

MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE

Petro Mohyla Black Sea National University

Medical Institute

Department of propaedeutic and surgical disciplines

“APPROVED”
First Deputy Head of the Department HRYSHCHENKO N.



2020

Course Description

PROPEDEUTICS OF INTERNAL MEDICINE

field of knowledge 22 «Health care»
in the specialty 222 «Medicine»

Developer	Zak M.
The head of the department	Zak M.
Guarantor of the educational program	Klymenko M.
Director of the Institute	Hryshchenko H.
Head of EMD	Shkirchak S.

Description of the course

Name	Characteristic		
Name of the discipline	Propedeutics of internal medicine		
Field of expertise	22 «Health Care»		
Specialty	222 «Medicine»		
Specialization (if any)			
Educational program	Medicine		
Higher education level	Master of Science		
Status of discipline	Normative		
Course of study	III		
Academic year	2020-2021		
Semester numbers:	Daytime instruction	Correspondence course	
	5,6		
Total ECTS credits / hours	6 credits (3.0 / 3.0) / 180 hours		
Course structure: <ul style="list-style-type: none"> • lectures • practical training • hours of independent work of students 	Daytime instruction	Correspondence course	
		30 h. (16/14)	
		70 h. (46/24)	
	68 h. (24/44)		
Percentage of classroom load	62%		
Language of instruction	English		
Form of intermediate control (if any)	Attestation		
Form of final control	6th semester - exam		

1. The goals and tasks of the discipline

The purpose of teaching / studying of the discipline "Propedeutics of internal medicine" is studying by students methods and techniques of clinical examination of the patient, features of professional communication of the doctor with the patient, subjective and objective manifestations of diseases (symptoms and syndromes), causes and mechanisms of their occurrence and development (semiology) for the purpose of diagnosis.

Tasks of study: to receive a student: knowledge, professional skills for professional activity:

- 1) to study the basic principles of examination of the patient according to the traditions of the national therapeutic school
- 2) methodically correct conduct of questioning and examination of patients with pathology of internal organs
- 3) interpretation of the relationship of the patient's complaints and preliminary assessment of the affected body system
- 4) summarizing the results of questioning and examination of patients and identifying on their basis the main symptoms and syndromes
- 5) analyzing the results of laboratory and instrumental investigations of the affected systems
- 6) summarizing the results of examination of the affected systems and identifying the main symptoms and syndromes for the correct diagnosis.

Interdisciplinary connections

Discipline "Propaedeutics of Internal Medicine":

- based and integrates with subjects: normal anatomy, topographic anatomy, pathological anatomy, normal physiology, pathological physiology, pharmacology;
- lays the groundwork for studying therapeutic methods of examination of the patient and the major syndromes in diseases of the internal organs, which involves the formation of skills to apply the knowledge gained in the course of further education.

1. The purpose and objectives of discipline

1.1. The goal of teaching "Propedeutics of Internal Medicine" is to conduct questioning and physical examination of patients and analyze their results in the clinic of internal medicine; analyze the results of basic laboratory and instrumental methods of research; define leading syndromes and symptoms in the clinic of internal diseases.

1.2. The main objectives of the discipline "Propedeutics of Internal Medicine" is the teaching methods of examination of patients, recognition of basic clinical syndromes building syndromal diagnosis doctoral foundations of ethics and deontology.

1.3. As required educational and professional program students must:

know: the basic principles of patient questioning on national therapeutic traditions of the school, method of physical examination of patients with pathology of internal organs, the main syndromes of internal diseases and explain the mechanisms of their development, modern survey methods and classification for diseases of the internal organs.

be able to: methodically correct conduct questioning and examination of patients with pathology of internal organs, conduct examination of the patient, analyze ECG of patient with disorders of automatism and excitability of heart, make a differential diagnosis beats, analyze ECG patient with conduction disorders of the heart and the combined violations of excitability and conduction of the heart, to analyze the PCG patient with heart defect, summarize the results of questioning and examination of patients and differentiate on the basis of their main symptoms and syndromes treated the relationship of patient complaints and make a preliminary assessment on the affected system.

have: notions about the application of subjective, objective and additional methods of diagnostics in internal medicine, the use of health information technology and critical peer reviews of the medical literature on the diagnosis in the clinic of internal medicine.

According to the requirements of the standard, the discipline provides students with the acquisition of **competencies**:

integral:

- the ability to solve typical and complex specialized tasks and practical problems in the learning process, provides for research and / or innovation and is characterized by the complexity and uncertainty of conditions and requirements;

- *general:*

GC1. Ability to abstract thinking, analysis and synthesis.

GC2. The ability to learn and master modern knowledge.

GC3. The ability to apply knowledge in practical situations.

GC4. Knowledge and understanding of the subject area and understanding of professional reality.

GC6. Ability to make informed decisions.

GC7. Ability to work in a team.

GC8. Interpersonal skills.

GC9. Ability to communicate in the state language both orally and in writing.

GC11. Information and Communication Technology Skills.

- *special (professional, subject):*

SC1. Patient interrogation and clinical examination skills.

SC2. Ability to determine the necessary list of laboratory and mental research and evaluate their results.

SC3. Ability to establish a preliminary and clinical diagnosis of the disease.

SC4. The ability to determine the necessary mode of work and rest in the treatment of diseases.

SC7. Ability to diagnose emergency conditions.

SC17. Ability to keep medical records.

Programmatic Learning Outcomes for Discipline:

PLO 1. Collect data on patient complaints, medical history, life history according to the standard patient survey scheme, according to established algorithms, conduct and evaluate the results of a physical examination.

PLO 2. Evaluate information regarding the diagnosis using a standard procedure based on the results of laboratory and instrumental studies.

PLO 3. Identify a leading clinical symptom or syndrome. Establish the most likely or syndromic diagnosis. Assign a laboratory and instrumental examination of the patient. Perform differential diagnosis of diseases. Establish a preliminary and clinical diagnosis.

PLO 4. Determine the necessary mode of work and rest in the treatment of the disease.

PLO 5. Determine the necessary therapeutic nutrition in the treatment of the disease.

PLO 6. Determine the principles and nature of treatment (conservative, surgical) diseases.

PLO 11. Perform medical manipulations.

PLO 20. Organize the work of medical personnel; form rational medical routes for patients; organize interaction with colleagues, organizations and institutions; apply medical promotion tools.

PLO 21. To formulate goals and determine the structure of personal activity.

PLO 22. Adhere to a healthy lifestyle, use the methods of self-regulation and self-control.

PLO 23. Recognize and be guided in their activities by civil rights, freedoms and duties, increase the general educational level.

PLO 24. Observe the requirements of ethics, bioethics and deontology in their professional activities.

2. The program of the discipline

The educational process is organized in accordance with the European Credit Transfer and Accumulation System (ECTS).

The discipline program consists of two modules, each of which is divided into sections:

Module 1. Basic methods of examination of the patients in clinic of internal diseases.

The Contents of Module 1. Introduction in Clinic of Internal Diseases. Main Rules of Questioning and Inspection of the Patient.

The Contents of Module 2. Physical and Instrumental Methods of Examination of the State of Broncho-Pulmonary System.

