: its structure and topography, the size of the esophagus at different age periods. Blood supply and innervation of the esophagus.
95. Features of the structure of the cervical esophagus. Blood supply and innervation of the esophagus. Anomalies of the esophagus.
96. Stomach: development, structure, topography, blood supply and innervation. X-ray anatomy of the stomach.
97. The duodenum, features of its structure and topography. Blood supply and innervation of the duodenum.
98. Functional anatomy of the jejunum and ileum, blood supply and innervation.
99. Large intestine: structure, sections, topography, relation to the peritoneum, blood supply, innervation, regional lymph nodes. Anomalies of the development of the large intestine.
100. Rectum, features of its structure and topography. Blood supply and innervation of the rectum. Paths of venous blood and lymph outflow from the rectum. Anomalies of the rectum.
101. Anatomy of the liver, gallbladder, hepatic, cystic and common bile ducts.
102. Functional anatomy of the pancreas. Blood supply and innervation of the pancreas.
103. Anatomy of the peritoneum.
104. Topography of the peritoneum. Lesser omentum, its components.
105. Formation of the respiratory system at the stages of ontogenesis. Bronchial tree of the right and left lung. Structural unit of the lung.
106. The larynx, its structure, muscles of the larynx, innervation and blood supply.
107. Laryngeal cartilages, their connections
108. Muscles of the larynx. Blood supply and innervation.
109. Lungs: structural and topographic features. Segmental structure of the lungs. Concept of the structural unit of the lung. Blood supply and innervation of the lungs. Regional lymph nodes
110. Formation of the organs of urine formation and excretion. Anomalies of the organs of urine formation and excretion.

111. Kidneys: development, structure, position, membranes, X-ray anatomy, blood supply, innervation, regional lymph nodes. Kidney anomalies.
112. Ureters, features of their structure and topography. Blood supply and innervation of the ureters.
113.. Functional anatomy of the prostate gland, topography, blood supply and innervation.
114. Principles of structural organization of serous membranes (pleura, peritoneum, pericardium).
115. Features of the structure and topography of the urinary bladder. Blood supply and innervation of the urinary bladder.
116. Spermatic cord, structure, topography, blood supply and innervation.
117. External male genitalia, their blood supply and innervation. Layers of the scrotum.
118. Anatomy of the female external genitalia, their blood supply, innervation.
119. Anatomy of the internal female genital organs. Their topography, innervation and blood supply.
120. Functional anatomy of the vagina, vaginal vaults, features of their topography. Blood supply, innervation of the vagina.
121. Mammary gland, features of structure, blood supply, innervation. Paths of lymph outflow from the mammary gland.
122. History of the study of circulatory systems (W. Harvey, M. Servet).
123. Functional anatomy of the small and large circles of blood circulation.
124. Heart: development, topography, structure of chambers, X-ray anatomy of the heart. Anomalies in the development of the heart.
125. Innervation of the heart. Anatomy of the system that ensures the automaticity of the heart.
126. Mediastinum, borders, sections. Organs of the mediastinum.
127. Features of blood supply and outflow of venous blood of the heart. The system of arteries of the celiac trunk, zones of blood supply. Paths of bypass blood flow of the arterial system of the celiac trunk.
128. Superior mesenteric artery, branches of the superior mesenteric artery, blood supply zones.
129. Venous plexuses. Intersystemic and intrasystemic anastomoses of veins (examples).
130. Anatomy of the inferior vena cava. Sources of its formation.
131. Functional anatomy of cavacaval anastomoses.
132. Portal vein, sources of its formation. Topography of the portal vein.
133. Anatomy of the portocaval anastomosis system.
134. Anatomy of the system that provides venous blood outflow from the head and upper limbs.
135. Superficial and deep veins of the lower limb, their topography.
136. The spleen, features of its structure and topography. Blood supply and innervation of the spleen, venous blood outflow from the spleen.
