Khanty-Mansiysk Autonomous Okrug-Ugra
"Surgut State University"

Approved by
Deputy Rector for
Academic Affairs
_____E.V. Konovalova
“11” June 2026, Record № 5

PROGRAM

state final certification
graduates in the field of study (specialty)

31.05.01 General medicine
Orientation (profile) of the program (specialization) –

specialist
Qualification (degree) – medical doctor

Surgut – 2026

The program of the state final certification of graduates is compiled in accordance with the requirements: Federal State Educational Standard of Higher Education in the field of study 31.05.01 General Medicine, approved by Order of the Ministry of Education and Science of the Russian Federation on February 9, 2016 No. 95.

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Coordination of the work program

Subdivision (department/library)	Full name
Department of Internal Diseases	Head of department, d.m.s., Professor O. L. Aryamkina
Acquisition department	I. I. Dmitrieva

The program was reviewed and approved by the meeting of the Department of Internal Diseases 17.04.2026, protocol № 10.

Head of department, d.m.s., Professor O. L. Aryamkina

The program was reviewed and approved by the meeting of the educational and methodological council of the medical institute 23.04.2026, protocol № 8.

Chairman of EMC, Ph.D., Associate Professor E. A. Vasilyeva

1. GENERAL CHARACTERISTICS OF THE PROGRAMME

1.1 General provisions

The programme of the state final attestation (hereinafter SFA) has been developed incompliance with:

- "Federal Law on Education in the Russian Federation" No. 273-FZ dated December 29, 2012;
- the Procedure for Final State Attestation for Higher Education Programs — Bachelor's Programs, Specialist Programs and Master's Programs approved by the Order of the Ministry of Education and Science of the Russian Federation No. 636 dated on June 29, 2015; (in addition tothe Order of the Ministry of Education of Russia No. 86 09.02.2016), STO-2.12.9-17 "Regulationson the state final certification".

The state final attestation is carried out on the basis of the objectivity principle in assessing the quality of students' training to determine whether the students master the educational programin the field training (specialty) 31.05.01 General Medicine according to the demands of the Federal State Educational Standard of Higher Education (hereinafter – FSES HE).

The programme is designed for full-time students in the field of study 31.05.01 General Medicine. Graduates SFA in the field of training (specialty) 31.05.01 General Medicine is a state(interdisciplinary) exam, consisting of three attestation tests (testing, practical skills, and interview). The specific list of the final certification tests included in SFA of students in the particular field of study is defined by the FSES HE in the part of requirements to the graduates` final state attestation. The aim of the SFA is to determine whether the learning outcomes of students completing educational programs meet the respective requirements of the basic professional educational programes of FSES HE. The students who fully succeeded in the courseof theoretical training and successfully fulfilled all the requirements of the curriculum are admittedto the graduates` state final attestation.

2.1 Characteristics of graduates' professional activity who have mastered the programme of specialty

1.2.1 Graduates of programme 31.05.01 General Medicine are prepared to the following types of professional activity:

- medical;
- organizational and managerial;
- research.

1.2.2 Competences that the student must have as a result of mastering educational program:

General cultural competences (hereinafter – GCC)***:***

- ability of abstract thinking, analysis, synthesis (GCC-1);
- ability to apply basic philosophical concepts to develop world outlook (GCC-2);
- ability to analyze the main stages and tendencies in historical development of society toshape/sustain personal civic background (GCC-3);
- ability to act in non-standard situations, to take social and ethical responsibility fordecisions (GCC-4);
- ability for self-development, self-realization, self-education, applying creative potential (GC-5);
- ability to apply physical culture resources in the social and professional activities (GCC-6);
- readiness to apply first aid and protection techniques in emergency (GCC-7);
- readiness to work in a team being tolerant to social, ethnic, confessional and cultural

differences (GCC-8).

General professional competences (hereinafter – GPC)***:***

- readiness to solve standard professional tasks using information, bibliographic resources, medical and biological terminology, information technologies based on information security requirements (GPC-1)
- readiness for oral and written communication in Russian and foreign languages to solve professional tasks (GPC-2);
- ability to apply basic economic and legal issues in professional activity (GPC-3);
- ability and readiness to apply ethical and deontological principles in professional activity (GPC-4);
- ability and readiness to analyze the results of individual activities to prevent professionalmistakes (GPC-5);
- readiness to keep medical records (GPC-6);
- readiness to apply basic physical, chemical, mathematical and other natural sciencesconcepts and methods to solve professional tasks (GPC-7);
- readiness for medical use of drugs, substances and their combinations in solvingprofessional tasks (GPC-8);
- ability to assess morpho-functional, physiological states and pathological processes in thehuman body for solving professional problems (GPC-9);
- readiness to provide patients' care and primary pre-medical health care (GPC-10);
- readiness to apply medical devices approved for medical procedures (GPC-11).

Professional competence (hereinafter – PC)***:***

Medical activities:

- ability and readiness to apply care bundle aiming to: preserve and strengthen health; promote healthy lifestyle; prevent the occurrence and/or spread of diseases, to conduct their early detection, uncovering causation and progression; eliminate adverse health effects of habitat factors (PC-1);
- ability and readiness to conduct preventive and standard examinations and follow-up care (PC-2);
- ability and readiness to implement epidemic countermeasures, to protect population in the foci of especially dangerous infections, during the deterioration of the radiation situation, natural disasters and other emergencies (PC-3);
- ability and readiness to apply biofeedback methods, medico-statistical data collection and analysis of public health records (PC-4);
- readiness to collect and analyze patient complaints, health background status, examination results, laboratory, instrumental, patho-anatomical and other test results to estimate the state or to establish the presence/absence of disease (PC-5);
- ability to determine the patient's basic pathological states, disease symptoms and syndromes, nosological forms in accordance with the International Statistical Classification of Diseases and Related Health Problems, X revision (PC-6);
- readiness to perform temporary disability expertise, medical and social expertise, to ascertain biological death of a person (PC-7);
- ability to determine strategies of managing patients with various nosological forms (PC- 8);
- readiness to manage and treat patients with various nosological forms in outpatient clinics (PC-9);
- readiness to provide medical care for sudden acute illnesses, conditions,

exacerbation of chronic diseases non-threatening the patient's life and requiring no urgent medical care (PC-10);

- readiness to provide emergency medical care in conditions requiring urgent medical intervention (PC-11);
- readiness to manage physiological pregnancy and to attend delivery (PC-12);
- readiness to provide medical care in emergency, including medical evacuation (PC-13);
- readiness to evaluate the necessity of natural therapeutic resources, medicinal, non-medicinal therapy and other resources in patients requiring medical rehabilitation and sanatorium treatment (PC-14);
- readiness to educate patients and their relatives on health-promoting principles, self-monitoring of basic physiological indicators contributing to health preservation and strengthening and disease prevention (PC-15);
- readiness to educate patients on risk factors elimination and healthy lifestyle promotion (PC-16);

Organizational and managerial activities:

- ability to apply basic management principles in public health care and medical organizations (PC-17),
- readiness to assess medical care quality based on medical and statistical parameters (PC- 18);
- ability to provide emergency medical care including medical evacuation (PC-19);

Research activities:

- readiness for analysis and public presentation of medical issues on the basis of evidence- based medicine (PC-20);
- ability to conduct/participate in scientific research (PC-21);
- readiness to apply new methods and techniques aimed at public health protection (PC-22).

2. THE PROGRAMME OF THE STATE EXAM

2.1 List of points for the state examination "Hospital therapy":

1. Coarctation of aorta. Epidemiology. Hemodynamic changes. Clinical implications. Clinical course.
2. Coarctation. Diagnosis and differential diagnosis. Laboratory and instrumental diagnostics. Complications. Principles of therapy. Indications for surgical treatment.
3. Botallo duct patency. Epidemiology. Etiology. Hemodynamic disorders. Clinical picture. Instrumental diagnostics. Differential diagnosis. Complications. Indications to surgical treatment.
4. Congenital defects of the atrial and interventricular septum treatment. Types. Features of intra-atrial violation of hemodynamics. Clinical manifestations depending on the defect and the stage of the disease. Indications for surgical treatment.
5. Myocarditis. Epidemiology. Etiology, pathogenesis. Classification. Clinical picture. Variants of the disease development. Instrumental and laboratory diagnostics. Diagnostic criterion. Differential diagnosis. Prognosis. Complications. Principles of therapy.
6. Pericardial effusion. Etiology and pathogenesis. Variants of the disease development. Clinical implications. Laboratory and instrumental diagnostics. Differential diagnosis. Treatment with the etiological factor. Indications for pericardial puncture.
7. Adhesive (constrictive) pericarditis. Etiology. The mechanism of development and

features of circulatory disorders. Clinical picture. Diagnosis. Treatment. Indications for surgical treatment. Prognosis.

8. Myocardiodystrophy. Definition. Etiology and pathogenesis. Classification. The main clinical manifestations. Diagnostic criterion. Differential diagnosis. Treatment. Prevention.

9. Ectopic heartbeat. Definition. Epidemiology. Etiology. Pathogenesis. Clinical implications. ECG diagnostics. Treatment and prevention of extrasystoles.

10. Bouveret's disease. Classification. Etiology. Pathogenesis. The clinical picture of an attackof paroxysmal tachycardia. ECG diagnostics. Emergency treatment. Indications to a countershock.Prognosis. Prevention.

11. Atrial and ventricular fibrillation. Etiology and pathogenesis. Classification. Clinical implications. ECG diagnostics. Therapy depending on the form. Indications to a countershock. Complications. Prevention of complications. Prognosis.

12. Conduction defects. Etiology and pathogenesis. Classification. Clinical implications. ECGdiagnostics. Complications. Treatment. Prognosis.

13. Sinus node weakness syndrome. Etiology. Clinical implications. Principles of diagnosis and therapy. Indications for implantation of an artificial pacemaker.

14. Hypertrophic cardiomyopathy. Contribution of genetic factors. Pathogenesis of intracardiac hemodynamic disorders. The main clinical manifestations. Laboratory and instrumental diagnostics. Differential diagnosis. Variants of the disease development. Prognosis. Medical and surgical treatment.

15. Restrictive cardiomyopathy. Epidemiology. Etiology. Pathogenesis of hemodynamic disorders. The main clinical manifestations. Principles of diagnosis. Differential diagnosis. Course and complications. Principles of conservative and surgical treatment.

16. Dilated cardiomyopathy. Epidemiology. Etiology. Pathogenesis of hemodynamic disorders. The main clinical manifestations. Principles of diagnosis. Differential diagnosis. Course and complications. Principles of conservative and surgical treatment.

17. Symptomatic arterial hypertension of renal Genesis. Classification. Etiology. Pathogenesis of high blood pressure. Features of the clinical picture. Laboratory and instrumental diagnostics. Differential diagnosis. Medical and surgical treatment. Complications. Prognosis.

18. Secondary arterial hypertension of endocrine Genesis. Etiology. Pathogenesis. Features of the clinical picture. Laboratory and instrumental diagnostics. Differential diagnosis. Principle of treatment.

19. Systemic lupus erythematosus. Epidemiology. Etiology and pathogenesis. Classification. Clinical picture. Laboratory changes. Course of disease. Diagnostic criterion. Differential diagnosis. Treatment. The value of anti-cytokine therapy. Complications. Prognosis. Prevention.

20. Systemic scleroderma. Epidemiology. Etiology and pathogenesis. Classification. Clinical picture. Laboratory changes. Course of disease. Diagnostic criterion. Differential diagnosis. Treatment. The value of anti-cytokine therapy. Complications. Prognosis. Prevention.