The Contents of Module 3. Physical Methods of Examination of Cardiovascular System.

The Contents of Module 4. Instrumental Methods of Examination of Cardiovascular System.

The Contents of Module 5. Main Methods of Examination of Digestive System.

Module 2. Basic Symptoms and Syndromes of Diseases of Internal Organs.

The Contents of Module 6. Basic Symptoms and Syndromes in Cardiovascular Diseases.

The Contents of Module 7. Basic Symptoms and Syndromes of the Diseases of Respiratory System.

The Contents of Module 8. Basic Symptoms and Syndromes in Diseases of the Digestive System and Urinary System.

The Contents of Module 9. Endocrine Diseases, Blood System Pathology and the Interpretation of Laboratory Methods of Examination Results.

MODULE 1. THE BASIC METHODS OF EXAMINATION OF PATIENTS IN CLINIC OF INTERNAL DISEASES

The Contents of Module 1. Introduction in Clinic of Internal Diseases. Main Rules of Questioning and Inspection of the Patient.

Specific goals:

- To learn the basic principles of examination of patient in traditions of the national therapeutic school
- Methodically properly conduct questioning and examination of patients with pathology of internal organs
- To interpret patient complaints relationship and make a preliminary assessment on the affected body systems
- To generalize the results of questioning and examination of patients and differentiate on their basis main symptoms and syndromes.

Topic 1. The role and place of propedeutics of internal medicine among the clinical disciplines of therapeutic profile.

Propaedeutics of Internal Medicine as an introduction to clinical practice. History install of propaedeutics of internal medicine in Ukraine and abroad. The contribution of famous clinicians M.J.Mudrova, H.A.Zahar'yina, S.P.Botkina, O.O.Ostroumova, T.H.Yanovskoho, V.P.Obraztsova, M.H.Kurlova, M.M.Huberhritsa, M.D.Strazhesko, M.V.Konchalovskoho, M.V.Chernorutskoho, H.F.Lanha, O.L.M'yasnykova, B.S.Shklyara in the development of national propaedeutical school. The main aims and objects of study of propaedeutical medicine. Basic methods of examining patients in clinical internal medicine, physical, instrumental and laboratory. Medical history of the disease, its main parts and assembly rules. Methods of questioning the patient, its diagnostic value systematic carrying out based on individual, intellectual and psychological characteristics of the patient. The basic structure parts of history (part the passport, patient complaints, history of disease, questioning in organs and systems, life history). The role of the Ukrainian scientists and clinicians in the development of professional art patient questioning.

Topic 2. The scheme of case history. Conducting questioning of the patient. Anamnestic part of the case history

Medical case history: its basic sections and rules of drawing up. A technique of inquiry of the patient, its diagnostic value, it's carrying out in view of individual, intellectual and of psychological features of the patient. The basic structural parts of the anamnesis (a passport part, inquiry on organs and systems, the anamnesis of a life). A role of the Ukrainian and Russian scientist-clinicians in development of professional art of inquiry of the patient.

Topic 3. General Inspection of the Patient. Inspection of Separate Parts of a Body. Diagnostic value of the signs received during the inspection of the patient.

Technique of carrying out of the general inspection of the patient. Definition of the general condition of the patient (a version of the general conditions of the patient and their criteria), an estimation of a condition of its consciousness (types of disturbances of consciousness), gaits (versions of a gait at various pathology), positions in a bed (active, passive, forced and their kinds). A body build and the basic criteria of normal constitutional types. A skin, its properties (color, turgor, humidity, temperature, elements of a rash, nevuses, scars, cicatrixes) and pathological changes; an estimation of a condition of hair and fingernails. A hypodermic fat (fatness, distribution, types of an obesity), a condition of muscles and of a locomotorium. Sequence of a palpation of lymph nodes. Diagnostic value of the signs received during the general inspection of the patient.

Technique of carrying out and sequence of inspection of a head and a neck, extremities and trunks, a stomach and a thorax. Diagnostic value of the signs received during inspection of separate parts of a body of the patient.

The Contents of Module 2. Physical and Instrumental Methods of Examination of the State of Broncho-Pulmonary System.

Specific goals:

- Methodically properly conduct questioning and physical examination of patients with respiratory diseases
- Analyze the results of instrumental investigations of the respiratory system (spirometry and pneumometry)
- Generalize the results of examination broncho-pulmonary system and distinguish basic symptoms and syndromes of its injury.

Topic 4. Main Complaints of the Patients with Lung Diseases. Static and dynamic examination of the chest. Chest palpation.

The following complaints and their details. Disease and life history. Static and dynamic examination of the chest. The basic topographical areas and reference points on a surface of the

chest. Normal and pathological shape of the chest. Pathological types of respiration (Cheyne-Stokes, Biot's, Kussmaul's, Grocco) and their characteristics, courses. Chest palpation, voice resonance.

Topic 5. Percussion of the Lungs. Methods and techniques of comparative percussion of the Lungs. Methods and techniques of topographic percussion of the Lungs.

History of percussion invention and its development. Role of percussion in definition of a condition of the lungs. Percussion rules. Types of percussion, technique of percussion. The characteristics of the percussion sound. Definition, technique of comparative percussion, sequence and diagnostic significance of the received results. Their purpose and diagnostic significance. Courses of formation of a dull, tympanic, deadened tympanic, bandbox percussion sound on the lungs.

Basic topographic chest lines. Basic tasks and sequence of topographic percussion of the lungs. Determination of the height of the apices of the lungs anterior and posterior, Krönig's fields, lower border of the lungs, mobility of the lungs border. Traube's space, its value at pathology of the lungs.

Topic 6. Auscultation of the Lungs: main respiratory sounds (vesicular and bronchial respiration).

History of auscultation invention. Auscultation rules. Instructions for using a stethoscope and phonendoscope. The methods of realization of comparative auscultation of the lungs. Main respiratory sounds: vesicular and bronchial respiration (mechanism of formation, changes). Bronchophony and its diagnostic significance.

Topic 7. Auscultation of the Lungs: accessory respiratory murmurs (rales, crepitation, pleura friction rub).

Classification of accessory respiratory murmurs (rales, crepitation, pleura friction rub). Mechanism of formation and classification of dry and moist rales. Mechanism of formation of crepitation, pleura friction rub. Discrimination of accessory respiratory murmurs. Mechanism of formation of additional respiratory phenomena (succussio Hippocratis, dripping sound) and their diagnostic significance.

Topic 8. Instrumental methods of examination of respiratory organs.

Indications and methods of realization of spirometry and pneumotachometry, the basic parameters in norm, changes in obstructive and restrictive variants of infringement of breath. Acquaintance with the methods of realization and diagnostic assessment of bronchoscopy and bronchography. A pleural puncture (engineering of realization and laboratory pleural fluid examination). Laboratory sputum examination. X-ray examination of the chest, its version and diagnostic value. Computerized tomography of the chest, the basic indications to its realization.

