



**TOPICS ORAL EXAMINATION - LECTURE
for ASSOCIATE PROFESSOR, Position no. 27
Department I, Faculty of Pharmacy,**

Disciplines: Anatomy, Physiology and Pathophysiology; Anatomy; Human physiology and pathophysiology

1. Anatomy of the heart and circulatory system. Physiology of the nodal system, cardiac automatism, excitability and conduction function of the myocardium, cardiac cycle.
2. Pathophysiology of the cardiovascular system I – atherosclerosis and coronary heart disease
3. Pathophysiology of the cardiovascular system II – arterial hypertension, rhythm and conduction disorders
4. Properties and functions of the blood. Hematopoiesis. General description of the figurative elements of the blood.
5. Pathophysiology of blood I – Diseases of red blood cells
6. Pathophysiology of blood II – Diseases of white blood cells and of haemostasis.
7. Anatomy and physiology of the respiratory system. The conduction area and the exchange area of the respiratory system, the lung parenchyma, the thoracic box, the vascularization of the lungs, the regulation of breathing, the gaseous exchanges. Forced respiratory movements.
8. Pathophysiology of the respiratory system – dyspnea, cough, chest pain, asthma, chronic obstructive pulmonary disease.
9. Anatomy and physiology of the digestive system and appendages (liver, pancreas).
10. Pathophysiology of the digestive system – gastritis, gastric ulcer, duodenal ulcer, jaundice, cirrhosis of the liver, pancreatitis.
11. Anatomy and physiology of the excretory system: the nephron, the juxtaglomerular apparatus, the exocrine and endocrine function of the kidneys.
12. Pathophysiology of the excretory system - bacterial infections of the urinary tract, glomerulonephritis, acute and chronic renal failure.
13. Physiology and pathophysiology of the carbohydrate metabolism – insulin, counterregulatory hormones, diabetes mellitus, hypoglycemia.
14. Physiology and pathophysiology of the lipidic and protein metabolism – lipoproteins, primary and secondary hyperlipoproteinemia, euproteinemia, pathological changes in serum and urine, dysproteinemia, alterations in the metabolism of purines and amino acids.

15. The endocrine system – general characteristics, mechanisms of hormonal action, classification, regulation of hormonal release, hypothalamus and pituitary, diseases of the pituitary gland.
16. The endocrine system – anatomy, physiology, pathophysiology: thyroid gland, parathyroid glands, adrenal glands.
17. The general structural organization and functions of the nervous system: the cellular organization (neurons), synapses, the rest potential and action potential, neurotransmitters, the nervous influx.
18. Structural organization of the central nervous system - subdivisions of central nervous system, brain configuration, brainstem, the cerebellum, cortical areas, spinal cord, vascularization of the central nervous system.
19. Pathophysiology of the main disorders of the nervous system: pain, Parkinson's disease, Epilepsy, Alzheimer's, stroke.
20. Anatomy, physiology and pathophysiology of the reproductive system – male and female reproductive system, male and female sex hormones, ovulation, pregnancy physiology, oral contraception, prostate adenoma, cervical cancer.
21. Skin anatomy: elements of morphology and histology of the skin, cutaneous appendages, the subcutaneous adipose tissue.
22. Skin ageing: mechanisms of production and prevention.

References:

1. Savoiu G., Cristescu C., Serban C, Petrus A. Anatomie, Fiziologie si Fiziopatologia Sistemelor Cardiovascular, Endocrin, Osos, Muscular, Digestiv, Renal, Respirator. Ed. Eurobit. Timisoara 2014.
2. Savoiu G., Cristescu C., Serban C. Fiziologia si Fizopatologia Metabolismelor. Sangele. Ed. Eurobit. Timisoara 2013.
3. Muntean D, Noveanu L, Duicu O, Sturza A. Fiziopatologia sistemelor respirator si cardiovascular. Ed. Victor Babes, Timisoara, 2015, ISBN: 978-060-8456-48-5, 184 pg.
4. Dragomirescu A, Dermatocosmetologie cu profil farmaceutic, Editura BrumaR, Timisoara, 2020, ISBN 978-606-726-211-7
5. Guyton A.C, Hall J.E. Textbook of Medical Physiology, 11th Ed., Elsevier Inc., 2006
6. V. Papilian, Anatomia Omului. Aparatul locomotor. Vol I, Ed. ALL, Bucuresti, 2008, ISBN: 978-973-571-690-5
7. V. Papilian, Anatomia omului. Vol. II: Splanhnologia, Ed. ALL, Bucuresti, 2014, ISBN: 978-973-571-691-2
8. Harrison. Principii de Medicină Internă. Vol I+II. Ediția 14, Ed.Teora, București, 2003
9. Ștefanț Mihail. Anatomia omului. Univ. de Medicină și Farmacie „Nicolae Testemițanu”. – Ch.: CEP „Medicina”, (Î.S. F.E.-P.,Tipogr. Centrală”). Vol I + Vol II 2007, 2008 – ISBN 978-9975-915-18-2 .
10. Silbernagl S, Lang F. Color Atlas of Pathophysiology. Ed. Thieme. 2004. 406 pg.
11. Cursurile Disciplinei de Anatomie, Fiziologie, Fiziopatologie in format ppt/pdf, disponibile la sediul disciplinei si pe platforma e-moodle.