21. Dermatomyositis. Epidemiology. Etiology and Pathogenesis. Classification. Clinical picture. Laboratory changes. Course of disease. Diagnostic criteria. Differential diagnosis. Treatment. The value of anti-cytokine therapy. Complications. Prognosis. Prevention.

22. Rheumatoid arthritis. Definition. Epidemiology. Etiology and Pathogenesis. Classification. Clinical implications. Laboratory and instrumental methods of diagnostics. Diagnostic criteria. Differential diagnosis. Clinical course. Treatment. Prognosis. Indications for surgical treatment.

23. Ankylosing spondylitis (Bekhterev's disease). Epidemiology. Etiology. Pathogenesis. Clinical implications. Diagnostic criteria. Laboratory and instrumental diagnostics. Differential diagnosis. Principles of therapy. Prevention.

24. Osteoarthrosis. Definition. Etiology. Pathogenesis. Classification. Clinical picture. Diagnostic criteria. Diagnostics. Differential diagnosis. Principles of therapy. Prognosis. Prevention.

25. Gout. Definition. Etiology. Pathogenesis. Classification. Clinical picture. Diagnostic criteria. Diagnostics. Differential diagnosis. The principles of urgent and planned care.

26. Reactive arthritis (Reiter's syndrome). Etiology. Pathogenesis. Clinical implications. Laboratory and instrumental diagnostics. Differential diagnosis. Treatment. Prevention.

27. Cranial giant arteritis (Horton's disease). Epidemiology. Etiology and Pathogenesis. Clinical picture. The main clinical syndromes. Diagnostic criteria. Laboratory and instrumental diagnostics. Differential diagnosis. Treatment. Prognosis.

28. Nonspecific aortoarteritis (Takayasu disease). Epidemiology. Etiology and Pathogenesis. Clinical picture. The main clinical syndromes. Diagnostic criteria. Laboratory and instrumental diagnostics. Differential diagnosis. Treatment. Prognosis.

29. Nodular periarteritis. Etiology and Pathogenesis. Clinical picture. Laboratory and instrumental diagnostics. Clinical variants. Diagnostic criteria. Diagnostics. Differential diagnosis.Treatment. Prognosis. Prevention.

30. Wegener's granulomatosis. Epidemiology. Etiology and Pathogenesis. Clinical picture. Clinical course variants. Laboratory and instrumental diagnostics. Diagnostic criteria. Differentialdiagnosis. Complications. Treatment. Prognosis. Prevention.

31. Goodpasture's syndrome. Epidemiology. Etiology and Pathogenesis. Clinical picture. Clinical course variants. Laboratory and instrumental diagnostics. Diagnostic criteria. Differentialdiagnosis. Complications. Treatment. Prognosis. Prevention.

32. Henoch-Schönlein purpura. Epidemiology. Etiology. Pathogenesis. Clinical variants. Diagnostic criteria. Differential diagnosis. Treatment. Complications. The course and outcome.

33. Thromboangiitis obliterans (disease of Winiwarter-Burger). Etiology and Pathogenesis. Clinical picture. Diagnostic criteria. Diagnostics. Differential diagnosis. Treatment.

34. Non-Hodgkin's lymphomas. Classification. Etiology. Pathogenesis. Clinical syndromes. Differential diagnosis. Principles of diagnosis and therapy.

35. Irritable bowel syndrome. Epidemiology. Etiology, pathogenesis. Diagnostic criteria. Clinical picture. Differential diagnosis. Treatment. Prevention.

36. Functional disorders of stomach motor and secretory functions. Etiology, pathogenesis. Clinical picture. Clinical course. Principles of diagnosis. Differential diagnosis. Treatment. Prognosis. Prevention.

37. Crohn's disease. Epidemiology. Etiology. Pathogenesis. Classification. Intestinal and extraintestinal manifestations. Clinical course variants. Complications. Laboratory and instrumental diagnostics. Differential diagnosis. Treatment. Prognosis.

38. Ulcerative colitis. Epidemiology. Etiology. Pathogenesis. Classification. Intestinal and extraintestinal manifestations. Clinical course variants. Complications. Laboratory and instrumental methods of diagnostics. Differential diagnosis. Treatment. Prognosis.

39. Chronic pyelonephritis. Etiology and Pathogenesis. Classification. Clinical implications. Methods of laboratory and instrumental diagnostics. Principles of therapy. Prognosis. Prevention.

40. Nephrotic syndrome. Definition. Etiology and Pathogenesis. Clinical implications. Laboratory and instrumental diagnostics. Principles of therapy. Complications. Prognosis. Prevention.

41. Renal amyloidosis. Epidemiology. Etiology and Pathogenesis. Classification. Clinical picture depending on a type of amyloidosis. Laboratory and instrumental diagnostics. Treatment.Outcomes. Prognosis.
42. Acute renal failure. Etiology and Pathogenesis. Clinical picture. Stages. Differential diagnosis. Treatment. Indications for extracorporeal treatments. Outcomes. Prognosis.
43. Acute renal failure. Epidemiology. Etiology and Pathogenesis. The main clinical syndromes. Classification. The concept of CKD. Principles of therapy. Indications for hemodialysis and kidney transplantation.
44. Iron deficiency anemia. Epidemiology. Etiology and Pathogenesis. The main clinical syndromes. Laboratory and instrumental diagnostics. Differential diagnosis. Principles of therapy.Complications. Prevention.
45. B12 (folic) deficiency anemia. Epidemiology. Etiology. Pathogenesis. The main clinical syndromes. Laboratory and instrumental diagnostics. Differential diagnosis. Principles of therapy.Complications. Prognosis. Prevention.
46. Congenital hemolytic anemia. Mechanisms of hemolysis. Classification. clinical laboratory signs of membranopathies enzyme defects и hemoglobinopathies. Differential diagnosis. Principles of therapy. Prognosis.
47. Acquired hemolytic anemia. Etiology and Pathogenesis. The most important symptoms in intracellular and intravascular hemolysis. Laboratory diagnostics. Principles of therapy. Complications and their prevention. Prognosis. Indications for surgical treatment.
48. Aplastic anemia. Epidemiology. Etiology and Pathogenesis. The main clinical signs. Laboratory changes. Diagnostic criteria. Differential diagnosis. Treatment depending on theseverity of the disease. Indications for bone marrow transplantation. Prognosis.
49. Agranulocytosis. Definition. Classification. Etiology and Pathogenesis. Clinical appearance of immune agranulocytosis. Laboratory and instrumental diagnostics. Treatment. Complications. Prevention.
50. Thrombocytopenias. Classification. Etiology and Pathogenesis. Clinical implications. Diagnosis and differential diagnosis. Principles of therapy. Indications for splenectomy.
51. Willebrand's disease Etiology. Pathogenesis. Clinical variants. Principles of diagnosis. Differential diagnosis. Planned and emergency treatment. Prevention. Prognosis.
52. Hemophilias. Etiology. The place of hereditary factor in the development of the disease. Pathogenesis of bleeding. Clinical implications. Principles of diagnosis. Differential diagnosis. Prognosis. Treatment and prevention of bleeding.
53. Chronic myeloleukemia. Etiology and Pathogenesis. Classification. Clinical implications. Laboratory and instrumental diagnostics. Differential diagnosis. Principles of therapy. Complications. Indications for bone marrow and peripheral stem cell transplantation. Prognosis.
54. Polycythemia vera. Osler's disease. Etiology and Pathogenesis. The main clinical syndromes. Diagnostic criteria. Laboratory and instrumental diagnostics. Differential diagnosis with symptomatic erythrocytosis. The course and outcomes of the disease. Treatment. Prognosis.
55. Chronic lymphocytic leukemia. Epidemiology. Etiology and Pathogenesis. Classification. Clinical implications. Laboratory and instrumental diagnostics. Differential diagnosis. Principles of therapy. Complications. Prognosis.
56. Myeloma. Epidemiology. Etiology. Pathogenesis. Classifications. Clinical syndromes. Diagnostic criteria. Diagnostics. Differential diagnosis. Principles of therapy. Prognosis.
57. Acute lymphoblastic leukemia. Epidemiology. Etiology and Pathogenesis.

Classification. The main clinical syndromes. Laboratory and instrumental diagnostics. Differential diagnosis. Course and complications. Principles of therapy and its stages. Complications of cytostatic therapy and their correction. Prognosis and survival. Indications for bone marrow transplantation.

58. Acute non-lymphoblastic leukemia. Epidemiology. Etiology and Pathogenesis. Classification. The main clinical syndromes. Laboratory and instrumental diagnostics. Differential diagnosis. Course and complications. Principles of therapy, its stages. Complications of cytostatic therapy and their correction. Prognosis and survival. Indications for bone marrow transplantation.

59. Lymphogranulomatosis (Hodgkin's disease). Epidemiology. Etiology and Pathogenesis. Clinical variants. Clinical picture. Laboratory and instrumental diagnostics. Differential diagnosis.The course and outcome. Treatment. Prognosis.

60. Lung emphysema. The concept of COPD. Epidemiology. Etiology, pathogenesis. Classification. Clinical picture. Principles of diagnosis. Treatment.

61. Pulmonary heart. Definition. Classification. Etiology. The pathogenic role of pulmonary hypertension. Pathogenesis of hemodynamic changes. Clinical implications. Laboratory andinstrumental diagnostics. Principles of therapy. Complications. Prognosis.

"Pulmonology"

1. Differential diagnosis and treatment of bronchial obstruction: Diseases of the larynx, angioedema, diseases of the trachea, lungs, mediastinum, hysteria, carcinoid syndrome, nodular periarteritis).
2. Algorithm for diagnosis of bronchial obstruction syndrome.
3. Laboratory diagnosis of bronchial obstruction syndrome.
4. Instrumental diagnosis of bronchial obstruction syndrome.
5. Modern principles of treatment of obstructive bronchitis and asthma.
6. Basic therapy of COPD.
7. Indications and contraindications to the use of methylxanthines, ^{2}agonist, M-cholinolytics, inhaled and systemic corticosteroids.
8. Treatment of bronchial obstruction syndrome in patients with ischemic heart disease,diabetes.
9. Intensive therapy of asthmatic status.
10. Criteria for the effectiveness of treatment of broncho-obstructive syndrome.
11. Differential diagnosis of focal lung diseases: cancer, tuberculosis, pulmonary embolism,eosinophilic infiltration, pneumonia of different etiologies.
12. Empirical and pathogenetic therapy of community-acquired and nosocomial pneumonia.
13. Treatment of acute pneumonia of various etiologies.
14. Intensive therapy of severe pneumonia.
15. Differential diagnostics and treatment of pulmonary embolism.
16. The possibilities of instrumental diagnosis of PATE.
17. Tactics of management of patients with PATE, including invasive treatments.
18. Differential diagnosis and treatment of diffuse (disseminated) lung lesions: tuberculosis, sarcoidosis, exogenous allergic alveolitis, Hamman-rich syndrome, lung damage in diffuse connective tissue diseases and systemic vasculitis, pneumoconiosis, tumor dissemination,
19. Medicinal pneumopathy (amiodarone, nitrofurans, etc.). Treatment of sarcoidosis and allergic alveolitis.
20. Emergency therapy for pulmonary bleeding.
21. Technique of pleural puncture.

22. Indications and methods of artificial lung ventilation.
23. Peculiarities of course and treatment strategy of pneumonia and COPD in elderly patients. Features of clinical course and treatment of pneumonia, bronchitis, asthma in pregnant women.