The Contents of Module 3. Physical Methods of Examination of Cardiovascular System.
Specific goals:

- Methodically properly conduct questioning and physical examination of patients with diseases of the cardiovascular system.
- To generalize the results of physical examination of the cardiovascular system and distinguish basic symptoms of its injury.
- Analyze the relationship between results questioning and physical methods of examination of the cardiovascular system and identify of its main syndromes of injury.

Topic 9. Questioning and general examination of the patients with the disorders of cardiovascular system. Conducting patients.

The sequence of determining and detail in of patients with the disorders of cardiovascular system. Taking a case history and past history. General examination of the patients with the disorders of cardiovascular system. Independent work with patients. The information in the notebooks.

Topic 10 .The Pulse and Arterial Pressure Study.

Places of pulse investigation. Investigation of arterial and venouse pulse. Investigation of the pulse on the radial artery. Pulse properties: frequency, rhythm, tension, shape, value, causes of the changes of the pulse properties, pulse different, the state of the vascular wall. Pulse deficiency. Dicrotic pulse. Arterial pressure and factors, which determine it. Systolic, diastolic, mean, pulse pressure. Methods of arterial pressure measurement. Technique of the blood pressure measurement. Phases of acoustic phenomena according to Korotkoff. Normal arterial pressure. Diagnostic significance of arterial pressure.

Topic 11. Inspection and palpation of the precordial area. Determination of the borders of relative and absolute heart dullness.). Determination of the borders of the vascular band.

Visual examination and palpation of the precordial area. Visibl pulsations in the precordial area. Cardiac humb. Technique of apical thrust investigation, mechanism of formation, location. Causes of displacement. Height, width, resistance of the apical thrust. Negative apical thrust. Cardiac thrust. Epigastric pulsation: pulsation of the abdominal aorta and the liver. Pulsation of the aneurysms of ascending aorta and the arch of aorta. Pulsation of the dilation of the trunk of the pulmonary artery. “Cat’s purring” syndrome, mechanism of formation. Determination of the borders of relative and absolute heart dullness (right, upper, left). Determination of the borders of the vascular band.

Topic 12. Auscultation of the heart: heart sounds, their reduplication, splitting and additional sounds.

Rules of the heart auscultation. Basic points of auscultation. Places of valves projection and areas of auscultation. Mechanism of heart sounds formation. Changes of the sound: the increase and decrease of the sound. Reduplication and splitting sounds. Additional sounds: gallop rhythm (protodiastolic, systolic, presystolic), mitral snap. Immediate, appliances (stethoscope, phonendoscope) methods of heart auscultation.

Topic 13. Auscultation of the heart: organic and functional heart murmurs.

Mechanism of formation and classification of the heart murmur (extracardiac, intracardiac, functional, systolic, diastolic, murmur of regurgitation, ejection, filling). Rules of the heart auscultation. Determination of the place of heart auscultation in the patient. Elicit the presence of murmur. Determination of the relation to the cardiac cycle. Determination of the place of optimum auscultation. Determination of the loudness, timber, character of the murmur. Determination of the murmur radiation. Kukoverov’s sign, Udincev’s sign. Discrimination of the organic and functional murmur. Extracardiac murmur (Pericardial friction rub, Pleuropericardial murmur, Cardiopulmonal murmur). Venous murmur in the jugular vein. Doubl sound and murmur on the femoral artery. Method, causes, mechanism of formation.

The Contents of Module 4. Instrumental Methods of Examination of Cardiovascular System.

Specific goals:

- Demonstrate ability in electrocardiogram (ECG) registration
- To interpret the mechanisms of ECG elements formation in normal and pathological conditions

- To identify changes of ECG elements, which are characteristic for violation of the basic functions of the heart (automatism, excitability, conductivity, refractivity)
- To analyze the results of electrocardiographic and phonocardiographic studies and to distinguish on their basis the main symptoms and syndromes of heart damage
- Summarize the results of echocardiographic, phlebographic and rheovasographic studies and make a preliminary conclusion about the nature of the cardiovascular system problems

Topic 14. Methods of the registration and detailed study of ECG. ECG signs of atrial and ventricular hypertrophy.

Clinical and diagnostic importance of ECG. Biophysical and physiological basis of ECG. Structure and function of pacemakers of heart rhythm and conduction system. Method of ECG registration: Standard leads; Unipolar leads from Extremities and Sternal leads. Basic elements of ECG: importance of duration and amplitude of waves, duration of intervals and segments in normal. Methods of ECG study: ECG signs of the right and left ventricular hypertrophy.

Topic 15. Electrocardiographical examination of the patients with disorders of automaticity and excitability.

The main structures, which provide the function of the Heart automatism. ECG signs of infringements of automatism: sinus tachycardia, sinus bradycardia, sinus arrhythmia, and syndrom of weakness of sinus node. Types of extrasystoles. ECG signs of sinus, auricle, auriclaventricular and ventricular extrasystoles. Differentiation of the right and left ventricular extrasystoles. Classification of ventricular extrasystoles. Types of allorhythmies.

Topic 16. ECG Examination of the Patients with Infringement of Conductive Function. Basis of Realization of Electroimpulse Therapy. ECG signs of combined cardiac arrhythmias.

Transmission of the impulse at any part of the heart conduction system. ECG- properties of sinoatrial and intraatrial block. Classification and ECG-properties of atrioventricular block. Attacks Morgagni-Adams-Stokes, courses, and clinical signs. Intraventricular block: right and left bundle branch block. Indications to realization and rules of performance of electroimpulse therapy. ECG and clinical signs of atrial fibrillation and atrial flutter. Clinic and ECG in treating ventricles of paroxysmal ventricular tachycardia, ventricular fibrillation.

Topic 17. Instrumental Methods of Examination of Cardiovascular System. Echocardiography.

Phonocardiography: diagnostic value of the method, the technique and the methodic of registration of PCG. Main principles of reading PCG. Polycardiography. Echocardiography: diagnostic value of the method, the technique and the methods of registration echocardiography. The basic echocardiography parameters - volumes of cavities of the heart, ejection fraction, thickness of intraventricular septum and posterior left ventricular wall. Dopplergraphy of the heart and vessels. Phlebography, reovasography: diagnostic value of the methods.

The Contents of Module 5. Main Methods of Examination of Digestive System

Specific goals:

- Methodically correct questioning and physical examination patients with diseases of the digestive system.
- Complaint the results of the physical examination of the organs of the gastrointestinal tract and distinguish the main symptoms of its lesion
- To analyze the relationship between the results of the survey and the physical methods of examination of the digestive system and to identify the

main syndromes of its defeat

- Analyze the results of instrumental (fibrogastroduodenoscopy, radiological examination) and laboratory (gastric and duodenal examination) studies of the digestive system.

Topic 18. Questioning and inspection of the patients with the disorders of digestive system. Inspection and superficial palpation of the abdomen.

Questioning and detail complaints of the patient with the disorders of digestive system. The specific character of anamnesis morbi and vitae is important during inquiry of these patients. Visual examination of the abdomen (shape of the abdomen, symmetrical shape of the both halves, umbilicus, participation of the abdomen in the act of respiration, the state of the skin, development of the subcutaneous veins). Topography of the anterior abdominal wall. Objective, technique of superficial palpation of the abdomen (abdominal wall resistance, muscular strain, tenderness, signs of peritoneum irritation, hernias (umbilical, inguinal, linea alba). Determine presence of ascites (inspection of the abdomen, the sign of fluid fluctuation, abdomen percussion).

