

«УТВЕРЖДАЮ»

1-й проректор, доцент

В.В. Воробьев" \_\_\_\_ " \_\_\_\_\_ 2021г.

**PROGRAMME QUESTIONS ON INTERNAL MEDICINE  
FOR FINAL EXAMINATION TO 6th YEAR GRADUATED STUDENTS OF FACULTY  
OF INTERNATIONAL STUDENTS SUBORDINATION «GENERAL PRACTICE» ON A  
SPECIALTY 1-79 01 01 «GENERAL MEDICINE»  
(2020-2021 ACADEMIC YEAR)**

*Main nosological forms*

**I. Respiratory system disorders**

1. Pneumonia: definition, classification, etiology, pathogenesis. Main clinical presentations of pneumonia. Treatment.
2. Differentiated antibiotic therapy for lung disease. Clinical pharmacology of antibacterial drugs.
3. Pneumonia: complications and their treatment. Outcomes. Periodic health examination of patients with acute pneumonia. Prophylaxis.
4. Atypical pneumonia (SARS): epidemiology, clinical picture, differential diagnostics, approaches to treatment, antiepidemic measures, prophylaxis. Clinical course and treatment characteristics of pneumonia, complicated influenza A infection, caused by H1N1 strain.
5. Acute bronchitis. Definition, etiology, pathogenesis, clinical features. Diagnosis and differential diagnosis, treatment and prevention.
6. Chronic bronchitis: etiology, pathogenesis, clinical features depending on the form of the disease. Treatment. Complications and outcomes. Primary and secondary prevention.
7. Chronic obstructive pulmonary disease. Definition. Etiology, pathogenesis. Classification. Clinical variants (emphysematous and bronchitic). Complications. Therapy, depending on stages (basic therapy with bronchodilators, corticosteroids). Preventing exacerbations.
8. Multiple bronchiectasis: etiology, pathogenesis, clinical picture, complications. Diagnostics and treatment.
9. Bronchial asthma: definition, etiology, pathogenesis, classification, clinical picture. Diagnostics. Rapid relief of asthma of different levels of severity.
10. Pleurisy: etiology, pathogenesis, classification, main clinical presentations according to the character of effusion, diagnostics. Treatment.
11. Alveolitis. Idiopathic pulmonary fibrosis, exogenous (toxic) alveolitis. The clinical picture, diagnosis, treatment.
12. Acute and chronic purulent destruction of the lungs, lung abscess, lung gangrene. Features of pathogenesis, course, clinical manifestations. Diagnostic approach. Choosing the place of treatment of patients, features of treatment.
13. Pulmonary hypertension. Causes, classification, diagnostic methods. The main principle in the treatment of pulmonary hypertension.
14. Pulmonary heart disease: classification, etiology, pathogenesis. The main clinical manifestations of compensated and decompensated pulmonary heart disease, diagnosis, course and treatment.

**II. Cardiovascular diseases**

1. Prevalence and classification of coronary heart disease. The concept of "ischemic cascade." Basic approaches to cardiovascular risk stratification.
2. Classification, diagnosis and treatment of stable angina. Relief of pain attack.

3. Modern methods of treatment of chronic ischemic heart disease.
4. Non-invasive diagnosis of ischemic heart disease. Indications for routine and diagnostic coronary angiography.
5. Silent myocardial ischemia, medical and social significance, diagnosis and therapeutic tactics.
6. Acute coronary syndrome with and without the elevated segment ST. Definition, diagnosis, organizational tactics in the prehospital and hospital. Risk stratification scale GRACE. Emergency care, differentiated approach. Methods of reperfusion therapy. Medicine therapy.
7. Etiology, pathogenesis, clinical variants (typical and atypical) of the myocardial infarction, severity classes. ECG diagnosis and laboratory diagnosis. Trombolitical and anticoagulant therapy. Indications for percutaneous coronary intervention and cardiac treatment.
8. Complications of myocardial infarction (cardiogenic shock, pulmonary edema), diagnosis and treatment.
9. Etiology, pathogenesis, classification, risk stratification, clinical picture, treatment of arterial hypertension. Strategic directions of antihypertensive therapy.
10. Symptomatic arterial hypertension. Differential diagnosis, treatment features.
11. Plan and algorithm evaluation of patients with elevated blood pressure. Differentiated approach to treatment.
12. Prevention of sudden death, heart attack and stroke in people with arterial hypertension.
13. Etiology, pathogenesis, clinical picture, treatment of acute rheumatic fever.
14. Etiology, pathogenesis, clinical picture, treatment of mitral valvular heart disease.
15. Etiology, pathogenesis, clinical picture, treatment of aortal valvular heart disease.
16. Etiology, pathogenesis, clinical picture, diagnostic criteria and treatment of infective endocarditis.
17. Etiology, pathogenesis, clinical picture of chronic heart failure. Classification of heart failure. Modern approaches to therapy. Surgical treatment of chronic heart failure .
18. Etiology, pathogenesis, classification, clinic, treatment of pericarditis.
19. Etiology, pathogenesis, classification, clinical picture, diagnostics of myocarditis. Treatment of myocarditis.
20. Cardiomyopathy: definition of this disorders group, classification, clinical types and their diagnostics. Treatment.
21. Primary cardiomyopathy: differential diagnostics. Treatment.
22. Etiology, pathogenesis, diagnostic criteria of neurocirculatory dystonia, clinical types of disease. Treatment of neurocirculatory dystonia.
23. Paroxymal cardiac rhythm disturbances: clinical picture, ECG -diagnostics, treatment.
24. Heart blocks: clinical picture, ECG-diagnostics, treatment.
25. Risk factors for sudden cardiac death. The mechanism of development. Types of cardiac arrest.
26. Rehabilitation of patients with acute myocardial infarction.
27. Treatment characteristics of arterial hypertension in pregnant women.
28. Features of treatment of acquired heart valvular disease in pregnant women.