"Cardiology"

1. Differential diagnosis of heart murmur: differential diagnosis of acquired and most common congenital heart defects characterized by the appearance of systolic murmur.
2. Systolic murmur of "relative" mitral valve insufficiency (prolapse of valves, violation of papillary muscle tone, organic myocardial damage). Murmurs on large vessels with hypertension of small and large circles of blood circulation.
3. Differential diagnosis of heart defects characterized by diastolic murmur. The value ofinstrumental methods in the differential diagnosis of heart defects (non-invasive and invasivemethods).
4. Possibilities of surgical treatment of heart defects.
5. Differential diagnosis in cardiomegaly: congenital and acquired heart defects, coronary heart disease, exudative pericarditis, heart tumors, amyloidosis of the heart, myocardial lesions in collagenoses, alcoholism, hemochromatosis, sarcoidosis, primary cardiomyopathy.
6. The importance of echocardiography, scintigraphy of the heart, invasive methods in the diagnosis of rare heart diseases.
7. Diagnosis and treatment of myocardial diseases: non-coronary myocardial diseases: myocarditis, cardiomyopathy, myocardiodystrophy.
8. Clinical, instrumental, laboratory methods of their recognition, indications for myocardial biopsy.
9. Clinical variants of the course of these diseases.
10. Treatment, including surgical.
11. Indications for heart transplantation.
12. Diagnosis of acute heart failure.
13. Acute left ventricular failure.
14. Pulmonary edema. Provoking factors. Pathogenesis. Characteristics of hemodynamic shifts. Differential diagnosis with other causes of paroxysmal dyspnea. Outcomes. Prognosis. Emergency treatment.
15. Features of treatment of pulmonary edema on the background of hypertension andhypotension, as well as a combination of cardiac and bronchial asthma.
16. Acute right ventricular failure.
17. Diagnosis of chronic heart failure.
18. Chronic left-, right-ventricular and biventricular cardiac: failure. Etiology, epidemiology, clinic, instrumental diagnostics, modern medical and non-drug therapy, prevention.
19. Differential diagnosis in hypertension.
20. Possibilities of differentiation of hypertension and symptomatic hypertension. Indications foruse of invasive techniques (including aortography and renal puncture biopsy).
21. Early detection of malignant hypertension syndrome. Modern methods of treatment ofhypertension.
22. Emergency treatment of hypertensive crisis.
23. Features of treatment of hypertension in the elderly and senile age, as well as in severeatherosclerosis.
24. Differential diagnosis for chest pain: features coronarogenic and pain of noncoronary origin(including noncardiac).
25. Possibilities of electrocardiography in pain differentiation (medical and stress tests).

26. Indications for the use of coronary angiography, atrial stimulation test.
27. Features of pain treatment depending on their origin
28. Treatment of coronary heart disease.
29. Relief and prevention of angina attacks and pain attack in myocardial infarction, including inthe prehospital period.
30. Medical management in unstable angina. Surgical treatment of ischemic heart disease. Ballooncoronary angioplasty.
31. Rehabilitation of patients with myocardial infarction. Phases (stages) of rehabilitation.
32. The concept of physical, psychological, professional and socio-economic aspects of rehabilitation.
33. Types of physical training programs and basic methods of control in the rehabilitation ofpatients with coronary insufficiency.
34. Prevention of coronary heart disease (primary and secondary).
35. Differential diagnosis in cardiac arrhythmias and conduction disorders. Features of clinicalmanifestations and the importance of ECG method in diagnosis.
36. Therapy depending on the type of arrhythmia, its tolerability and the nature of heart damage.Indications and contraindications to defibrillation.
37. Diagnosis and treatment of supraventricular and ventricular tachycardia.
38. Features of management of patients with permanent and paroxysmal atrial fibrillation.
39. Diagnosis and treatment of ventricular pre-excitation syndrome and sinus node weaknesssyndrome.
40. The value of detection of “high” and “low” heart blockades, indications for implantation ofartificial pacemaker (permanent and temporary).
41. Resuscitation measures for ventricular asystole.
42. Differential diagnosis and treatment of hypotension.
43. Hypotension as an individual variant of the norm, adaptive hypotension.
44. Essential, symptomatic, idiopathic orthostatic arterial hypotension. The concept of hypotonicdisease.
45. Individual selection of drug therapy. Physiotherapy. Prophylactic medical examination. Laborexpertise and employment.
46. Emergency therapy of acute adrenal insufficiency.
47. Differential diagnosis in shock.
48. The difference between shock and fainting and collapse. Features cardiogenic, arrhythmic, pain shock.
49. Shock in myocardial infarction and pulmonary embolism.
50. Treatment of cardiogenic shock in myocardial infarction.
51. The role of intensive care units in shock treatment.
52. Treatment of septic toxic shock.
53. Features of the course and therapeutic tactics in hypertension and coronary heart disease in elderly patients.
54. Therapeutic tactics for hypertension, heart disease, myocardial diseases in pregnant women.

“Nephrology”

1. Differential diagnosis in urinary syndrome.
2. Diagnostic criteria for diseases, manifested mainly by hematuria, pyuria, proteinuria.
3. Possibilities of laboratory and instrumental methods of research.
4. Indications for biopsy of kidneys.
5. Kidney damage in diabetes, systemic connective tissue diseases, systemic vasculitis, myeloma.
6. Features of therapy of the underlying disease in the accession and kidney damage.

7. Differential diagnosis for edema: clinical features of edema in lesions of the kidneys, heart, liver, endocrine disorders, violations of venous and lymphatic circulation.
8. Idiopathic edema syndrome.
9. Treatment taking into account the characteristics of different types of edema.
10. Differential diagnosis in nephrotic syndrome.
11. Diseases manifested by nephrotic syndrome.
12. The importance of determining selective and non-selective proteinuria, puncture kidney biopsy, biopsy of the mucous membrane of the gums and rectum to identify the etiology.
13. Features of therapy of the underlying disease with the addition of nephrotic syndrome.
14. Treatment of nephrotic syndrome.
15. Features of the course of kidney disease and treatment tactics in elderly patients
16. Characteristics of progestin treatment of pyelonephritis.
17. Possible complications of diuretic therapy.

"Gastroenterology"
1. Algorithm of differential diagnosis of pain in the stomach.
2. False "acute abdomen" in diseases of internal organs: lower lobe pleuropneumonia, basal pleurisy, gastralgia form of myocardial infarction, dissecting aortic aneurysm, acute right ventricular failure of various origins, hemorrhagic vasculitis, diabetic ketoacidosis, addisonic crisis.
3. Therapist`s tactics in the detection of acute surgical pathology of the abdominal cavity.
4. Emergency therapy in acute adrenal insufficiency.
5. Differential diagnosis of esophageal and gastric dyspepsia syndrome.
6. Algorithms for patients' examination with impaired swallowing, nausea and vomiting.
7. Identification of diseases of the gastrointestinal tract, Central nervous system, exchange of vesicles, vestibular apparatus, endocrine disorders, diseases of the cardiovascular system, infectious and acute surgical pathology, acute and chronic exogenous intoxication, complications of drug therapy.
8. Antiemetic drug therapy.
9. Differential diagnosis of intestinal dyspepsia.
10. Diseases manifested themselves as diarrhea (tumors of the gastrointestinal tract, ulcerative colitis, Crohn's disease, chronic enterocolitis, mono-and disaccharidase malabsorption, celiac disease, functional disorders, infectious diseases).
11. Malabsorption syndrome.
12. Constipation (achalasia of the colon, overgrown colon syndrome, colon tumors, diverticulosis, distal diseases of the colon, irritable bowel syndrome).
13. Diagnostic capabilities (X-ray contrast examination of the intestine, feces, enzymes, endoscopic methods, biopsy of the intestinal mucosa).
14. Differential diagnosis and treatment of gastrointestinal bleeding.
15. Diagnostic criteria of bleeding, its size, localization and causes.
16. Treatment tactics of various diseases, complicated by gastrointestinal bleeding.
17. Indications for surgery.
18. Differential diagnosis of hepatomegaly.
19. Differential diagnosis in Banti's syndrome.
20. The main reasons for the development (chronic hepatitis and cirrhosis of the liver, accumulation diseases, liver tumors, diseases of the hepatic blood vessels, diseases of the blood and blood-forming organs, diseases of the heart).
21. The possibility of timely disease recognition, the role of the enzyme spectrum of blood, radioisotope and echographic methods, X-ray contrast, including angiography, morphological

methods.

22. Treatment of chronic hepatitis and liver cirrhosis.
23. Differential diagnosis of jaundice.
24. Diagnostic criteria of different forms of jaundice accompanied by unconjugated (suprarenal and hepatic forms) and conjugated bilirubin (hepatocellular and obstructive jaundice).
25. Possibilities of laboratory and instrumental methods (including X-ray contrast, endoscopic and ultrasound methods).
26. Treatment for various forms of jaundice: parenchymal jaundice, hereditary syndromes, hemolytic jaundice, medicinal hepatopathy.
27. Emergency therapy of acute liver failure.
28. Differential diagnosis and treatment of diseases of the biliary tract and pancreas: cholelithiasis, chronic cholecystitis, biliary dyskinesia, various clinical variants of chronic pancreatitis, pancreatic cancer.
29. Emergency care for biliary colic and acute pancreatitis.
30. Features of the course and treatment tactics of diseases of the gastrointestinal tract and liver in elderly patients.
31. Features of treatment of exacerbation of chronic cholecystitis, pancreatitis, gastric ulcer and duodenal ulcer in pregnant women.

"Hematology"

1. Differential diagnosis in anemic conditions.
2. Classification of anemia. Diagnostic search program of anemic syndrome.
3. Anemia treatment of various origins. Therapeutic tactics. Indications for blood transfusion. Maintenance therapy.
4. Differential diagnosis in lymphadenopathy and splenomegaly.
5. Diseases manifested by local and diffuse enlargement of lymph nodes and splenomegaly. Diagnostic search program.
6. The value of the morphological method of research in lymphadenopathy. Indications for splenectomy.
7. Differential diagnosis and treatment of diseases manifested by hemorrhagic syndrome.
8. Classification of hemorrhagic diathesis.
9. Rational use of modern laboratory methods for the study of blood coagulation.
10. Examination programs for hemorrhagic diathesis.
11. Treatment of hemorrhagic diathesis
12. Diagnostic criteria of bleeding, its size, localization and causes.
13. Tactics of treatment of various diseases, complicated by bleeding. Indications for surgery.
14. Differential diagnosis and treatment of hemoblastosis.
15. Reliable diagnostic criteria and rational therapy of acute leukemia, chronic lymphocytic leukemia and myeloid leukemia, lymphogranulomatosis, myeloma.
16. Leukemoid reactions.
17. Benign hypergammaglobulinemia.
18. Complications of drug therapy of hemoblastosis.
19. Cytostatic disease (causes, clinic, treatment).
20. Diagnosis, treatment and prevention of thrombosis.
21. Anticoagulant and thrombolytic therapy in the clinic of internal diseases.
22. Modern ideas about the mechanisms of thrombosis.
23. Thrombophilia, their classification.
24. Clinical, instrumental, laboratory diagnosis of thrombosis of different localization.

25. Anticoagulant, antiplatelet, thrombolytic therapy (drugs, indications, contraindications, possible complications, their prevention).
26. DIC-syndrome in the clinic of internal diseases.
27. Diseases that cause DIC syndrome.
28. Clinical variants of acute DIC syndrome, diagnosis, treatment, prevention.
29. Chronic intravascular blood micro-coagulation, its role in the pathogenesis of various internal diseases. Possibilities and value of its correction.