Topic 19. Deep sliding methodical palpation of intestine, stomach.

The role of Ukrainian scientists in creation of the method about palpation of the abdominal organs. The topography of the abdominal organs. Sequence of palpation of the abdominal organs according to Obratsov and Strazhesko. Normal signs of intestine (sigmoid colon, cecum, the ascending and descending colons, transverse colon). Methods of definition of the bottom border of a stomach (palpation of the greater curvature of the stomach, percussion of the inferior border of the stomach, stethacoustic palpation, by splashing sound). The rules of palpation of the pyloric portion.

Topic 20. Deep sliding methodical palpation of liver, spleen and kidneys.

Percussion: determining the size and borders of the liver according to Obratsov and Kurlov. The causes of enlargement and diminutive the size of the liver. Technique of deep sliding methodical palpation of the liver. Characteristics of palpated of the lower border of the liver in normal and pathological. Technique of percussion of spleen and main causes of enlargement of its. The rules of palpation of the spleen. Diagnostic significance of Pasternatsky's sign. Technique of the kidneys palpation in supine and upright positions.

Topic 21. Instrumental and laboratory methods of examination of digestive system and kidneys.

Study of duodenal contents and to analyze the results. Indications and technique of upper gastrointestinal endoscopy and colonoscopy. The present methods of study of gastric secretion. Study of duodenal contents and to analyze the results. X-ray examination of the gastrointestinal tract and the kidneys. Radionuclide studies of the kidneys.

MODULE 2. BASIC SYMPTOMS AND SYNDROMES IN DISEASE OF INTERNAL ORGANS

The Contents of Module 6. Basic Symptoms and Syndromes in Diseases of Cardiovascular System.

Specific goals:

- Summarize the results of questioning, physical and instrumental examination of a patient with a specific pathology of the cardiovascular system and distinguish the main symptoms and syndromes
- To identify the main syndromes in diseases of the cardiovascular system and to explain the mechanisms of their development
- To choose adequate methods of examination for specific diseases of the cardiovascular system
- Demonstrate knowledge in modern classifications of diseases of the cardiovascular system

Topic 1. Mitral Valvular Diseases of the Heart: the Main Symptoms and Syndromes on the Based on Clinical and Instrumental Methods of Investigation.

Heart Valvular Diseases. The main cause of acquired incompetence the mitral valve and mitral stenosis. Haemodynamics. Kitaev's reflex. The main complaints of the patients with regurgitation and mitral stenosis. General examination, palpation, percussion, auscultation of the patients with mitral regurgitation and mitral stenosis. X-ray studies. Echocardiography. ECG. Phonocardiogram. Prolaps of the mitral valve.

Topic 2. Aortal Valvular Diseases of the Heart: the Main Symptoms and Syndromes on the Based on Clinical and Instrumental Methods of Investigation.

Etiology factors and mechanism of development of aortic insufficiency, aortic stenosis. Haemodynamics. The main complaints of the patients with aortic regurgitation, aortic stenosis. External examination, palpation, percussion, auscultation of the patients with aortic regurgitation, aortic stenosis. X-ray studies. Echocardiography. ECG. Phonocardiogram.

Topic 3. The Main Syndromes and Symptoms of Essential and Symptomatic Arterial Hypertension. Hypertonic Crisis.

Arterial hypertension (WHO/1999), essential hypertension, secondary hypertension. The risk main factors of arterial hypertension and mechanism of the development. Modern classification of arterial hypertension. The main complaints of the patients with arterial hypertension, external examination, palpation, percussion, auscultation of the patients with arterial hypertension. ECG-signs of the changes in myocardium in the patients with arterial hypertension. Secondary hypertension. Hypertonic crisis.

Topic 4. Ischemic Heart Disease. The Main Symptoms and Syndromes of Angina Pectoris and Myocardial Infarction.

Ischemic heart disease. Etiology and pathophysiology of ischemic heart disease, the main risk factors for atherosclerosis. Modern classification of ischemic heart disease. Clinical presentation of angina pectoris. Stable angina pectoris. ECG-signs. Stress Testing. Radionuclide ventriculography. Coronary Arteriography. Unstable angina pectoris. The acute coronary syndromes. Clinical presentation of acute myocardial infarction: non-Q-wave myocardial infarction and Q-wave myocardial infarction. Electrocardiographical signs of patients with acute myocardial infarction. Modern laboratory examination.

Topic 5. Syndrome of Heart Failure: the main Clinical and Instrumental Methods of Investigation.

Heart failure. Etiology and pathophysiology of heart failure. Modern classification of heart failure (New York Heart Association functional class, stage of heart failure, haemodynamic forms of heart failure). Clinical manifestations of heart failure. Instrumental methods of examination. Acute vascular insufficiency (syncope, collapse, shock).

The Contents of Module 7. Basic Symptoms and Syndromes of the Diseases of Respiratory System.

Specific goals:

- Summarize the results of questioning, physical and instrumental examination of a patient with a specific pathology of the respiratory system and distinguish the main symptoms and syndromes
- To identify the main syndromes in diseases of the respiratory system and to explain the mechanisms of their development
- To choose adequate methods of examination for specific diseases of the respiratory system
- Demonstrate knowledge in modern classifications of diseases of the respiratory system

Topic 6. The Basic Clinical Signs of Chronic Bronchitis and Bronchial Asthma. Chronic Obstructive Pulmonary Disease.

Modern classification of chronic obstructive pulmonary disease. Definition and the basic mechanisms of the development of chronic bronchitis and bronchial asthma. Chronic bronchitis and bronchial asthma, the basic complaints and physical examination of the patients. A syndrome of bronchial obstruction, mucocellular insufficiency and the increased airiness of the pulmonary tissue. The basic methods of instrumental diagnostics. Laboratory findings of bronchial asthma according to the general blood tests and sputum examination. Bronchiectasis, definition and the basic clinical syndroms.

Topic 7. Pneumonias: Symptoms and Syndromes on the Basis of Clinical - Instrumental and Laboratory Methods of Examination. Pneumosclerosis. The Main

Definition and modern classification of pneumonias (hospital-acquired, non-hospital-acquired, aspiration, pneumonia at immunodeficiency persons), classification by character of affection of the lungs (pleuropneumonia, bronchopneumonia, interstitial pneumonia). The basic etiology factors of pneumonias. Lobar and bronchopneumonia: complaints and physical methods of examination of the patients. Criteria of heavy current of pneumonia. Instrumental diagnostics of consolidation of pulmonary tissue. Laboratory findings of an inflammatory syndrome at pneumonias. Principal causes of development of pneumosclerosis. Pneumosclerosis, physical and instrumental examination of a patient. The basic clinical forms of lung cancer: clinical features in the central and peripheral localization of tumor. A syndrome of consolidation of pulmonary tissue.

Topic 8. Symptoms and Syndromes on Dry and Exudative Pleuritis. Lung cancer. Syndrome of Respiratory Failure.