### **III. Gastrointestinal diseases**

1. Diagnostic capabilities and value of instrumental methods in gastroenterology: endoscopic, ultrasound, electrometric (Ph-metry), radiological, radioisotope, magnetic resonance imaging. Indications and contraindications for instrumental studies.
2. Diseases of esophagus. Main causative agents. Clinical picture and diagnostics of esophagitis, achalasia of esophagus, cancer of esophagus. Therapeutic aspects of treatment.
3. Chronic gastritis. Main causative agents. Clinical picture, main syndromes. Classification. Possibilities of diagnostics. Treatment according to the form and phase of disease. Periodic health examination.
4. Acute gastritis. Etiology. Clinical picture depending on the form of disease. Complications. Treatment. Prognosis.

5. Duodenal and gastric ulcer. Causative agents. Features of pathogenesis of duodenal and gastric ulcer. Clinical picture depending on the ulcer localization. Treatment. Periodic health examination.
6. Duodenal and gastric ulcer. Clinical picture. Diagnostics possibilities. Treatment. Clinical pharmacology of anti-ulcer drugs.
7. Clinical picture of duodenal and gastric ulcer complications. Possibilities of early diagnostics. Therapeutic management. Prophylaxis (seasonal and year-round) of peptic ulcer.
8. Characteristic types of peptic ulcer. Clinical picture. Possibilities of diagnostics. Treatment.
9. Diseases of postoperative stomach (jejunal syndrome, gastric remnant, peptic ulcer of anastomosis). Clinical picture. Diagnostics. Possibilities of conservative treatment.
10. Chronic enterocolitis. Etiology. Pathogenesis. Clinical picture depending on the localization and character of morphological changes. Main syndromes. Diagnosis. Treatment. Prognosis. Periodic health examination.
11. Ulcerative colitis and Crohn's disease. Main causative factors. Clinical picture according to localization and level of morphological changes. Differential diagnosis. Complications. Treatment.
12. Chronic pancreatitis. Etiology. Pathogenesis. Clinical picture. Classification. Diagnosis, differential diagnostics. Treatment according to the form and phase of disease. Periodic health examination.
13. Chronic hepatitis. Causative agents. Pathogenesis. Main morphological manifestations. Classification. Clinical picture. Main clinical syndromes. Differential diagnosis. Treatment. Prognosis.
14. Liver cirrhosis. Etiology. Morphological features. Main syndromes. Pathogenesis of clinical laboratory syndromes. Differential diagnosis. Complications. Treatment.
15. Chronic cholecystitis. Etiological factors. Clinical picture. Diagnostic criteria. Treatment in acute attack of disease and remission.
16. Biliary dyskinesia. Etiology. Pathogenesis. Clinical picture. Differential diagnostics. Treatment. Prophylaxis.
17. Cholelithiasis (gallstone disease). Etiology. Pathogenesis. Clinical picture: acute attack of disease and remission. Complications. Indications for surgery. Therapeutic management. Prophylaxis.