"Rheumatology"
1. Algorithm of differential diagnostics in joint disease.
2. Features of the joint syndrome in systemic connective tissue diseases, paraneoplastic reactions, gout and deforming osteoarthritis.
3. Possibility of early diagnosis of rheumatoid arthritis, Bekhterev's disease, gout, Sjogren and Reiter's syndrome.
4. Reactive arthritis.
5. Treatment of rheumatoid arthritis.
6. Treatment of gout, acute attack of gout.
7. Treatment of Reiter's syndrome.
8. Treatment of Bekhterev's disease.
9. Differential diagnosis of systemic connective tissue diseases: systemic lupus erythematosus, polyarteritis nodosa, systemic sclerosis, dermatopolymyositis (non-cancer origin), Wegener's granulomatosis, goodpasture's syndrome.
10. Treatment of systemic lupus erythematosus.
11. Treatment of nodular polyarteritis.
12. Treatment of systemic scleroderma.
13. Treatment of dermatopolimiositis (non-cancer origin).
14. Treatment of Wegener's granulomatosis.
15. Treatment of Gudpasture's syndrome.
16. Prophylactic medical examination, prevention of side effects of drugs used in rheumatology.
17. Anti-inflammatory and immunosuppressive therapy in the clinic of internal diseases: the most important groups of non-steroidal and steroid anti-inflammatory drugs and immunosuppressors used in the clinic.
18. Indications for anti-inflammatory and immunosuppressive therapy in inflammatory and immunopathic diseases of internal organs (heart, lungs, liver, kidneys, intestine, thyroid gland, etc.).
19. Rational modes of drug therapy, prevention of its complications.

"Endocrinology"
1. Differential diagnosis in hyperglycemia and glucosuria.
2. Treatment of diabetes mellitus in patients with myocardial infarction, acute pneumonia, other inflammatory diseases and during surgery.
3. The principles of diet in diabetes.
4. Oral antidiabetic drugs, the possibility of their use. Characteristics of their actions.
5. Indications for the appointment of insulin.
6. Fast-acting simple insulin; medium-acting insulin and long-acting insulin.
7. Insulin overdose syndrome. Side effects of insulin.
8. Measures to overcome insulin resistance.
9. Differential diagnosis and treatment of diabetic comas.
10. Ketoacidotic and hypoglycemic comas. Etiology and pathogenesis. Clinical picture. Diagnostic criterion. Emergency treatment. Prognosis, prevention.

11. Characteristics of hyperosmolar and lactacidemia comas, brain coma emerged by inadequate therapy of ketoacidotic coma.
12. Differential diagnosis and treatment of diseases manifested by thyrotoxicosis and hypothyroidism.
13. Laboratory verification of increased and decreased thyroid function.
14. Diseases leading to thyrotoxicosis and hypothyroidism, their diagnostic criteria.
15. The concept of subclinical and oligosymptomatic hypothyroidism.
16. The importance of timely diagnosis.
17. Emergency therapy of thyrotoxic crisis. Treatment of diffuse toxic goiter, autoimmune and subacute thyroiditis.
18. Differential diagnosis of menopausal syndrome.
19. The psychovegetative disorders. Changes in the cardiovascular system, bone system, endocrine glands in menopausal syndrome.
20. Diagnosis. Treatment. The role of psychotherapy in the treatment of menopausal neurosis. Medical treatments. Hormone therapy in pre-and postmenopausal. Indications and contraindications to the appointment of androgens and estrogens.
21. State of disease. Prognosis. Prevention of the pathological course of the climacteric period.

"Clinical immunology"
1. Critical periods of the immune system functioning at the postnatal stage of development.
2. Clinical and immunological characteristics of variants of primary immunodeficiency states.
3. Approaches to therapy of primary immunodeficiency states.
4. The courses for the development of allergic diseases in children at an early age.
5. Contact dermatitis.
6. Basic therapy of bronchial asthma and methods of its control.
7. Recurrent urticaria in children: diagnosis, treatment and prevention.
8. Allergic rhinitis: diagnosis and methods of therapy.
9. Atopic dermatitis in children: modern approaches to diagnosis and treatment.
10. Hay fever in children: diagnosis and treatment methods.
11. Food allergy: diagnosis, clinical manifestations, treatment approaches.
12. Pseudoallergic states: differential diagnosis according to the mechanism of development with allergopathology, principles of treatment.
13. Systematization of autoimmune diseases, immunopathogenesis, diagnosis and treatment principles.
14. Principles and methods of immunoprophylaxis, immunotherapy, immunorehabilitation.
15. Angioedema quince.
16. Anaphylactic shock.
17. Toxic epidermal necrolysis.
18. Autoimmune thyroid disease in children: clinic, immunodiagnosis, principles of treatment.
19. Autoimmune hemolytic anemia in children Vaccine prophylaxis. The modern vaccination schedule.
20. Immunorehabilitation in the group of frequently ill children.

"Phthisiatry"
1. Deontology in Phthisiatry.

2. Features of clinical examination of patients with tuberculosis. The main clinical symptoms of tuberculosis.
3. Laboratory, instrumental diagnosis of tuberculosis.
4. Tuberculin diagnosis.
5. X-ray diagnosis of tuberculosis. Fluorography examination of the population.
6. Clinical classification of tuberculosis. Formulation of a clinical diagnosis of a patient with respiratory tuberculosis.
7. TB dispensary, its tasks for the timely detection of tuberculosis and its prevention.
8. Measures for the diagnosis of tuberculosis, treatment and dispensary observation of patients. Treatment of tuberculosis.
9. Small and large residual changes after tuberculosis treatment. Temporary and permanent disability of patients with pulmonary tuberculosis.
10. The work of the General treatment institutions and prevention network for the prevention of tuberculosis.
11. TB vaccination of BCG and BCG-M in children, adolescents and adults. Indications and contraindications. Evaluation of the effectiveness of vaccination, possible complications.
12. Groups of people at high risk of tuberculosis, methods of examination and prevention of tuberculosis.
13. Primary tuberculosis. The primary period of tuberculosis infection, tuberculosis intoxication.
14. Tuberculosis of intrathoracic lymph nodes.
15. Primary tuberculosis complex. Pathogenesis, diagnosis, clinic, treatment, differential diagnosis.
16. Miliary tuberculosis of the lungs. Pathogenesis, diagnosis, clinic, treatment, differential diagnosis.
17. Disseminated tuberculosis of the lungs. Pathogenesis, diagnosis, clinic, treatment, differential diagnosis.
18. Tuberculous meningitis. Pathogenesis, diagnosis, clinic, treatment, differential diagnosis.
19. Focal pulmonary tuberculosis. Acute and chronic focal tuberculosis. Pathogenesis, diagnosis, clinic, treatment, differential diagnosis.
20. Pulmonary tuberculosis. Pathogenesis, diagnosis, clinic, treatment, differential diagnosis.
21. Infiltrative pulmonary tuberculosis. Limited (rounded) and common infiltrates. Pathogenesis, clinic, treatment, differential diagnosis.
22. Caseous pneumonia. Pathogenesis, clinic, treatment, differential diagnosis.
23. Cavernous, fibrous-cavernous pulmonary tuberculosis. Pathogenesis, diagnosis, clinic, treatment, differential diagnosis.
24. Cirrhotic pulmonary tuberculosis. Limited and common cirrhosis. Pathogenesis, diagnosis, clinic, treatment, differential diagnosis
25. Tuberculous pleurisy. Exudative and fibrinous pleurisy. Pathogenesis, diagnosis, clinic, treatment, differential diagnosis.
26. Pulmonary tuberculosis, combined with dust occupational diseases.
27. Pulmonary tuberculosis, combined with HIV infection.
28. Pulmonary tuberculosis combined with lung cancer
29. Pulmonary tuberculosis, combined with COPD.
30. Pulmonary tuberculosis, combined with gastric ulcer.
31. Pulmonary tuberculosis, combined with diabetes.
32. Pulmonary tuberculosis, combined with alcoholism, drug addiction, mental illness.
33. Pulmonary hemorrhage. Pathogenesis, diagnosis principles of treatment and prevention.

34. Spontaneous pneumothorax, atelectasis. Pathogenesis, diagnosis principles of treatment and prevention.
35. Pulmonary-cardiac insufficiency, amyloidosis. Pathogenesis, diagnosis principles of treatment and prevention.
36. Differential diagnosis of tuberculosis complications.
37. Treatment of tuberculosis.
38. Antituberculous drug.
39. General principles and methods of chemotherapy of tuberculosis.
40. Combinations of drugs and drug regimen ns.
41. Indications for chemotherapy in a hospital and outpatient departments.
42. Methods of surgical treatment of patients with respiratory tuberculosis.
43. Indications for different types of surgery.
44. Extrapulmonary forms of tuberculosis.
45. Tuberculosis of the lymphatic system. Peripheral lymphadenitis, mesenteric adenitis. Diagnosis, treatment and differential diagnosis
46. Clinical symptoms and methods of patients' examination with tuberculosis of the genitourinary system.
47. Tuberculosis of the musculoskeletal system.
48. Features of detection of bones and joints tuberculosis.
49. Clinical forms of bones and joints tuberculosis.
50. Spinal tuberculosis
51. Complications of lungs tuberculosis - spontaneous pneumothorax. Emergency. Methods of treatment and prevention. \ Complications of pulmonary tuberculosis - pulmonary hemorrhage. Emergency. Methods of treatment and prevention. \ Complications of pulmonary tuberculosis - pulmonary heart failure. Emergency. Methods of treatment and prevention.
52. Tuberculosis of the Central Nervous System.
53. Tuberculous meningitis.
54. Tuberculosis of the eye.

"Public Health and Health Care"
1. Goals, objectives, content of the subject "Public Health and Health Care".
2. Study levels and criteria of public health evaluation.
3. Factors determining public health.
4. Study methods of the public health state.
5. Problems of social policy in the country.
6. Criteria, health indicators at the individual, group, community level.
7. Risk factors for developing the disease.
8. Additional criteria for determining public health.
9. Methods for calculating relative values.
10. The impact of migration on public health. The value of urbanization in the development of modern society.
11. Main indicators of natural movement of the population. Natural population growth, factors affecting it. Unnatural population decline.
12. The influence of medical and social factors on the birth rate and fertility.
13. The concept of "live birth" and "stillbirth."
14. The influence of medical and social factors on mortality.
15. Methods for calculating and analyzing mortality rates.
16. Maternal mortality, methods of study, level, trends, factors affecting maternal mortality.
17. Factors affecting infant and perinatal mortality.

18. Life expectancy at birth and average life expectancy, the nature and significance of these indicators.

19. Characteristics of the demographic situation in Russia and abroad at the present stage. General morbidity referred to polyclinics and dispensaries. The method of study: the unit of observation, accounting and reporting documents and their contents.

20. Hospitalized morbidity. The method of study: the unit of observation, accounting and reporting documentation, analysis of indicators (level, structure of morbidity, etc.).

21. Disease incidence of the population according to medical examinations. Types of medicalexaminations (preliminary, periodic, targeted). Methods of study, records, indicators.

22. Disease incidence of population according to the causes of death, the method of study, indicators. The only and multiple causes of death, the value of their analysis.

23. Principles and features of the construction of the International Statistical Classification of Diseases and Problems Related to Health.

24. Public healthcare facilities of public (state and municipal) and private health care.

25. Types of public healthcare centers institutions to the public.

26. The main activities of the public healthcare centers.

27. The main directions (elements) of primary health care.

28. Evaluation criteria for the organization of primary health care.

29. General principles of the organization of primary health care to the population.

30. The organizational structure of the city polyclinic for adults.

31. The organizational structure of the city hospital for adults.

32. The organization of admission of patients with the medical, diagnostic, preventive purposes.

33. Registrar's Office, its purpose.

34. Methods for analyzing and evaluating the activities of outpatient clinics and inpatient facilities.

35. Specialized medical assistance and its work organization.

36. The principles of the organization of outpatient, hospital specialized care.

37. Early treatment centre, types of early treatment centre, structure, organization of work.

38. The main forms of primary medical records of early treatment centre (oncological, tuberculosis, drug abuse, skin and venereal diseases).