137. Pathways of lymphatic circulation. The role of individual components of the lymphatic bed in lymphatic circulation.
138. Principles of structural organization of lymph nodes.
139. Lymphatic drainage pathways from the facial area
140. Thoracic lymphatic duct: structure, topography, place of entry into the venous bed.
141. The right lymphatic duct, its formation, topography, place of entry into the venous bed.
142. Branchiogenic endocrine glands: thyroid and parathyroid glands. Their structure, topography, blood supply, innervation.
143. The group of endocrine glands of the adrenal system, carotid, coccygeal, interrenal bodies, their topography, structure.
144. Neurogenic endocrine glands: pituitary gland, adrenal medulla, pineal gland, their structure, topography, blood supply and innervation.
145. The nervous system and its importance in the body. Phylogenesis of the nervous system.
146. Ontogenesis of the central nervous system.
147. The concept of a neuron (neurocyte). Anatomical "substrate" of a simple and complex reflex arc.
148. Topography of the spinal cord in the spinal canal. Blood supply of the spinal cord.
149. Functional anatomy and topography of the gray matter nuclei of the spinal cord.
150. Functional anatomy of the membranes and intermembranous spaces of the spinal cord and brain.

151. Topography of the conducting pathways in the white matter of the spinal cord.
152. Topography of the gray matter of the spinal cord.
153. White matter pathways of the spinal cord
154. Blood supply to the brain.
155. Functional anatomy of the medulla oblongata.
156. Structural organization of the pons
157. Functional anatomy of the cerebellum. Cerebellar nuclei.
158. Rhomboid fossa. Localization of the nuclei of the cranial nerves in the rhomboid fossa.
159. Functional anatomy of the midbrain.
160. Functional anatomy of the midbrain nuclei.
161. The diencephalon, its main formations.
162. Structural organization of the cerebral cortex.
163. Anatomy of the temporal lobe of the cerebral cortex.
164. Functional anatomy of the striopallidal system of the brain.
165. Functional anatomy of the limbic system.
166. Ventricles of the brain. Paths of cerebrospinal fluid circulation.
167. Conducting pathways of the pyramidal and extrapyramidal system
168. The system that provides cutaneous and proprioceptive sensitivity (conducting pathways).
169. Trigeminal nerve, its formation, nuclei. First branch, its topography and area of innervation.
170. Trigeminal nerve, its formation, nuclei. The second branch, its topography and area of innervation.
171. Trigeminal nerve, its formation, nuclei. Third branch, its topography and area of innervation.
172. Functional anatomy of the VII pair of cranial nerves.
173. Innervation of the muscles and mucous membrane of the tongue.
174. Innervation of the oral mucosa.
175. Innervation of the salivary glands.
176. Innervation of the neck muscles.
177. Sensory innervation of the face.
178. Principles of structural organization of the autonomic nervous system.
179. History of the study of the autonomic nervous system.
180. Structural differences between the reflex arc of the somatic and autonomic nervous systems.
181. Principles of structural organization of nerve plexuses.
182. Intercostal nerves, sources of their formation, innervation zones.
183. Cervical plexus, its branches, areas of innervation.
184. Brachial plexus: sources of formation, short branches.
185. Median, ulnar and musculocutaneous nerves, sources of their formation, innervation zones.
186. The radial nerve, sources of its formation, zones of its innervation.
187. Lumbar plexus: sources of formation, topography, short branches.
188. Obturator nerve, sources of its formation, innervation zones.
189. Femoral nerve, sources of formation, branches of the femoral nerve, zones of their innervation.
190. Sciatic nerve, sources of formation, branches of the sciatic nerve. Branches of their innervation.
191. Tibial nerve, sources of its formation, innervation zones.
192. Anatomy of the visual analyzer.
193. Anatomy of the light-conducting and light-receiving systems of the eye.
194. The retina of the eye. Features of structure, functions. Blood supply of the retina.
195. Conducting pathways of the visual analyzer.
196. Anatomy of the outer, middle and inner ear. Auditory analyzer.
197. Functional anatomy of the auditory and vestibular analyzers.
198. Conducting pathways of the statokinetic analyzer.
199. Functional anatomy of the olfactory and gustatory analyzers.
200. Gustatory innervation of the tongue.