The reasons of the development of inflammation of the pleura. Ways of occurrence and circulation of intrapleural fluid both in norm and pathologies. Complaints of a patient in dry pleurisy and pleural effusion, differences of the results of physical examination (palpation, percussion, auscultation of the lungs). Syndromes of accumulation of fluid and air in the pleural cavity. Opportunities of instrumental diagnostics. Pleural puncture: pleural fluid examination. Differences between exudates and transudates due to the results of physical and laboratory examination. The basic clinical syndromes and stages of the syndrome of respiratory failure in lung diseases.

The Contents of Module 8. Basic Symptoms and Syndromes in Diseases of the Digestive System and Urinary System.

Specific goals:

- Summarize the results of questioning, physical and instrumental examination of a patient with a specific pathology of the digestive system and distinguish the main symptoms and syndromes
- To identify the main syndromes in diseases of the digestive system and to explain the mechanisms of their development
- To choose adequate methods of examination for specific diseases of the digestive system
- Demonstrate knowledge in modern classifications of diseases of the digestive system

Topic 9. Clinical, Instrumental and Laboratory Examination of the Patients with Chronic Gastritis, Gastric and Duodenal Ulcer.

Definition and modern classifications of gastritis, gastric and duodenal ulcer. Etiology of these diseases. Epidemiology of *Helicobacter pylori*, conditions of damage of a mucosa of a stomach and duodenum. Main complaints of the patients with gastritis and peptic ulcer. Instrumental and laboratory examination of the patients. Complications of peptic ulcer disease. Acute upper gastrointestinal bleeding: clinical features. Main symptoms and syndromes in patients with enteritis and colitis: intestinal dyspepsia, symptoms of malabsorption. Irritable bowel syndrome.

Topic 10. Basic Symptoms and Syndromes of Hepato-biliary Diseases: Chronic Cholecystitis, Cholangitis, Cholelithiasis, Chronic Hepatitis and Hepatic Cirrhosis.

Definition and modern classifications of chronic cholecystitis and cholangitis. Biliary duct dyskinesia and its types. Main complaints of the patients with cholecystitis and cholangitis. Clinical, instrumental and laboratory examination of the patients for biliary disease. Cholelithiasis, main complaints and clinical features. Biliary pain (“biliary colic”). Jaundice and cholestasis, their laboratory findings.

Definition and modern classifications of chronic hepatitis and hepatic cirrhosis. Main causes of hepatitis and cirrhosis. The mechanisms of affection of liver in viral hepatitis. Main complaints and clinical features of the patients with chronic hepatitis and cirrhosis of liver. Hepatic histology and biochemical tests for hepatocellular damage. Child-Pugh classification and index of histological activity. Portal hypertension, liver failure and hepatorenal failure. Main complications of hepatic cirrhosis.

Topic 11. The Main Symptoms and Syndromes of Renal Diseases - Acute and Chronic Glomerulonephritis and Pyelonephritis.

The definition and modern classification of glomerulonephritis and pyelonephritis. The main mechanisms of developing glomerulonephritis and pyelonephritis. Patient’s complaints in kidneys disorders and physical examination data in patients with glomerulonephritis and pyelonephritis. Edematous syndrome and syndrome of arterial hypertension in kidneys disease. The possibilities of instrumental diagnostics of kidneys pathology. Laboratory examination of urine, the analysis and the interpretation of the results of general clinical analysis of urine. The examination of urine by Nechiporenko, Ambjurrhe, Adiskakovsky, Zymnitskyj methods. Urinary, nephritic syndromes in renal diseases. The results of biochemical blood examination in kidneys pathology. The syndromes of renal insufficiency and renal colic.

The Contents of Module 9. Endocrine Diseases, Blood System Pathology and the Interpretation of Laboratory Methods of Examination Results.

Specific goals:

- Summarize the results of questioning, physical and instrumental examination of a patient with a specific endocrine disease or pathology of the blood system and distinguish the main symptoms and syndromes
- To identify the main syndromes in diseases of the endocrine system and blood system and to explain the mechanisms of their development
- To choose adequate methods of examination for specific diseases of the endocrine system and blood system
- Demonstrate knowledge in modern classifications of diseases of the endocrine system and blood system

Topic 12. The Main Symptoms and Syndromes of Anemias. Clinical Blood Analysis.

The definition and modern classification of anemia. The mechanism of developing iron insufficiency in the body and the occurring of iron deficiency anemia. The main clinical signs of sideropenic and general hypoxic syndromes in iron deficiency anemia. Laboratory criteria of iron deficiency anemia. The reasons and the pathogenesis of B₁₂ - folia deficiency anemia. The manifestations of general anemia syndrome, the syndromes of affected digestive organ, funicular myelosis and affected peripheral blood in B₁₂ – folic deficiency anemia. The main laboratory signs of B₁₂ - folic deficiency anemia. Congenital and acquired hemolytic anemias. The signs of general anemia and icteric syndromes, splenomegaly and hemosiderosis of inner organs. The main laboratory criteria of hemolytic anemias and the peculiarities of bilirubin metabolism disorder. The analysis and the interpretation of general and clinical blood test.

Topic 13. Hemorrhagic syndromes and the pathology of blood coagulation system. The syndrome of disseminated intravascular blood coagulation

The main components of blood coagulation system. The factors of Bleeding development and the reasons of hemorrhagic syndromes thrombocytopenia, coagulopathy and hemorrhagic vasculitis. The characteristics of hemorrhagic syndrome in hemophilia, thrombocytopenia purple and Shenljan-Jenoh disease. The manifestations of articulate, abdominal, renal and anemia syndromes in all these diseases. The main methods of laboratory diagnostics of hemorrhagic syndromes. The reasons of development and the pathogenesis of disseminated intravascular coagulation syndrome. The stages and clinical manifestation of DIC-syndrome, its main laboratory criteria.

Topic 14. The main symptoms and syndromes in diabetes mellitus. The main clinical manifestations of thyroid gland diseases.

The main risk factors and mechanisms of developing II and I types diabetes mellitus. The complaints, the peculiarities of patients` examination and physical examination data in II and I types diabetes mellitus. Modern laboratory diagnostics of diabetes mellitus diagnostic significance of the content of glycosyled hemoglobin and immune reactive insulin. The most frequent states of coma in diabetes mellitus (hyperketonemic and hypoglycemic coma), the mechanisms of its development, clinical signs and first aid.

The main etiological factors in thyroid gland disease. Hyperthyroid and hypothyroid syndromes in the thyroid gland disease. Diffuse toxic goiter. The main patients` complaints, the results of physical, instrumental and laboratory examination. The notion of thyrotoxic crisis. The main clinical manifestations of myxedema, the notion of hypothyroid coma.