39. Features of the center for the prevention and fight against AIDS.

40. Early treatment centre indicators performance.

41. The list of basic laws regulating activities in the health care.

42. The Constitution of the Russian Federation. Civil Code of the Russian Federation.

43. Law of the Russian Federation "On the basis of the protection of public health in theRussian Federation".

44. The Russian law "On Protection of Consumer Rights".

45. The law of the Russian Federation "On medical insurance of citizens in the RussianFederation".

46. The Russian federal law "On Transplantation of Human Organs and (or) Tissues".

47. Federal Law "On Immunization of Infectious Diseases."

48. Criminal Code of the Russian Federation.

49. The definition of private medical practice.

50. The right to engage in private medical practice.

51. Persons allowed engaging in private medical practice.

52. Definition of the concept of traditional medicine.

53. Persons allowed engaging in traditional medicine.

54. Methods of traditional medicine used in hospitals.

55. The preventive measures provided for the illegal occupation of traditional medicine.

56. The content of the basic principles of management.

57. Basic management functions.
58. Styles and methods of management.
59. Management of the health care system in the Russian Federation.
60. Basics of predicting public health and health care.
61. Principles and types of planning in the health care.
62. Health care planning methods.
63. The calculation of the required number of beds.
64. Medical, social and economic efficiency of the health care, calculation methods.
65. Health care financing, general provisions.
66. Sources of health financing.
67. Planning and expenditure of funds by public health institutions.
68. Compulsory medical insurance, the essence of the concept.
69. Subjects and participants of the CHI (compulsory health insurance).
70. Basic principles of the development of the CHI.
71. The basic and territorial programme of the CHI.
72. The main sources of formation of CHI funds.
73. Functions of the Federal and Territorial CHI Funds.
74. Assessment of the quality of medical care at various levels of its delivery.
75. Health Insurance Legislation.
76. Features of voluntary health insurance (VHI).
77. The differences between CHI and VHI.
78. Components of the health care quality, quality characteristic.
79. The strategy of continuous improvement of the care quality.
80. Development and implementation of quality plans in medical organizations.
81. Patient management protocols, clinical, economic and medico-economic standards.
82. Intra-departmental and non-departmental quality control of medical care.
83. Standardization in medicine and health care.
84. Assessment of the quality of medical care at various levels of its delivery.
85. Temporary disability leave, its medical criteria.
86. Social criteria for temporary disability leave.
87. Types of temporary disability leave.
88. The functions of the attending physician during the examination of temporary disabilityleave.
89. Tasks of the medical commission.
90. The main functions of a disability certificate, methods of issuing it in health care organizations.
91. Categories of citizens eligible for temporary disability leave.
92. Categories of medical workers who have the right to issue temporary disability leave.
93. Procedure for issuing a temporary disability leaves for diseases, injuries, poisoning, incases of pregnancy and childbirth.
94. Procedure for issuing a temporary disability leaves for the period of sanatorium-resorttreatment.
95. The basic concepts used in medico-social expertise (MSE).
96. Medico-social expert commissions (MSEC): levels (bureau, main bureau), composition,and functions.
97. The procedure for sending citizens to the MSE.
98. Causes of disability.
99. Disability groups, criteria for their determination, time of re-examination.
100. Rehabilitation of persons with disabilities: definition, types.
101. Methods for calculating generalizing coefficients.
102. Methods for calculating relative values.

103. The concept of relative values.
104. The types of relative values – extensive, intensive, ratios, visibility, their definition,methods of calculation, scope and their characteristics.
105. Comparison methods for different statistical aggregates.
106. Methods for assessing the interaction of factors.
107. Types of dynamic series.
108. Indicators of the dynamic series, their calculation and practical application.

"Clinical Pharmacology"
1. Definitions: drug substance, medicinal drugs.
2. Legal basis of the medicines circulation in Russia: Federal Law "On the circulation of medicines".
3. Definitions: clinical pharmacology and pharmacotherapy.
4. Sections of clinical pharmacology.
5. Types of pharmacotherapy.
6. Differences between the international non-proprietary name and the trade name of the drug.
7. What are the pharmacokinetic processes?
8. What is the role of transporters in the pharmacokinetics of drugs?
9. What are the factors affecting the processes of absorption, distribution, metabolism and excretion of drugs?
10. Definitions of antagonists, agonists, partial agonists.
11. Types of target molecules of drugs (receptors, enzymes, ion channels).
12. Types of pharmacological response: the expected pharmacological response, hyper-reactivity, tachyphylaxis, and idiosyncrasy.
13. Principles for the development of drug efficacy control programs.
14. Acute pharmacological test (concept, purpose, indications, rules of carrying out).
15. Methods for assessing the influence of drugs on the quality of life.
16. Indications for the appointment of antibacterial agents.
17. Groups of chemotherapeutic agents.
18. Antimicrobial agent in the treatment of respiratory diseases.
19. Antimicrobial agent in the treatment of diseases of the kidneys and urinary tract.
20. Antimicrobial agent in the treatment of digestive tract infections.
21. The most rational combination of antimicrobial agent.
22. Adverse reactions of antimicrobial agent.
23. Drugs increasing blood pressure.
24. What are the indications for the use of adrenaline, norepinephrine, mezaton?
25. What are the main classes of antihypertensive drugs used for long-term treatment hypertension?
26. List the methods of monitoring the effectiveness of the use of antihypertensive and antianginal drugs.
27. List the safety control methods for the use of beta-blockers.
28. What adverse events (AE) can cause ACE inhibitors?
29. What AE can cause organic nitrates?
30. Groups of drugs for the treatment of heart failure, their pharmacokinetics, pharmacodynamics, indications, contraindications, drug interactions, dosing regimen n, depending on age.
31. Antiarrhythmic drugs pharmacokinetics, pharmacodynamics, indications, contraindications, drug interactions, dosing regimen n, depending on age.
32. Classification of anticoagulants and antiplatelet agents.
33. What are the indications for the use of anticoagulants and antiaggregants?

34. What are the most frequent adverse reactions in the use of anticoagulants and antiplatelet agents? What are the risk factors for their development?
35. How to carry out coagulation control when applying anticoagulants and antiplatelet agents?
36. Drugs affecting airway conductance, groups of drugs.
37. Drugs used for symptomatic treatment of bronchopulmonary diseases, pharmacokinetics, pharmacodynamics, indications, contraindications, drug interactions, dosing regimen n, depending on age.
38. Drugs that reduce inflammation in the respiratory tract: their pharmacokinetics, pharmacodynamics, indications, contraindications, drug interactions, dosing regimen n, depending on age.
39. Expectorant and antitussive drugs.
40. Antihistamine drugs, classification, pharmacokinetics, pharmacodynamics, indications, contraindications, drug interactions, dosing regimen n depending on age.
41. Drugs used in the digestive system diseases.

"General Surgery, Diagnostic Radiology"
1. History of surgery development. Stages of surgery development. Representatives of the Russian surgery in its development.
2. Nikolay Pirogov – the founder of national surgery. His contribution to the development of the anatomical principles of surgery, anesthesia, military field surgery.
3. The structure and organization of the admission department of a surgical hospital.
4. Sanitary and hygienic regimen n of the emergency unit.
5. The structure and organization of the surgical department.
6. Sanitary and hygienic regimen of the surgical department.
7. Sanitary and hygienic regimen of the surgery block.
8. Prevention of the spread of airborne infection.
9. Characteristics of physical sterilization methods.
10. Characteristics of chemical sterilization methods.
11. Methods of sterilization of surgical instruments, sterilization of surgical clothes and dressings.
12. Methods of treatment of the surgical field, Filonchikov-Grossikh rule, classical and modern methods of the surgeon's scrub-up.
13. Prevention of implant infection of patients: sterilization of suture material, drains, implants.
14. Methods of monitoring the sterility of surgical instruments and linen, dressing.
15. Mechanical antiseptics – methods of mechanical antiseptics.
16. Physical antiseptic: characteristics of the physical phenomena used to fight infection, types of drainage and their properties, methods of drainage of wounds and cavities.
17. Chemical antiseptics: the main groups of chemical antiseptics, the mechanism of action, methods of application.
18. Biological antiseptics: characterization of groups of biological antiseptic substances; active and passive immunization, methods of immunization by the Bezredko method, properties of bacteriophages and proteolytic enzymes.
19. The main groups of antibacterial drugs, their classification, indications for their use, the basic principles of antibiotic therapy, the concept of de-escalation therapy, the route of administration of antibiotics.
20. Fractures. Classification, the mechanism of their development, clinic, diagnosis. Basic principles of fracture treatment.
21. Dislocations. Classification, the mechanism of their development, clinic, diagnosis.

Basic principles of treatment of dislocations.

22. Burns. Classification, clinical picture, diagnosis. Determining methods of the burns area. The basic principles of burns treatment. Types of skin grafting of post-burn skin defects.

23. Burn disease. Phases of burn disease. Clinical pictures. Basic principles of treatment.

24. Frostbites. Characteristics of external and internal factors that contribute to frostbite. Classification, clinical pictures, diagnostics. The basic principles of frostbites treatment. Types of surgical interventions for frostbites.

25. General hypothermia, causes, clinical picture depending on the phase of hypothermia, thebasic principles of treatment.

26. Electrical injury. Features of electric burns. Clinical picture. Diagnostics. Principles of treatment.

27. Crush (compression) syndrome. Causes of development, pathogenesis of traumatic toxicosis. The basic principles of treatment.

28. Wounds. Characteristic signs of wounds. Classification of wounds. Clinical picture, diagnosis. Types of wound healing.

29. Types of surgical treatment of wounds. Primary, delayed, secondary seams. Indications tooverlapping. Timing of overlapping.

30. Wound process. Phases of the wound process. Features of treatment of wounds, dependingon the phase of the wound process.

31. Purulent wounds. Features of the course of the wound process. Principles of local and general treatment of purulent wounds.

32. Furuncle. Definition. Etiology. Characteristics of the pathogen. Pathogenesis. Clinical picture, diagnosis, complications. Medical tactics.

33. Carbuncle. Definition Etiology. Characteristics of the pathogen. Pathogenesis. Clinical picture, diagnosis, complications. Medical tactics.

34. Hydradenitis. Definition. Etiology. Characteristics of the pathogen. Pathogenesis. Clinicalpicture, diagnosis, complications. Medical tactics.

35. Lymphangitis, lymphadenitis. Definition. Etiology. Characteristics of the pathogen. Pathogenesis. Clinical picture, diagnosis, complications. Medical tactics.

36. Erysipelas. Definition. Etiology. Characteristics of the pathogen. Pathogenesis. Classification. Clinical picture, diagnosis, complications. Medical tactics.

37. Mastitis. Definition Etiology. Characteristics of the pathogen. Pathogenesis. Classification.Clinical picture, diagnosis, complications. Medical tactics.

38. Phlegmon (pyogenic cellulitis). Definition. Etiology. Characteristics of the pathogens. Pathogenesis. Classification. Clinical picture, diagnosis, complications. Medical tactics.

39. Abscess of soft tissues. Definition. Etiology. Characteristics of the pathogen. Pathogenesis.Classification. Clinical picture, diagnosis, complications. Medical tactics.

40. Panaritium. Definition. Etiology. Characteristics of the pathogen. Pathogenesis. Classification. Clinical picture, diagnosis, complications. Medical tactics.