#### **IV. Renal diseases**

1. Diagnostic capabilities of the laboratory and instrumental methods of research in nephrology. Assessment criteria of kidneys functional state. Main methods of investigation and their interpretation. Kidney biopsy (indications and contraindications).
2. Acute glomerulonephritis (etiology and pathogenesis, classification, clinical picture, diagnostics and treatment).
3. Chronic glomerulonephritis: etiology and pathogenesis, classification, clinical picture according to the type of disease, complications, treatment.
4. Chronic kidney disease. Main causes and classification. Differential diagnosis. Treatment. Prognosis.
5. Acute renal insufficiency: etiology and pathogenesis, main clinical presentations, stages of the disease, treatment.
6. Chronic renal insufficiency: etiology and pathogenesis, main clinical presentations, classification, outcomes, treatment. Treatment of chronic renal insufficiency end stage. Extrarenal blood purification methods. Kidney transplantation.
7. Chronic pyelonephritis: etiology and pathogenesis, clinical picture, diagnostics, treatment. Preventing exacerbations/
8. Tubulointerstitial nephritis. Etiology, pathogenesis, clinical features, treatment.
9. Nephrotic syndrome: etiopathogenesis, clinical picture. Differential diagnosis. Treatment.
10. Renal disease in diabetes, gout, systemic disease connective tissue, vasculitis. Diagnostic capabilities. Principles of treatment.

## **V. Blood diseases**

1. Etiology, pathogenesis, clinical picture, classification, diagnostics, treatment of iron-deficiency anemia.
2. Etiology, pathogenesis, clinical picture, classification, diagnostics, treatment of vitamin B12 deficiency anemia.
3. Classification of hemolytic anemia, main diagnostic criteria, principles of therapy.
4. Etiology, pathogenesis, clinical picture, classification, diagnostics, treatment of aplastic anemias.
5. Causes of leukemoid reactions. A blood picture.
6. Diagnosis and differential diagnosis of leukemoid reactions and hemoblastosis. Principles of treatment of hemoblastosis.
7. Etiology, pathogenesis, clinical picture, diagnostics of chronic myeloid leukaemia (CML).
8. Etiology, pathogenesis, clinical picture, diagnostics, outcome, treatment of erythremia (polycythemia vera).
9. Clinical types, diagnostics, complications, treatment of chronic lymphocytic leukemia.
10. Etiology, pathogenesis, classification of hemorrhagic diathesis. Treatment of thrombocytopenic purpura.
11. Etiology, pathogenesis, clinical presentations, diagnostics, treatment of hemophilia.
12. Etiology, pathogenesis, clinical types, diagnostics, treatment of hemorrhagic vasculitis.

## **VI. Metabolism and endocrine system disorders**

1. Diffuse toxic goiter: etiology and pathogenesis, main clinical presentations, classification, treatment, indications for surgery.
2. Hypothyroidism etiology and pathogenesis, classification, main clinical presentations, diagnostics, treatment.
3. Diabetes mellitus: etiology and pathogenesis, classification, clinical picture, complications and clinical course, severity criteria, treatment.
4. Chronic adrenocortical insufficiency: etiology and pathogenesis, main clinical presentations, complications and clinical course, treatment.
5. Cushing's disease and syndrome: etiology and pathogenesis, main clinical presentations, diagnostics, complications and clinical course, treatment.
6. Pheochromocytoma: pathogenesis of main clinical presentations, symptomatology, diagnostics, treatment.

## **VII. Connective tissue diseases, joint diseases, allergosis**

1. Systemic lupus erythematosus: etiology and pathogenesis, classification, main clinical presentations, clinical course and outcomes, treatment. Clinical pharmacology of corticosteroids. Pulse therapy: indications, contraindications, side effects.
2. Systemic sclerosis: etiology and pathogenesis, classification, main clinical presentations, clinical course and outcomes, treatment.
3. Dermatomyositis: etiology and pathogenesis, classification, main clinical presentations, clinical course and outcomes, treatment.
4. Rheumatoid arthritis: etiology and pathogenesis, classification, main clinical presentations, diagnostics, clinical course and outcomes, treatment.
5. Osteoarthritis: etiology and pathogenesis, classification, main clinical presentations, clinical course, treatment.
6. Gout: etiology and pathogenesis, classification, main clinical presentations, clinical course, criteria of diagnosis, treatment.
7. Psoriatic arthritis: etiology, pathogenesis, clinical picture, diagnostics, differential diagnostics, treatment.
8. Ankylosing spondylitis: etiology, pathogenesis, classification, clinical picture, diagnostics, differential diagnostics, treatment.
9. Chlamydia-induced reactive arthritis: etiology, pathogenesis, clinical picture, diagnostics, differential diagnostics, treatment.

