

# CONSPECTUS

## IN ANATOMY FOR PHARMACY STUDENTS 2024

1. Cell – principal structure. Cell membrane. Cell membrane formations.
2. Membrane transport (active and passive). Exocytosis and endocytosis - examples.
3. Cell nucleus in interphase and mitosis.
4. Cytoplasm. General cellular organelles. Cellular inclusions.
5. Epithelial tissue.
6. Connective tissue with fibrous intercellular substance.
7. Connective tissue with a solid intercellular substance.
8. Blood tissue.
9. Muscle tissue.
10. Nervous tissue.
11. Reproductive tissue.
12. Bones – types, structure.
13. Connections between bones – continuous and discontinuous.
14. Bones and connections of the skull, spine, and chest.
15. Bones and connections of the upper limb.
16. Bones and connections of the lower limb.
17. Muscles of the head, neck, chest, and abdomen.
18. Muscles of the upper limb.
19. Muscles of the lower limb.

### FINAL EXAM QUESTIONS

1. Cardiovascular system – heart.
2. Cardiovascular system. Major (systematic) and lesser (pulmonary) circulation. Blood vessels – principal structure of the wall. Arteries, veins, and capillaries.
3. Immune system – lymph, lymph vessels. Lymph organs – division. Lymph nodes.
4. Immune system. Lymph organs – division. Bone marrow, thymus, spleen, tonsils.
5. Digestive system - oral cavity – major salivary glands, tooth, tongue (taste buds).
6. Digestive system – pharynx, esophagus, stomach.
7. Digestive system – small intestine, large intestine, appendix.
8. Digestive system – liver and pancreas. Peritoneum.
9. Respiratory system – nasal cavity (respiratory and olfactory mucosa), paranasal air sinuses, larynx, trachea, and bronchi.
10. Respiratory system - lung – morphology. Pulmonary circulation. Pleura.

11. Urinary system – kidney, urinary tracts.
12. Male reproductive system – testis, epididymis, and ductus deferens (vas deferens).
13. Male reproductive system – prostate, seminal vesicles, penis.
14. Female reproductive system – ovary and uterus. Cyclic changes in the uterine mucosa.
15. Female reproductive system – oviduct, vagina, external genitalia.
16. Endocrine system. General structure of endocrine glands. Hypophysis (pituitary gland), epiphysis (pineal body). Hypothalamus-hypophysis system.
17. Endocrine system. General structure of endocrine glands. Thyroid gland, parathyroid glands, adrenal gland.
18. Skin - principal structure. Mammary gland.
19. Nervous system - general characteristics and division. Spinal cord.
20. Brainstem – medulla oblongata.
21. Brainstem – pons and midbrain.
22. Cerebellum and diencephalon.
23. Cerebrum – cortex. Arrangement and structure.
24. Cerebrum – the white matter. Basal nuclei.
25. Meninges and blood supply of the brain. Ventricles and cerebrospinal fluid.
26. Spinal nerves – nerve plexuses.
27. Cranial nerves.
28. Autonomic nervous system - definition, criteria for division into sympathetic and parasympathetic parts.
29. Organ of vision. The eyeball.
30. The ear. Organ of Corti. Organ of equilibrium.

**Literature:**

**Textbooks:**

1. Lecture course in Anatomy for Pharmacy Students by Yvetta Koeva, Lax Book, 2023 ISBN 978-619-189-219-8
2. Fundamentals of Anatomy and Physiology for Nursing and Healthcare students, edited by Ian Peate and Muralitharan, Wiley Blackwell, 2017
3. Junqueira, Carneiro. Histology, 13 edition, Springer, 2013