41. Acute hematogenous osteomyelitis. Definition. Etiology. Characteristics of the pathogen. Pathogenesis. Classification. Clinical picture, diagnosis, complications. Medical tactics. Types ofsurgical interventions of acute hematogenous osteomyelitis.

42. Chronic osteomyelitis. Definition. Etiology. Characteristics of the pathogen. Pathogenesis. Clinical picture, diagnosis, complications. Medical tactics. Types of surgical interventions for chronic hematogenous osteomyelitis.

43. Tetanus. Clinical picture, diagnosis, treatment. Preventive actions.

44. Sepsis as generalized infection. Etiology, pathogenesis, classification, Clinical picture, diagnosis, basic principles of sepsis treatment.

45. Anaerobic clostridial and non-clostridial infection. Characteristics of pathogens,

Clinical picture, diagnosis, basic principles of treatment.

46. Nosocomial infection. Characteristics of pathogens, properties of flora, criteria for nosocomial infections, basic principles of treatment, measures aimed at preventing development.

47. Tumors. Definition. Etiology of carcinogenesis. Pathogenesis. Classification. Distinctive features of benign and malignant neoplasms.

48. Types of specific treatment of tumors. Classification of surgical interventions for tumors.

49. Fistula. Definition. Etiology. Pathogenesis. Classification. Clinical picture, diagnosis. Medical tactics.

50. Necrosis, gangrene. Definition. Etiology. Classification. Clinics, diagnosis. Medical tactics. Types of surgical interventions used in the treatment of necrosis and gangrene of the extremities and internal organs.

51. Trophic ulcers. Definition. Etiology. Pathogenesis. Classification. Clinical picture, diagnosis, complications. Medical tactics. Types of surgical interventions in the treatment of trophic ulcers.

52. Preoperative period. Features of patient preparation for planned and emergency surgery. Mandatory diagnostic minimum before scheduled surgery.

53. Surgery. Definition. Classification of surgical interventions. Stages of the operation. The position of patients on the operating table depending on the type of operation. Intraoperative complications.

54. The postoperative period. The concept of early postoperative period. Principles of treatment and rehabilitation of the patient in the postoperative period.

55. Types of local anesthesia. Classification of local anesthetics. Criteria for the effectivenessof anesthesia. Advantages and disadvantages of local anesthesia.

56. General anesthesia. Non-inhalational anesthesia. Drugs used for non-inhalation anesthesia. Characteristics of the phases of anesthesia. Complications of non-inhalation anesthesia.

57. General anesthesia. Inhalation anesthesia. Types of inhalation anesthesia. Preparations used for inhalation anesthesia. Characteristics of the phases of anesthesia. Complications of inhalation anesthesia.

58. Characteristics of terminal states, their classification Pre-diagonal and agonal periods. Clinical picture. Principles of treatment. Prognosis.

59. Resuscitation. Definition. Signs of clinical and biological death. Criteria of the brain death.Cardiopulmonary resuscitation: indications for carrying out , features of carrying out. Open heartmassage. Criteria of efficiency and inefficiency of resuscitation.

60. Features of the examination of surgical patients. The main methods of medical imaging used in the examination of surgical patients.

61. Bleeding. Classification, the main clinical signs of blood loss, criteria of the severity of blood loss.

62. Determination the severity of blood loss. The basic principles of blood loss treatment. Indications of hemotransfusion.

63. The main pathogenic mechanisms of compensatory reactions of the body to blood loss.

64. Methods of temporary stop bleeding at the pre-hospital and hospital stages, the criteria forthe effectiveness of the methods used.

65. Ways to permanently stop bleeding. Mechanical, physical, biological methods. Criteria ofefficiency.

66. Methods for determining blood groups using the AB0 system and determining the rhesus (Rh) factor.

67. Classification of blood products, blood components. Indications for blood transfusion

andits components. Complications from blood transfusion.

68. Septic shock. Causes of development, pathogenesis, clinic, diagnosis, basic principles of treatment.

69. Hemorrhagic shock. Causes of development, pathogenesis, clinical picture, diagnosis, basic principles of treatment.

70. Traumatic shock. Causes of development, pathogenesis, clinical picture, diagnosis, basic principles of pathogenic treatment.

71. Burn shock. Causes of development, pathogenesis, clinical picture, diagnosis, basic principles of treatment.

72. Blood transfusion shock. Causes of development, pathogenesis, clinical picture, diagnosis,basic principles of treatment.

73. Basic principles of infusion-transfusion therapy. Indications and contraindications for the infusion-transfusion therapy.

74. Hemodynamic drugs, representatives, mechanism of action, indications and contraindications to use.

75. Preparations of detoxification action, representatives, mechanism of action, indications andcontraindications to use.

76. Preparations for parenteral nutrition, representatives, mechanism of action, indications andcontraindications for use.

77. Opisthorchiasis. Characteristics of the pathogen, epidemiology, clinical presentation, diagnosis, complications, basic principles of treatment. Indications and types of surgical treatmentof opisthorchiasis.

78. Echinococcosis. Characteristics of the pathogen, epidemiology, clinical presentation, diagnosis, basic principles of treatment. Types of surgical treatment for echinococcosis. Complications, treatment of complications.

79. Alveoccosis. Characteristics of the pathogen, epidemiology, clinical presentation, diagnosis, basic principles of treatment. Types of surgical treatment for alveococcosis. Complications, treatment of complications.

80. The purpose of organ and tissue transplantation. The concept of the donor, the selection criteria of potential donors. Types of organ and tissue donors, classification of transplants, classification of types of transplantation.

81. The meaning of the term “brain death” in transplantology. Methods for assessing the brainactivity of a potential donor.

82. Features of liver transplantation, indications for liver transplantation.

83. Features of kidney transplantation, indications for kidney transplantation.

84. Features of heart transplantation, indications for heart transplantation.

85. What is the method of ultrasound, what is it based on and what device is it carried out with?What is the piezoelectric effect? What is the purpose of the sensor?

86. How is a computed tomography (CT) image formed? What is the Hounsfield scale? What do images different organs give?

87. What is the basis of magnetic resonance imaging (MRI), when and how did this method appear? What is the nuclear magnetic resonance (NMR) and what has allowed its use in medicine?

88. Which of the methods of radiological diagnosis is the basic for breast diseases (its advantages and disadvantages)?

89. What are the advantages of CT in diseases of the urinary tract?

90. What is a lung abscess, what are its radiographic signs, what do they depend on?

91. What are the features of X-ray examination of the esophagus, stomach and intestines?

92. What are the periods of evacuation of a contrast agent (barium sulfate) through the esophagus, stomach and intestines after oral administration? What purpose do they need to be known?

93. What are the causes of intestinal obstruction? What radiologic techniques and symptoms can help to detect obstruction of various localization?
94. What are diverticula, what parts of the gastrointestinal tract are they most often localized, how do they radiologically appear, and what situations do they have clinical significance?
95. What part of the gastrointestinal tract are ulcers more often located, what radiological symptoms (main and additional) do they show, what are the differences between acute and chroniculcers and complications?
96. What disease of the gastrointestinal tract has the main radiological symptom – a defect of filling? How does it form, what does it look like and how is it called when it is located on the organcircuit and on a non-edge-forming wall (for example, the front or back)?
97. What form of growth does endophytic cancer belong to, what layer of the organ wall doesit mainly spread and what do radiological signs appear in its varieties?
98. What diagnostic methods are preferable to use for various benign and malignant tumors ofthe esophagus, stomach and intestines?
99. What radiation method is primarily recommended to decide the existance and nature of gallbladder diseases?
100. What is the technique, indications and informative methods of radiology in the study of the bile ducts?
101. What additional radiation methods (CT, MRI, ERCP) are used to identify any pathological changes in the pancreas?
102. What is related to interventional radiology? What methods of radiation diagnosis are used? What diseases the interventional radiation technology is applied to?
103. What types of bone fractures do you know? What radiological symptoms are characteristic of bone fractures? Types of displacement of bone fragments.
104. Stages and timing of the formation of callus in bone fractures.
105. Radiological semiotics of acute and chronic hematogenous osteomyelitis.

"Obstetrics and Gynecology"

1. Methods to study hormonal ovarian function.
2. Anatomy of female genital organs.
3. Anatomical and physiological features of the female reproductive system in the embryonic and pediatric periods.
4. Anatomical and physiological features of the reproductive system of women in menopause.
5. Anatomical and physiological features of the girl reproductive system in the pre-pubertal and pubertal periods.
6. Artificial abortion: medical indications, conditions, pain relief, possible complications and their prevention.
7. Out-of-hospital abortion: causes, clinical forms, clinic, emergency care.
8. Hormonal methods of contraception: classification of drugs, mechanism of action, contraindictions, complications.
9. Dysfunctional juvenile uterine bleeding: pathogenesis, clinic, treatment, prevention.
10. Dysfunctional uterine bleeding in premenopausal age: etiology, pathogenesis, clinic, differential diagnosis, emergency care, rehabilitation.
11. Female sex hormones and their effect on the woman's body.
12. Delayed sexual development: etiology, clinical presentation, diagnosis, treatment principles.
13. The value of gonadotropic hormones in the regulation of the menstrual cycle.
14. Artificial abortion: conditions, methods of anesthesia. Possible complications and their prevention.

15. Climacteric syndrome: pathogenesis, clinical picture, differential diagnosis, treatment.
16. Methods of diagnosis of cervical disease.
17. Methods of examination of gynecological patients.
18. Methods of screening unfertile couples.
19. Neuroendocrine regulation of the menstrual cycle.
20. Features of contraception in adolescents: classification methods, the mechanism of action of contraceptives, contraindications.
21. Acute inflammatory diseases of uterine appendages: etiology, clinical picture, diagnosis, treatment.
22. Acute metroendometritis: etiology, clinic, diagnosis, treatment.
23. Age periods of a woman's life.
24. Premature puberty: etiology, clinical picture, diagnosis, principles of therapy.
25. The role of antenatal clinics in the prevention and treatment of gynecological diseases.
26. Modern methods of contraception: types, conditions of their use, mechanism of action, contraindications, complications.
27. Modern methods of family planning: goals, objectives, prevention of abortion.
28. Modern ideas about the neuroendocrine regulation of the menstrual cycle. The hypothalamic-pituitary neurosecretory system and its role in the regulation of menstrual function.Classification of menstrual dysfunction.
29. The role of antenatal care in the system of obstetric and gynecological care.
30. Special methods of gynecological examination (colposcopy, hysteroscopy, laparoscopy, ultrasound): informative, indications, conditions for implementation.
31. The degree of purity of the vaginal smear: indications to study, information conten, methodof taking the material, the value in the diagnosis of gynecological diseases.
32. Tests of functional diagnostics to assess the menstrual cycle: types, time of their implementation, information content.
33. Topography of the pelvic organs.
34. Cyclic changes in the ovaries and uterus during the menstrual cycle.
35. Endoscopic research methods in gynecology: indications, conditions, informative.
36. Cystic mole: etiology, diagnosis, treatment, the principles of clinical examination.
37. "Acute abdomen" in gynecology: causes, clinical picture, differential diagnosis, emergency care, indications for surgical treatment.
38. Prolapse of the uterus: causes, clinic, treatment, prevention.
39. Dysfunctional uterine bleeding in reproductive age: pathogenesis, differential diagnosis, emergency care, hormonal hemostasis.
40. Benign ovarian tumors: classification, diagnosis, clinic, complications, treatment. The principle of dynamic observation.
41. Infertile marriage. Causes of infertility in marriage. Survey methods. Principles of treatment of female infertility.
42. Sexually transmitted diseases: etiology, classification, principles of diagnosis, treatment, prevention.
43. Infected abortion: etiology, clinic, complications, diagnosis, treatment, emergency care. Emergency care for septic shock.
44. Uterine fibroids: classification, clinic, diagnosis. Indications for surgical treatment. The volume of surgical treatment.
45. Uterine fibroids: etiology, pathogenesis, classification. Clinical picture of submucous uterine fibroids. Principles of treatment, indications for surgical treatment.
46. Menstrual function disorders: classification, etiology, pathogenesis, methods of examination, differential diagnosis.
47. Incomplete abortion: clinic, emergency care, prevention of complications.
48. Complications of ovarian tumors: clinic, diagnosis, emergency care, prevention.