4. The structure of studying discipline

Names of modules, thematic modules and topics	Amount of hours				
	Total	L.	Pr.	Self students work	
				Ind.	Self.
MODULE 1. Basic methods of examination of the patients in clinic of internal diseases					
The Contents of Module 1. <i>Introduction in Clinic of Internal Diseases. Main Rules of Questioning and Inspection of the Patient.</i>					
Topic 1. The role and place of propedeutics of internal medicine among the clinical disciplines of therapeutic profile.	2	1	–	–	1
Topic 2. The scheme of case history. Conducting questioning of the patient. Anamnestic part of the case history	5,0	1	2,0	–	2
Topic 3. General Inspection of the Patient. Inspection of Separate Parts of a Body. Diagnostic value of the signs received during the inspection of the patient.	4,0	–	2,0	–	2
Total	11,0	2,0	4,0	–	5,0
The Contents of Module 2. <i>Physical and Instrumental Methods of Examination of the State of Broncho-Pulmonary System.</i>					
<i>Topic 4.</i> Main Complaints of the Patients with Lung Diseases. Static and dynamic examination of the chest. Chest palpation.	5,0	1	2,0	–	2
<i>Topic 5.</i> Percussion of the Lungs. Methods and techniques of comparative percussion of the Lungs. Methods and techniques of topographic percussion of the Lungs.	5,0	1	2,0	–	2
<i>Topic 6.</i> Auscultation of the Lungs: main respiratory sounds (vesicular and bronchial respiration).	5,0	1	2,0	–	2
<i>Topic 7.</i> Auscultation of the Lungs: accessory respiratory murmurs (rales, crepitation, pleura friction rub).	5,0	1	2,0	–	2
<i>Topic 8.</i> Instrumental methods of	6,0	–	2,0	2	2

Names of modules, thematic modules and topics	Amount of hours				
	Total	L.	Pr.	Self students work	
				Ind.	Self.
examination of respiratory organs.					
Submodule control	1,0				1
Total 2.	27,0	4,0	10,0	2,0	11,0
The Contents of Module 3. <i>Physical Methods of Examination of Cardiovascular System.</i>					
<i>Topic 9.</i> Questioning and general examination of the patients with the disorders of cardiovascular system. Conducting patients.	8,0	–	4,0	2	2
<i>Topic 10 .</i> The Pulse and Arterial Pressure Study.	5,0	2	2,0	–	1
<i>Topic 11.</i> Inspection and palpation of the precordial area. Determination of the borders of relative and absolute heart dullness.). Determination of the borders of the vascular band.	4,0	–	2,0	–	2
<i>Topic 12.</i> Auscultation of the heart: heart sounds, their reduplication, splitting and additional sounds.	6,0	2	2,0	–	2
<i>Topic 13.</i> Auscultation of the heart: organic and functional heart murmurs.	6,0	2	2,0		2
Total 3.	29,0	6,0	12,0	2,0	9,0
The Contents of Module 4. <i>Instrumental Methods of Examination of Cardiovascular System.</i>					
<i>Topic 14.</i> Methods of the registration and detailed study of ECG. ECG signs of atrial and ventricular hypertrophy.	3,0	–	2,0	–	1
<i>Topic 15.</i> Electrocardiographical examination of the patients with disorders of automaticity and excitability.	4,0	–	2,0	–	2
<i>Topic 16.</i> ECG Examination of the Patients with Infringement of Conductive Function. Basis of	4,0	–	2,0	–	2

Names of modules, thematic modules and topics	Amount of hours				
	Total	L.	Pr.	Self students work	
				Ind.	Self.
Realization of Electroimpulse Therapy. ECG signs of combined cardiac arrhythmias.					
<i>Topic 17.</i> Instrumental Methods of Examination of Cardiovascular System. Echocardiography.	6,0	–	2,0	2	2
Submodule control	1,0				1
<i>Разом за змістовим розділом 4.</i>	18,0	–	8,0	2,0	8,0
The Contents of Module 5. Main Methods of Examination of Digestive System					
<i>Topic 18.</i> Questioning and inspection of the patients with the disorders of digestive system. Inspection and superficial palpation of the abdomen.	5,0	1	2,0	–	2
<i>Topic 19.</i> Deep sliding methodical palpation of intestine, stomach.	3,0	–	2,0	–	1
<i>Topic 20.</i> Deep sliding methodical palpation of liver, spleen and kidneys.	4,0	–	2,0	–	2
<i>Topic 21.</i> Instrumental and laboratory methods of examination of digestive system and kidneys.	8,0	1	4,0	2	1
Submodule control	1,0				1
<i>Total 5.</i>	21,0	2,0	10,0	2,0	7,0
Final module control.	5,0	–	2,0	–	3
All of Module 1	111	14	46	8	44
MODULE 2. Basic Symptoms and Syndromes of Diseases of Internal Organs.					
The Contents of Module 6. Basic Symptoms and Syndromes in Cardiovascular Diseases.					
Topic 1. The Main Syndromes and Symptoms of Essential and Symptomatic Arterial Hypertension. Hypertonic Crisis.	4,5	1	2,0		1,5
Topic 2. Ischemic Heart Disease. The Main Symptoms and Syndromes of Angina Pectoris and Myocardial	4,5	1	2,0		1,5

Names of modules, thematic modules and topics	Amount of hours				
	Total	L.	Pr.	Self students work	
				Ind.	Self.
Infarction.					
Topic 3. Syndrome of Heart Failure: the main Clinical and Instrumental Methods of Investigation. Acute and chronic heart failure.	3	2	2,0		1
Topic 4. Mitral Valvular Diseases of the Heart: the Main Symptoms and Syndromes on the Based on Clinical and Instrumental Methods of Investigation.	3,5	–	1,0		1,5
Topic 5. Aortal Valvular Diseases of the Heart: the Main Symptoms and Syndromes on the Based on Clinical and Instrumental Methods of Investigation.	3,5	–	1,0		1,5
Total 6.	19	4	8	*	7
The Contents of Module 7. Basic Symptoms and Syndromes of the Diseases of Respiratory System.					
<i>Topic 6.</i> The Basic Clinical Signs of Chronic Bronchitis and Bronchial Asthma. Chronic Obstructive Pulmonary Disease.	5,5	2	2,0		1,5
<i>Topic 7.</i> Pneumonias: Symptoms and Syndromes on the Basis of Clinical - Instrumental and Laboratory Methods of Examination. Pneumosclerosis. Lung cancer.	4,5	1	2,0		1,5
<i>Topic 8.</i> The Main Symptoms and Syndromes on Dry and Exudative Pleuritis. Lung cancer. Syndrome of Respiratory Failure.	4,0	1	2,0		1,0
Total 7.	14	4	6	*	4
The Contents of Module 8. Basic Symptoms and Syndromes in Diseases of the Digestive System and Urinary System.					
<i>Topic 9.</i> Clinical, Instrumental and Laboratory Examination of the Patients with Chronic Gastritis, Gastric and Duodenal Ulcer.	5,5	2	2,0		1,5
<i>Topic 10.</i> Basic Symptoms and Syndroms of Hepato-biliary	6,0	2	2,0		2