10. Modern options of treatment for rheumatic diseases: NSAIDs, glucocorticosteroids, cytostatics, genetic engineering biological agents.
11. Osteoporosis. Risk factors for osteoporosis. Classification. Clinical picture, diagnosis. Therapy. Primary and secondary prevention of osteoporosis.

### **VIII. Occupational diseases**

1. Pneumoconiosis: etiology and pathogenesis, main clinical presentations, treatment.
2. Chronic dust bronchitis: etiology and pathogenesis, main clinical presentations, clinical course and complications, treatment.
3. Vibration disease: etiology and pathogenesis, main clinical presentations, clinical course, treatment.
4. Chronic lead intoxication: etiology and pathogenesis, main clinical presentations, complications, treatment.
5. Inorganic mercury compounds intoxication: etiology and pathogenesis, main clinical presentations, clinical course, treatment.
6. Organic solvents intoxication (aromatic and chlorinated hydrocarbons): etiology and pathogenesis, main clinical presentations, clinical course, treatment.

### **IX. Tuberculosis**

1. Tuberculosis causative agent, transmission of disease.
2. Miliary and disseminated pulmonary tuberculosis, clinical picture and differential diagnostics.
3. Infiltrative pulmonary tuberculosis, clinical picture and differential diagnostics.
4. Fibro-cavernous pulmonary tuberculosis, clinical picture and differential diagnostics.
5. Pulmonary tuberculoma, clinical picture and differential diagnostics.
6. Pulmonary hemoptysis and pulmonary hemorrhage. Diagnostics and approaches to treatment.
7. Spontaneous pneumothorax: diagnosis, treatment.
8. Laboratory diagnostics of tuberculosis (bacterioscopic, bacteriological, molecular genetic).
9. Main approaches and methods of treatment of patients suffering from tuberculosis.
10. Infection control in tuberculosis facilities.

### **X. Diagnostics and differential diagnostics**

1. Differential diagnostics in pulmonary edema.
2. Differential diagnosis in swallowing disturbances (dysphagia).
3. Differential diagnosis in gastrointestinal bleeding.
4. Differential diagnosis in pulmonary and gastric bleeding.
5. Differential diagnosis in jaundices.
6. Differential diagnostics in ascites.
7. Differential diagnostics in renal colic associated with fever.
8. Differential diagnosis in joint syndrome.
9. Differential diagnostics in broncho-obstructive syndrome.
10. Differential diagnostics in sudden suffocation.
11. Differential diagnostics in unknown fever as the clinical sign in internal diseases.
12. Differential diagnosis in the syndrome of elevated ESR.

### **XI. Military field therapy**

1. Pathogenesis and clinical picture of acute radiation sickness due to external radiation exposure.
2. Diagnostics and differential diagnostics of acute radiation sickness.
3. Clinical course characteristics of radiation sickness due to radioactive substances intake.
4. Main approaches to treatment of acute radiation sickness.
5. Chronic radiation sickness: symptomatology, diagnostics and treatment.
6. Features of the radiation sickness course with combined radiation injuries (combination of radiation sickness with injury, burns, etc.).

7. Early and late diseases due to blast injury. Treatment.
8. Internal organs lesions in crush syndrome and therapeutic management.
9. Therapeutic management in treatment of diseases of wounded patients.
10. Therapeutic management of burn disease at the stages of medical evacuation.
11. The effect on the body of the microwave electromagnetic field.