49. Acute female gonorrhea: clinic, diagnostic methods, treatment, cure criteria, prevention.
50. Acute adnexitis: etiology, clinical presentation, diagnosis, treatment, prevention.
51. Acute pelvioperitonitis: etiology, differential diagnosis, emergency care.
52. Torsion of the stem of an ovarian tumor: the concept of the anatomical and surgical stem of an ovarian tumor, clinic, differential diagnosis, treatment.
53. Premenstrual syndrome: etiology, pathogenesis, clinics, differential diagnosis, treatment.
54. Cervical cancer: stages of spread, clinical presentation, diagnostic methods, treatment, prevention.
55. Endometrial cancer: etiology, pathogenesis, stages of spread, clinical presentation, diagnosis, treatment principle.
56. Ovarian cancer: classification, stages of spread, clinical presentation, diagnosis, treatment.
57. Septic abortion: etiology, clinical presentation, diagnosis, emergency care for bacterial shock.
58. Trichomoniasis of the female genital organs: etiology, clinic, diagnosis, treatment, prevention.
59. Chorionepithelioma: pathogenesis, clinical picture, differential diagnosis, treatment, principle of dynamic observation.
60. Tubal pregnancy interrupted by the principle of pipe rupture: etiology, clinics, diagnosis, emergency care.
61. Tubal abortion: etiology, pathogenesis, clinical picture, differential diagnosis, treatment, rehabilitation.
62. Female genital tuberculosis: classification, clinical picture, diagnostic methods, treatment principles.
63. Background diseases and cervical precancer: clinical presentation, diagnostic methods, treatment.
64. Background and precancerous diseases of the endometrium: etiology, pathogenesis, clinical picture, differential diagnostics, medical tactics.
65. Chronic inflammatory diseases of the internal genital organs: etiology, clinical picture, diagnosis. Principles of treatment.
66. Chronic adnexitis: etiology, pathogenesis, clinical picture, differential diagnosis, treatmentmethods.
67. Endometriosis: classification, clinical picture, diagnosis, conservative therapy.
68. Ovarian epithelial tumors: classification, clinical picture, diagnostic methods, complications, treatment.
69. Chronic gonorrhea of the female genital organs: clinical picture, diagnosis, methods of provocation, treatment.
70. Asphyxia of the newborn. Compensatory-adaptive reactions of the fetus as the basis for maintaining homeostasis, mechanism of its maintenance. Etiology, pathogenesis, classification, assessment of the severity of asphyxia and modern methods of resuscitation.
71. Anemia of pregnant women: etiology, clinical picture, diagnosis, treatment, importance ofproteins in the diet of pregnant women, metabolic ways of using amino acids. Prenatal care. Rehabilitation in the postpartum period.
72. Prenatal care in severe forms of preeclampsia, complications for the mother, fetus and newborn. Indications for early delivery.
73. Mode, hygiene and nutrition of pregnant women. The value of proteins in the diet of a pregnant woman. The peculiarity of diet therapy in the prevention of preeclampsia.
74. Histophysiology of the breast, neuroendocrine regulation of lactation. Disease of the mammary glands in the postpartum period (nipple cracks, pathological lactostasis, non-

purulent mastitis). Clinic, diagnosis, treatment, prevention.

75. Clinical picture of childbirth: the causes of labor and delivery, the mechanism of regulationof the uterus contractile activity, periods of labor, their duration and clinical signs. Modern principles of labor. Pain relief during childbirth.

76. Bleeding in the early postpartum period: etiology, clinic, diagnosis. Emergency care for early postpartum hypotonic bleeding. Prevention of bleeding in childbirth.

77. Gestational toxicosis: pathogenesis, classification, clinical picture, diagnosis, treatment principles.

78. Premature detachment of a normally located placenta. The role of the placenta in the system

79. "Mother-fetus" especially during its development. Etiology, clinical picture, differential diagnosis, the principle of pregnancy and childbirth, emergency care, prevention.

80. The role of antenatal clinics in the prevention of complications of pregnancy and childbirth:clinical examination of pregnant women from high-risk groups, their differentiated management during pregnancy and childbirth.

81. Narrow pelvis: etiology, diagnosis, features of the course and management of pregnancy and childbirth, prevention of complications in the mother and fetus.

82. Biomechanics of labor during anterior vertex presentation. Principles of management of the fetus expulsion period. Prevention of complications.

83. physiological labor management, anesthesia, and prevention of bleeding.

84. Hygiene and diet pregnant. The role of antenatal clinics in preventing the development of a large fetus.

85. Readiness of an organism of a pregnant woman for childbirth. Preparatory and preliminary periods, their duration. Pathological preliminary period: clinic, diagnosis, obstetric tactics.

86. Dynamic observation of pregnant women with kidney diseases (pyelonephritis, glomerulonephritis, urolithiasis), contradictions to pregnancy. Rehabilitation in the postpartum period.

87. Dynamic observation of pregnant women with endocrine pathology (diabetes mellitus): contradictions to pregnancy, duration of preventive hospitalization. Rehabilitation in the postpartum period. Diabetic fetopathy.

88. Clinical examination of healthy pregnant women (Order of the Ministry of Health of the Russian Federation No. 50): the optimal time for registration, the extent of examinations, the allocation of risk groups.

89. Kidney disease and pregnancy: classification, risk groups, contradictions to pregnancy. Features of pregnancy and childbirth. Rehabilitation in the postpartum period.

90. Changes in the mammary glands during pregnancy. Breast care in the postpartum period. Prevention of mastitis.

91. Implantation, fetal organogenesis, placentation. Influence of damaging environmental factors to the embryo and fetus.

92. Caesarean section: indications, conditions, types of operations, topographical reasoning of operations in the lower segment, the main stages of operational technology. Possible complications, their prevention.

93. Clinical picture of childbirth, periods of labor and the duration of their course, modern principles of labor. Pain relief during childbirth.

94. Bleeding in the early postpartum period: etiology, clinic, diagnosis, emergency care, prevention.

95. Premature birth: etiology, clinic, treatment. Features of premature birth.

96. The operation of imposing obstetric forceps: indications, conditions, complications and their prevention. Features of the sanitary and epidemic regimen in obstetric institutions. Sanitary Rules and Regulations (SanRaR) 2.1.3.2630-10 "Sanitary and epidemiological

requirements for organizations engaged in medical activities".

97. Features of the course and management of pregnancy and childbirth in women with heart defects: the main objectives and methods of examining a pregnant woman with cardiovascular pathology, contradictions to pregnancy, preventive hospitalization terms, and methods of delivery.Prevention of complications.

98. Assessment of the state of the newborn according to Apgar scale. The first toilet of the newborn. SanRaR 2.1.3.2630-10 "Sanitary and epidemiological requirements for organizations engaged in medical activities".

99. Gestational toxicosis of pregnant women: etiology, pathogenesis, classification, differential diagnosis, treatment principles, prevention in the conditions of antenatal clinics.

100. Postpartum hemorrhage: causes, clinic, diagnosis, emergency care, prevention.

101. Postpartum mastitis. The concept of inflammation, etiology of inflammation, the main local and common signs, stages and forms. Etiology, pathogenesis, classification of mastitis. Features of the current state, diagnosis, treatment, prevention of postpartum mastitis.

102. The postpartum period: clinical characteristics, duration, modern principles. Emergency care for postpartum hemorrhage at the prehospital stage.

103. Placenta previa: etiology, classification, clinic, diagnosis, obstetric tactics.

104. Subsequent period. Mechanisms of separation of the placenta. Signs of separation of the placenta. Methods for isolating the placenta.

105. Uterine rupture: causes, mechanism of rupture, complete uterine rupture clinic, emergencycare.

106. Uterine rupture: etiology, classification. Clinic threatening rupture. Obstetric tactics.

107. The role of antenatal care in the prevention of preeclampsia in pregnant women: the allocation of risk groups features of follow-up, diagnosis, management tactics.

108. Diabetes and pregnancy: features of the course of diabetes, pregnancy complications. The principle of dynamic observation of pregnant women with diabetes.

109. Weakness of labor activity: etiology, types, clinical picture, diagnosis, treatment and prevention.

110. Breech presentation of the fetus: classification, diagnosis. Principles of pregnancy and childbirth.

111. Pregnancy and childbirth in women with heart defects. The principles of clinical examination, contrandictions to the preservation of pregnancy. Emergency care for pulmonary edema.

112. Eclampsia: pathogenesis, clinical picture, differential diagnosis, emergency care, prevention, obstetric tactics.

113. Clinical examination of pregnant women with cardiovascular diseases (heart defects, hypertension), contradictions to pregnancy, terms of preventive hospitalization. Rehabilitation in the postpartum period.

114. Methods of diagnosis of late terms of pregnancy: collection of anamnesis of a pregnant woman, an objective examination, and additional methods of examination.

115. Determination of pregnancy: etiology, pathogenesis, effect on the fetus. Obstetric tactics.

116. Placenta of human. Features of its development and implantation. Placental insufficiency: etiology, clinical picture, diagnosis, treatment, prevention during critical periods of pregnancy.

117. Modern principles of the physiological management of the postpartum period: sanitary- epidemic regimen of puerperas, dietary habits, care of the puerperal. Prevention of septic postpartum diseases.

2.2 State final attestation in the field of training (specialty) 31.05.01 General Medicine is carried out in three stages:

- assessment of the theoretical qualification level by means of an interdisciplinary computer-based test exam;
- assessment of the mastering practical skills level;
- assessment of theoretical knowledge and skills to solve specific professional tasks during an oral interview.

"State Final Attestation" corresponds to block 3 of the Federal State Educational Standard of Higher Education, which includes preparation for passing the state exam and to the procedure of passing the state exam. Unit 3 "State Final Attestation" is referred to the basic part of the programme and concluded by the assignment of qualifications specified in the list of specialties and fields of higher education.

Stage I – Interdisciplinary test exam. It is carried out with the use of test tasks, completed to every graduate automatically using information systems by randomly selecting 60 test tasks. The graduate is given 60 minutes to solve test tasks.

Stage II - Practical skills are assessed by passing five stations at the Simulation Training Attestation Center of the MI SurSU:
- physical examination of the patient;
- medical examination;
- cardiopulmonary resuscitation (basic);
- emergency medical care;
- urgent medical care.

Should be assessed:
- methods of collecting and interpreting case history;
- technique of carrying out physical examination and the methodology of interpreting the identified facts;
- ability to use data from laboratory and instrumental studies, both traditional (complete blood count, biological secrets, metabolic biomarkers, electrophysiological recordings and/or findings), and modern para-clinical studies (ultrasound, computed tomography, etc.);
- formulation accuracy of the comprehensive clinical diagnosis, its consistency and completeness, taking into account the requirements of the International Classification of Diseases 10th revision and the domestic modern classifications of the main nosologic forms in the basic clinicaldisciplines;
- validity and adequacy of the prescribed treatment, tactics of emergency medical care.