Names of modules, thematic modules and topics	Amount of hours				
	Total	L.	Pr.	Self students work	
				Ind.	Self.
Diseases: Chronic Cholecystitis, Cholangitis, Cholelithiasis, Chronic Hepatitis and Hepatic Cirrhosis.					
<i>Topic 11.</i> The Main Symptoms and Syndromes of Renal Diseases - Acute and Chronic Glomerulonephritis and Pyelonephritis.	5,5	2	2,0		1,5
Total 8.	18,5	6	7,5	*	5
The Contents of Module 9. Endocrine Diseases, Blood System Pathology and the Interpretation of Laboratory Methods of Examination Results.					
<i>Topic 12.</i> The Main Symptoms and Syndromes of Anemias. Clinical Blood Analysis	4,5	1	2,0		1,5
<i>Topic 13.</i> Hemorrhagic syndromes and the pathology of blood coagulation system. The syndrome of disseminated intravascular blood coagulation	2,5	1	–		1,5
<i>Topic 14.</i> The main symptoms and syndromes in diabetes mellitus. The main clinical manifestations of thyroid gland diseases.	2,0	–	–		2
Total 9.	9,0	2	2,0	*	5
Individual work (Conducting patient and preparation of the case history)	4,0			4*	
Final module control.	6,0		2,0		3
All of Module 2	69	16	24	4	24
Total hours	180	30	70	12	68
				80	

5. The content of the discipline

5.1. Plan of lectures

№	Topics	Hours
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№	Topics	Hours
MODULE 1. Basic methods of examination of the patients in clinic of internal diseases		
1.	The propedeutics of internal medicine as introduction in a clinical practice. The basic methods of examination of the patients.	2
2.	Symptoms of lung diseases on the basis of methodical questioning of the patients, chest palpation and percussion of the chest.	2
3.	Symptoms of lung diseases on the basis of auscultation of the lungs.	2
4.	Symptoms and syndromes in the pulse and blood pressure investigation.	2
5.	Auscultation of the heart: main symptoms while listening to normal and pathological heart sounds.	2
6.	Auscultation of the heart: organic and functional heart murmurs.	2
7.	The main symptoms and syndromes of diseases and functional disorders of the digestive system.	2
Total Module 1		14
MODULE 2. Basic Symptoms and Syndromes of Diseases of Internal Organs.		
1.	The main symptoms and syndromes in Arterial Hypertension and Ischemic Heart Disease.	2
2.	Syndrome of heart and vascular insufficiency in diseases of cardiovascular system.	2
3.	The main syndromes of diseases of respiratory organs. Acute and Chronic Bronchitis, Bronchial Asthma. Emphysema of lungs. Syndrome of increased airiness of the pulmonary tissue.	2
4.	The main symptoms and syndromes of Pneumonia, Dry and Exudative Pleuritis. Clinical, instrumental and laboratory signs of syndromes of the pulmonary tissue consolidation, fluid and air accumulation in pleural cavity, respiratory failure.	2
5.	The main symptoms and syndromes of the stomach and intestinal diseases. Clinical, instrumental and laboratory methods of the examination of Acute and Chronic Gastritis, Gastric and Duodenal Ulcer and Diseases of the Intestine.	2
6.	The main symptoms and syndromes of Hepato-biliary diseases. Clinical, instrumental and laboratory methods of examination.	2
7.	The main symptoms and syndromes of Renal diseases. The main symptoms of Acute and Chronic Glomerulonephritis and Pyelonephritis.	2
8.	The main symptoms and syndromes of Anemias. Hemorrhagic syndromes. Clinical, instrumental and laboratory methods of examination.	2
Total Module 2		16
TOTAL		30

5.2 THE THEMATIC PLAN OF PRACTICAL CLASSES

№ з/п	Topics	Hours
MODULE 1. Basic methods of examination of the patients in clinic of internal diseases		
The Contents of Module 1. <i>Introduction in Clinic of Internal Diseases. Main Rules of Questioning and Inspection of the Patient.</i>		
1.	The scheme of case history. Conducting questioning of the patient.	2,0
2.	General inspection of patient. Inspection of separate parts of a body: head and neck, extremities, trunks and its diagnostic value. Diagnostic value of the signs received during the inspection of the patient.	2,0
The Contents of Module 2. <i>Physical and Instrumental Methods of Examination of the State of Broncho-Pulmonary System.</i>		
3.	Main complaints of the patients with lung diseases. Static and dynamic examination of the chest. Chest palpation.	2,0
4.	Percussion of the Lungs. Methods and techniques of comparative percussion of the Lungs. Methods and techniques of topographic percussion of the Lungs.	2,0
5.	Auscultation of the Lungs: main respiratory sounds (vesicular and bronchial respiration).	2,0
6.	Auscultation of the Lungs: accessory respiratory murmurs (rales, crepitation, pleura friction rub).	2,0
7.	Instrumental methods of examination of respiratory organs.	2,0
<i>Змістовний розділ 3. Фізикальні методи дослідження серцево-судинної системи.</i>		
8.	Questioning and general examination of the patients with the disorders of cardiovascular system. Conducting patients. Writing anamnestic part of case history.	4,0
9.	The pulse and arterial pressure study.	
10.	Inspection and palpation of the precordial area. Determination of the borders of relative and absolute heart dullness.	2,0
11.	Auscultation of the heart: heart sounds, their reduplication and splitting and additional sounds.	2,0
12.	Auscultation of the heart: organic and functional heart murmurs.	2,0
The Contents of Module 4. Instrumental Methods of Examination of Cardiovascular System.		
13.	Methods of the registration and detailed study of ECG. ECG signs of atrial and ventricular hypertrophy.	2,0
14.	Electrocardiographical examination of the patients with disorders of automaticity and excitability.	2,0
15.	ECG Examination of the Patients with Infringement of Conductive Function. Basis of Realization of Electroimpulse Therapy. ECG signs of combined cardiac arrhythmias. Submodule.	2,0
The Contents of Module 5. Main Methods of Examination of Digestive System		
16.	Questioning and inspection of the patients with the disorders of digestive system. Inspection and superficial palpation of the	2,0

№ з/п	Topics	Hours
	abdomen.	
17.	Deep sliding methodical palpation of intestine, stomach.	2,0
18.	Deep sliding methodical palpation of liver, spleen and kidneys.	2,0
19.	Instrumental and laboratory methods of examination of digestive system and kidneys.	4,0
Total Module 1		46
MODULE 2. Basic Symptoms and Syndromes of Diseases of Internal Organs.		
The Contents of Module 6. Basic Symptoms and Syndromes in Diseases of Cardiovascular System.		
1.	The Main Syndromes and Symptoms of Essential and Symptomatic Arterial Hypertension. Hypertonic Crisis.	2,0
2.	Ischemic Heart Disease. The Main Symptoms and Syndromes of Angina Pectoris and Myocardial Infarction.	2,0
3.	Syndrome of Heart Failure: the main Clinical and Instrumental Methods of Investigation. Acute and chronic heart failure.	2,0
4.	Mitral and Aortal Valvular Diseases of the Heart: the Main Symptoms and Syndromes on the Based on Clinical and Instrumental Methods of Investigation.	2,0
The Contents of Module 7. Basic Symptoms and Syndromes of the Diseases of Respiratory System.		
6	The Basic Clinical Signs of Chronic Bronchitis and Bronchial Asthma. Chronic Obstructive Pulmonary Disease. Syndrome of increased airiness of the pulmonary tissue.	2,0
5.	Pneumonias: Symptoms and Syndromes on the Basis of Clinical - Instrumental and Laboratory Methods of Examination. Pneumosclerosis. Lung cancer. Syndrome of the pulmonary tissue consolidation . Syndrome of Respiratory Failure.	2,0
6.	The Main Symptoms and Syndromes on Dry and Exudative Pleuritis. Instrumental and Laboratory Methods of Examination. Syndromes of the fluid and air accumulation in pleural cavity.	2,0
The Contents of Module 8. Basic Symptoms and Syndromes in Diseases of the Digestive System and Urinary System. Anemias.		
7.	Clinical, Instrumental and Laboratory Examination of the Patients with Chronic Gastritis, Gastric and Duodenal Ulcer. Main symptoms and syndromes.	2,0
8.	The Basic Symptoms and Syndroms of Hepato-biliary Diseases: Chronic Cholecystitis, Cholangitis, Cholelithiasis, Chronic Hepatitis and Hepatic Cirrhosis.	2,0
9.	The Main Symptoms and Syndromes of Renal Diseases - Acute and Chronic Glomerulonephritis and Pyelonephritis. General clinical	2,0

