- 1. Primary (essential) hypertension: prevalence, etiology, pathogenesis, diagnostic criteria. Hypertensioninduced end-organs damage.
- 2. Secondary hypertensions: prevalence, etiology, pathogenesis, diagnostic criteria.
- 3. Arterial hypotension, shock and collapse: etiology, pathogenesis diagnostic criteria.
- 4. Coronary artery disease. Etiology, pathogenesis, diagnostic criteria of stable angina, vasospastic angina, microvascular angina.
- 5. Coronary artery disease. Etiology, pathogenesis, diagnostic criteria of unstable angina, myocardial infarction with and without ST elevation.
- 6. Pathogenesis of myocardial infarction complications: arrhythmias, sudden cardiac death, acute heart failure, myocardial rapture.
- 7. Chronic heart failure: etiology, classification, pathogenesis, criteria of diagnosis, clinical manifestations of right- and left-sided heart failure.
- 8. Pulmonary hypertension and hypotension: etiology, pathogenesis, clinical manifestations.
- 9. Pulmonary embolism: risk factors, pathogenesis, clinical manifestation, diagnostic.
- 10. Obstructive lung diseases: bronchial asthma. Classification, etiology, pathogenesis, clinical manifestations. Lung volumes and capacities.
- 11. Obstructive lung diseases: chronic obstructive pulmonary disease. Classification, etiology, pathogenesis, clinical manifestations. Lung volumes and capacities.
- 12. Restrictive lung diseases: idiopathic pulmonary fibrosis, pneumoconiosis. Extrapulmonary causes of restriction. Classification, etiology, pathogenesis, clinical manifestations. Lung volumes and capacities.
- 13. Acute lung injury and acute respiratory distress syndrome: etiology, pathogenesis, clinical manifestations.
- 14. Polycythemia: primary (polycythemia vera), secondary. Etiology, pathogenesis, clinical manifestations; qualitative and quantitative changes in the blood test, blood test example.
- 15. Anemias of blood loss: etiology, stages and mechanisms of compensation, clinical manifestations; qualitative and quantitative changes in the blood test, blood test example.
- 16. Hereditary hemolytic anemias: hereditary spherocytosis, sickle cell anemia, thalassemia, glucose-6-phosphate dehydrogenase deficiency. Etiology, pathogenesis, clinical manifestations; qualitative and quantitative changes in the blood test, blood test example.
- 17. Acquired hemolytic anemias: paroxysmal nocturnal hemoglobinuria, immunohemolytic anemias, hemolytic anemias resulting from mechanical trauma to red cells, malaria. Etiology, pathogenesis, clinical manifestations; qualitative and quantitative changes in the blood test, blood test example.
- 18. Iron deficiency anemia, anemia of inflammation or chronic disease. Etiology, pathogenesis, clinical manifestations; qualitative and quantitative changes in the blood test, blood test example.
- 19. Megaloblastic anemias: B₁₂- and folic deficiency anemias. Etiology, pathogenesis, clinical manifestations; qualitative and quantitative changes in the blood test, blood test example.
- 20. Aplastic anemia and other forms of bone marrow failure. Etiology, pathogenesis, clinical manifestations; qualitative and quantitative changes in the blood test, blood test example.
- 21. Leucopenia. Neutropenia, agranulocytosis. Definition, etiology, pathogenesis, clinical manifestations; clinical criteria, qualitative and quantitative changes in the blood test, blood test example.
- 22. Leukocytosis. Definition, etiology, mechanisms, pathogenesis, clinical manifestations, types of leukocytosis; clinical criteria, qualitative and quantitative changes in the blood test, blood test example.
- 23. Lymphoid neoplasms: acute lymphoblastic leukemia, chronic lymphocytic leukemia, Hodgkin lymphoma. Definition, etiology, mechanisms, pathogenesis, clinical manifestations; qualitative and quantitative changes in the blood test, blood test example.
- 24. Myeloid neoplasms: acute myeloid leukemia, chronic myeloid leukemia, essential thrombocytosis, primary myelofibrosis. Definition, etiology, mechanisms, pathogenesis, clinical manifestations; qualitative and quantitative changes in the blood test, blood test example.
- 25. Bleeding disorders related to vessel wall abnormalities, thrombocytopenia and platelet dysfunction. Definition, etiology, pathogenesis, clinical manifestations; changes in the blood clotting tests.
- 26. Bleeding disorders related to abnormalities in clotting factors. Definition, etiology, pathogenesis, clinical manifestations; changes in the blood clotting tests.
- 27. Disseminated intravascular coagulation: etiology, pathogenesis, clinical manifestations, changes in the blood clotting tests.