Stage III – Interview is carried out in the form of answers to case problems of basic clinical disciplines.

2.3 Recommendations for students preparing for the state examination

2.3.1 List of questions (points) submitted for the state exam is established by the Graduating Department. If the state exam is interdisciplinary, all academic disciplines are indicated, the mainquestions (points) are included in its structure.

2.3.2 By the university Rector`s order, the State Examination Committee (hereinafter SEC)is approved, the SEC structure is revealed to the students attention.

2.3.3 Every student is admitted to the state exams by the order of the vice-rector of educational and methodical work.

2.3.4 Consultations are being held in accordance with the state examination programme.

2.3.5 Dates and consultations of examinations are given in the schedule.

2.3.6 Examination cards are issued in accordance with the Supplement, signed by the head

of the department and the director of the institute, accepted by the Academic Council Session of MI and approved by the vice-rector of educational and methodical work.

2.3.7 The examination cards of the 3rd stage consist of three clinical problems.

2.3.8 During the preparation period for the oral answers students make the necessary notes of every question (point) on stamped sheets of cards by the SEC. The first student is given no morethan 60 minutes to prepare for his answer, the other students answer in the order of priority.

2.3.9 If it is necessary the student can be asked additional questions after answering the theoretical question of the ticket cards.

2.3.10 At the end of the answer members of the SEC (with the permission of its chairperson) may ask additional questions to the student that are not beyond the limits of the state exam programme. Student's answer to the examination card and the questions of the SEC members should not be more than 30 minutes.

2.3.11. At the end of the state examination the SEC discusses every student's answers at a closed meeting and gives an agreed final grade to each of them.

2.3.12. The final grade is given to the student on the day of the exam, put both in the exam protocol and the academic record book. The examination record should contain the number and questions (points) of the examination card. The SEC chairperson and the secretary should sign both the protocol and the academic record book.

2.3.13. The protocols of the state exam are approved by the SEC chairperson, recorded in a special journal, and stored in the educational department in accordance with the cases nomenclature. At the end of the expiry date the protocols are transferred to the archive.

2.3.14. The answer to the question (points) of an examination card must comply with the main provisions of the part of the state examination programme and provide a statement of definitions of basic concepts.

2.3.15. The order and sequence of the material presentation is determined by the student.

2.3.16. The student has the right to expand the scope of the answer to the question (points) on the basis of additional literature with the obligatory reference to the authorship of the stated theory.

2.3.17. Theoretical statements should be supported by the examples from practical activities.

2.4. Criteria for assessing the results of passing state examination

General criteria for assessing the level of graduate training on the basis of the state (nterdisciplinary) exam include:

2.4.1. The level of the student's acquisition of the theoretical and practical material provided by the curriculum in the disciplines of BPEP HE in the field of training specialty 31.05.01 General Medicine.

2.4.2. The student's ability to use acquired theoretical knowledge to analyze professional problems.

2.4.3. Argumentation, clarity, precision, consistency of presentation, professional erudition.

In accordance with the specified criteria the student's answer is assessed as follows:

At stages I and II, the student must score at least 70%, and it corresponds to a satisfactoryassessment.

Correlation scale of points and grades for the 1st and 2nd stages

Grade	Points
«2» unsatisfactory	0-69
«3» satisfactory	70-79
«4» good	80-89

«5» excellent	90-100

Stage III - Final interview.

At the 3rd stage every student's answer is estimated as 1 point. The maximum number of points that a graduate can get is 15 points. The student must get at least 10 points; this correspondsto a satisfactory grade.

Scale of grades and points

Grade	Points
«2» unsatisfactory	0-9
«3» satisfactory	10
«4» good	11 – 13
«5» excellent	14 – 15

The grade "Excellent" is given if the case problems are correctly solved; detailed explanations and argumentations of the conclusions are made for every situational problem of the examination card. The graduate demonstrates methodological and theoretical knowledge and is fluent in scientific terminology. When analyzing the proposed situations he shows creative abilitiesand knowledge of additional literature, demonstrates good analytical skills, and is able to draw analogies among course topics.

The grade "Good" is given if the case problems are correctly solved, explanations and argumentations of the conclusions are given. The graduate demonstrates methodological and theoretical knowledge but makes some inaccuracies when operating scientific terminology.

The grade "Satisfactory" is given if the case problems are correctly solved, explanations and argumentations of the conclusions are given by the active assistance of the examiners. He has limited theoretical knowledge, makes significant mistakes establishing logical relationships, and makes mistakes using scientific terminology.

The grade "Unsatisfactory" is given if the case problems are incorrectly solved, however, during the discussion with the examiners the graduate could not correct the error. He shows inability to make independent conclusion and has a weak theoretical knowledge; doesn't usescientific terminology.

In accordance with the specified criteria the final grade is given on the bases of total gradesof three stages SFA due to the following criteria:

"Excellent" ("5") - the student has a deep and full knowledge of the content of the educational material and the conceptual apparatus; can associate theory with practice, illustrates itwith examples, facts, and scientific research data; carries out interdisciplinary associations, proposals, conclusions; logically, clearly and precisely presents answers to posed questions; is able to argument his answers to the stated problem. The answer is independent.

"Good" ("4") - the student has knowledge of the content of the educational material and the conceptual apparatus but makes some inaccuracies (minor errors) in the presentation of material. The answer is less detailed, deep, valid and complete; however, errors are corrected by the studenthimself after examiner`s additional questions.

"Satisfactory" ("3") - the student has knowledge and understanding of the basic content ofthe educational material, but his answers are incomplete, inconsistent, he makes inaccuracies and significant errors in the definition of concepts, the formulation of provisions. When arguing the answer, the student does not rely on the main provisions of research, conceptual and regulatory documents; does not apply theoretical knowledge to explain empirical facts and phenomena, does not substantiate his arguments; there is a

violation of the presentation logic. In general, the answerhas a low level.

"Unsatisfactory" ("2") - the student has scattered unsystematic knowledge. He makes mistakes in the definition of concepts, formulation of theoretical positions distorting their meaning. The student is not oriented in normative-conceptual, program-methodical, research materials, randomly and uncertainly presents the material; does not know how to apply knowledge to explainempirical facts, does not establish interdisciplinary relationship.

Depending on the results of the exam the open voting committee decides "To award the qualification of the specialist "General Practitioner" or "To refuse to be awarded the qualificationof the specialist "General Practitioner".

In the case when one of the SEC members gives the grade that differs sharply from the others, it should be separately considered and discussed, as it can be recognized as more correct; after presenting the arguments by the expert. Exam results are recorded in the protocol.

2.4 List of recommended literature

Main sources				
	Authors	Name	Edition	Number
1.	Ivashkin, V. T.	Internal Diseases Propedeutics = Пропедевтика внутренних болезней: textbook : for foreign students of medical higher educational institutions	Moscow: GEOTAR - Media, 2020. - 176 p.	https://www.studentlibrary.ru/book/ISBN9785970455555.html
2.	Khaitov, Rakhim / Khaitov Rakhim M.	Immunology: учебник	Moscow: GEOTAR - Media, 2019. - 272 c.	https://www.studentlibrary.ru/book/ISBN9785970449806.html
3.	RadzinskiyV.E., Fuks A.M.	Gynecology: учебник	Moscow: GEOTAR-Media, 2020. - 896 c.	https://www.studentlibrary.ru/book/ISBN9785970457993.html
Additional sources				
	Authors	Name	Edition	Number
1.	Reshetnikov A. V.	Sociology of Medicine textbook: учебник	Moscow: GEOTAR - Media, 2020. - 368 c.	https://www.studentlibrary.ru/book/ISBN9785970454473.html
2.	Kharkevitch, D. A.	Pharmacology: Textbook / Translation of Russian textbook, 12th edition, revised and improved	Moscow: GEOTAR-Media, 2019 - 2nd edition. - 680 pages with illustration	https://www.studentlibrary.ru/book/ISBN9785970449851.html

			s. - 680 c.	
3.	Koshechkin V. A.	Phthisiatry: textbook -	Moscow: GEOTAR-Media, 2019- 256 c. - ISBN 978-5-9704-5302-5.	https://www.studentlibrary.ru/book/ISBN9785970453025.html
4.	Garkavi A. V., Kavalersky G. M.	Disaster medicine	Moscow: GEOTAR - Media, 2019. - 304c.	https://www.studentlibrary.ru/book/ISBN9785970452585.html
Guidance cardss				
	Authors	Name	Editio n	Number
1.	Gostishchev, V. K.	General surgery. The manual: tutorial	Moscow: GEOTAR - Media, 2020. – 220 c.	https://www.studentlibrary.ru/book/ISBN9785970454398.html
2.	GostishchevV. K.	Generalsurgery: The manual	Moscow: GEOTAR - Media, 2015. – 220 c.	https://www.studentlibrary.ru/book/ISBN9785970434918.html
3.	Glukhov A. I., Babchenko E. V.	Biochemistryof the connective tissue. Biochemistryof mixed saliva	Moscow: GEOTAR-Media, 2019. – 128 c.	https://www.studentlibrary.ru/book/ISBN9785970449721.html
4	Radzinskiy V. E. Fuks A. M., Gagaev Ch. G.	Obstetrics	Moscow: GEOTAR - Media, 2019. – 880 c.	https://www.studentlibrary.ru/book/ISBN9785970446836.html
5.	Baigildina A. A., Davydov V. V.	Laboratory Manual on Biological Chemistry: for foreign students of Medical Department of Higher Education Institutions: tutorial	ГЭОТАР - Медиа, 2019. – 304 с.	https://www.studentlibrary.ru/book/ISBN9785970449714.html

3. Requirements to the final theses and the order of their progress

The state qualification exam - final qualification works is not provided by the FSES.

4. Procedure for appeals presentation and expertise

4.1 According to the results of state attestation tests student has the right to submit to the Appeals Commission written appeal statement (hereinafter - appeal) on the violation, in his opinion, the established procedure for conducting the state attestation test and (or) disagreement with the results of the state examination.

4.2. Appeal to the Appeals Commission is submitted by the student personally not later than the next working day after the announcement of the results of the state attestation test.

4.3 To consider the appeal secretary of the GEC sends to the Appeals Commission minutes of the GEC meeting, the conclusion of the chairman of the GEC on compliance with procedural issues in the conduct of the state attestation test, as well as written responses of the student.

4.4 Appeal is considered no later than 2 working days from the date of appeal at a meeting of the Appeals Commission, which is invited to the chairman of the GEC and the student who filed an appeal.

4.5 The decision of the Appeal Commission is brought to the attention of the student who filed an appeal, within 3 working days from the date of the meeting of the Appeal Commission. The fact of familiarization of the student who filed an appeal, with the decision of the Appeal Commission is certified by the signature of the student.

4.6 Appeals Commission when considering an appeal on violation of the established procedure for conducting the state attestation test takes one of the following decisions:

- on the rejection of the appeal, if the information set forth in it about violations of the procedure for conducting the GIA of the student is not confirmed and / or did not affect the on the result of the GIA;
- on the satisfaction of the appeal, if the information set forth in her information on the admitted violations of the procedure for conducting GIA student confirmed and affected the result of the GIA.

4.7 In the case of satisfaction of the appeal, the previously exhibited result of the GIA is subject to annulment and putting a new result.

4.8 In the case of satisfaction of the appeal to the student is assigned to repeat the state certification test in the presence of one of the members of the appeals committee in the additional one of the members of the Appeals Commission in additional terms established by SURSU, no later than the date of completion of training on the relevant educational plan of the student who filed an appeal.

4.9 The decision of the Appeal Commission is final and is not subject to review.

4.10 Appeal for a repeat of the state attestation test is not accepted.