## **XII. Infectious diseases**

1. Differential diagnostics of fever of unknown origin. Algorithm of the patient's examination. The diagnostic measures to establishing the infectious and non-infectious etiology of fever.
2. Differential diagnosis of infectious diseases occurring with CNS lesions. Syndromes of defeat of the membranes of the brain and the substance of the brain and spinal cord. Clinical manifestations. Complications. Diagnostic algorithm. Interpretation of the liquorogram. Principles of antimicrobial and pathogenetic therapy.
3. Clinical and laboratory diagnosis of influenza. Features of highly endemic strains. Etiotropic and pathogenetic therapy. Preventive measures in the treatment of patients at home and in the clinic.
4. Differential diagnosis of acute intestinal infections. Infectious diarrhea: etiological, epidemiological, pathogenetic, clinical and laboratory aspects. Differential diagnostic with acute surgical pathology (acute appendicitis, acute pancreatitis, acute cholecystitis, mesotrombosis, peritonitis). Algorithm for examining patients with diarrhea syndrome. Assessment of the severity of exsiccosis. Rehydration therapy, principles of etiotropic therapy.
5. Clinical, epidemiological and laboratory criteria for the diagnosis of viral hepatitis A, B, C, D and E. Antiviral therapy of chronic hepatitis B and C.
6. HIV infection. Epidemiological situation in the world and the Republic of Belarus. Ways of infection. Risk groups. Classification of HIV Infection (WHO Classification). Diagnostic of HIV Infection. Principles of antiretroviral therapy. Clinical examination, prevention of opportunistic infections.
7. Sepsis, septic shock. Etiological structure of sepsis in the clinic of infectious diseases. Classification. Diagnostic criteria. Multiple organ failure. Principles of etiological verification and antibacterial therapy of sepsis.
8. Tropical malaria. Clinic, diagnostics, treatment and prevention. Complications of tropical malaria, treatment.
9. Dengue fever. Ebola Fever. Etiology. Epidemiology. Clinic, classification, diagnostics, treatment and prevention.
10. Yellow fever. Etiology. Epidemiology. Clinic, classification, diagnostics, treatment and prevention.
11. Visceral and cutaneous leishmaniasis: etiology, epidemiology, clinical presentation, diagnostics, treatment, prevention.
12. Cholera: etiology, epidemiology, pathogenesis, clinic. diagnostics, treatment and prevention.
13. African trypanosomiasis (Gambian and Rhodesian). Etiology, epidemiology, clinic, diagnostics, treatment and prevention.
14. Brucellosis: etiology, epidemiology, clinic, diagnostics, treatment and prevention.
15. Typhoid fever: etiology, epidemiology, clinical presentation, diagnostics, treatment and prevention.
16. Schistosomiasis: etiology, epidemiology, clinical presentation, diagnostics, treatment and prevention of intestinal, urinary and Japanese schistosomiasis.
17. Dracunculosis: etiology, epidemiology, clinic, diagnostics, treatment and prevention.
18. Strongyloidosis: etiology, epidemiology, clinical picture, diagnostics, treatment and prevention.
19. Echinococcosis: etiology, epidemiology, clinic, diagnostics, treatment and prevention.
20. Cysticercosis: etiology, epidemiology, clinic, diagnostics, treatment and prevention.
21. Amebiasis: etiology, epidemiology, clinic, classification, diagnostics, treatment, prevention.
22. Vukhirerioz: etiology, epidemiology, clinic, classification, diagnostics, treatment, prevention.

23. American trypanosomiasis. Etiology, epidemiology, clinic, diagnosis, treatment and prevention.

### **XIII. Rehabilitation**

1. Methods of medical rehabilitation, indications and contraindications for medical rehabilitation.
2. Principles of medical rehabilitation. The difference between medical rehabilitation and treatment.
3. Criteria of vital activity, the concept of a functional class. Evaluation of the effectiveness of medical rehabilitation.
4. Massage as a means of rehabilitation of patients in the clinic of internal diseases, classification, indications and contraindications.
5. . Classification of means of kinesitherapy, their description. Contraindications for the appointment of physical therapy.
6. Reflexotherapy, methods of influence in reflexotherapy, acupuncture point, its properties, search methods.
7. Ergotherapy, as a method of medical rehabilitation. Principles, indications.
8. Medico-technical means of rehabilitation.
9. Functional stress tests. Classification of stress tests. Indications for **exercise testing**.
10. Acupuncture in internal diseases, possible complications and their prophylaxis. Reflexotherapy contraindications.
11. Methods of physiotherapy, indications and contraindications for their application.
12. Means and methods of medical rehabilitation used for patients with cardiovascular diseases.
13. Exercise tests used in cardiology.
14. Medical rehabilitation of patients with diseases of the joints.
15. Means and methods of medical rehabilitation used in pulmonology.
16. Exercise testing used in pulmonology.
17. Basic principles and methods of using electrotherapy. Indications and contraindications.
18. Basic principles and methods of application of magnetotherapy. Indications and contraindications.
19. Basic principles and methods of application of light therapy. Indications and contraindications.
20. Complex application of therapeutic physical factors. Classification of therapeutic physical factors, general contraindications to their appointment.

### **XIV. Clinical immunology and allergology**

1. Anaphylaxis, principles of diagnosis, emergency care, prevention.
2. Urticaria, etiopathogenesis, principles of treatment and prevention.
3. Angioedema, etiopathogenesis, diagnosis and treatment.
4. Primary immunodeficiency. Principles of diagnosis and treatment.
5. Physiological immunodeficiencies (early childhood, pregnancy, old age). Clinical and laboratory features, prevention of infectious diseases.
6. Side effects of drugs: etiology, pathogenesis, classification, clinical manifestations, course, treatment.