№ з/п	Topics	Hours
	analysis of urine	
10.	The Main Symptoms and Syndromes of Anemias. Clinical Blood Analysis.	2,0
11.	Final module 2 control.	2,0
Total Module 2		24
TOTAL		70

A daily assessment of current training activities consists of evaluating the writing of tests from the KROK 2 database, patient examination protocols, theoretical protocols, oral responses to the interpretation of electrocardiograms, blood tests, and clinical problems.

The final module control is the recommended form of final control of academic success. The final module control for propedeutics to internal medicine is carried out at the last lesson upon completion of the study of all the topics in the section. Students who have attended all classroom classes provided for by the curriculum of the discipline and do not have passes are allowed to offset. A student who, for good reason, had missed classes, is made adjustments to the individual curriculum and is allowed to work out academic debt before a certain deadline.

Exam is carried out at the last lesson in discipline. It is based on the results of an oral response to a ticket, in which there are theoretical questions and practical task to demonstrate skills.

5.3. Individual work

- Pre-classes theoretical preparation according to the plan.
- Processing of topics not taught in the plan.
- Curation of one patient and preparation of the case history (patient history).
- Study theoretical and practical methods of physical examination of the patient.
- Study the skills of instrumental examinations.
- Mastering the ability to analyze the results of instrumental and laboratory methods of investigations.
- Performing individual work
- Preparation for submodules and final modules controls

№ з/п	Topics	Hours
MODULE 1. Basic methods of examination of the patients in clinic of internal diseases		
1.	Preparation for practical employments – theoretically and working off of methods physical inspections of the patient.	31
2.	Independent study by what are not included into the plan of practical classes: <ul style="list-style-type: none"> - <i>Instrumental methods of examination of respiratory organs.</i> - <i>Instrumental methods of examination of cardiovascular system.</i> 	1,5 2
3.	Mastering by skill to analyze: <ul style="list-style-type: none"> - results of research of function of external breath 	0,5

№ з/п	Topics	Hours
	- data ECG and PhCG inspections	2
	- results of research of gastric and duodenal contents	1
4.	Conducting patients with writing of anamnestic part of a case history	2
5.	–Individual work: –Carrying out of researches of function of external breath in indicative patients, processing of the received data and the report on employment. –Registration of an electrocardiogram, participation in carrying out tool researches in indicative patients, processing of the received data and the report on employment. –Carrying out of inspection of the indicative patient and preparation of the review of the scientific literature in the probed case.	2 2 2
6.	Preparation for the submodules of the module 1: – Submodule № 1 (The Contents of Modules 1, 2) – Submodule № 2 (The Contents of Modules 3, 4) – Submodule № 3 (The Contents of Modules 5)	3, в т.ч 1 1 1
7.	Preparation for the final control of mastering of the module 1	3
TOTAL MODLE 1		52
MODULE 2. Basic Symptoms and Syndromes of Diseases of Internal Organs.		
1.	Preparation for practical employments – theoretically and working off of methods physical inspections of the patient	16,5
2.	Independent study by what are not included into the plan of practical classes: Syndrome of Heart Failure: the main Clinical and Instrumental Methods of Investigation. Hemorrhagic syndromes and the pathology of blood coagulation system. The syndrome of disseminated intravascular blood coagulation. The main symptoms and syndromes in diabetes mellitus. The main clinical manifestations of thyroid gland diseases.	1 1,5 2
3.	Conducting patients with writing of a case history.	4
4.	Preparation for the final control of mastering of the module 2.	3
TOTAL MODULE 2		28
TOTAL		80

Tasks for independent work

1. Weekly observation of the patient (questioning, physical examination, evaluation of the results of instrumental and laboratory examinations) with pathology of the cardiovascular system with writing case history and presentation this case in a practical lesson.
2. Weekly observation of the patient (questioning, physical examination, evaluation of

the results of instrumental and laboratory examinations) with pathology of the respiratory system with writing case history and presentation this case in a practical lesson.

3. Weekly observation of the patient (questioning, physical examination, evaluation of the results of instrumental and laboratory examinations) with pathology of the digestive system with writing case history and presentation this case in a practical lesson.
4. Weekly observation of the patient (questioning, physical examination, evaluation of the results of instrumental and laboratory examinations) with pathology of the urinary system with writing case history and presentation this case in a practical lesson.
5. Weekly observation of the patient (questioning, physical examination, evaluation of the results of instrumental and laboratory examinations) with pathology of the endocrine system with writing case history and presentation this case in a practical lesson.
6. Weekly observation of the patient (questioning, physical examination, evaluation of the results of instrumental and laboratory examinations) with pathology of the blood system with writing case history and presentation this case in a practical lesson.

The student independently chooses the disease for which he will supervise (questioning, examination) the patient.

MODULE 1. Basic methods of examination of the patients in clinic of internal diseases

1. Give the definition for such science as propedeutics.
2. Give the definition for such science as diagnostics.
3. Give the definition of such concept as diagnosis.
4. What types of diagnosis do you know? Give the definition for all types of diagnosis.
5. What structure has diagnosis?
6. Give the definition for signs or symptoms of the disease.
7. Specify which symptoms we can call subjective and which objective.
8. Give the definition for pathological symptoms and compensatory symptoms.
9. Give the definition for specific or pathognomic, nonspecific and relative symptoms.
10. Give the definition for early and late symptoms.
11. Please define the concept of syndrome.
12. Please define the concept of symptomocomplex.
13. What in your opinion is deontological ethics?
14. Please specify the purpose of inquiring of patient. What aspects include inquiring of patients?
15. What special scheme you should comply during questioning the patient about present complains?
16. What it is "Anamnesis morbi"? What it includes?
17. What it is "Anamnesis vitae"? What it includes?
18. Give the definition for objective examination. On which examinations methods is divided objective examination?

19. What determined by the method of palpation? What types of palpation techniques are known to you (surface or tentative deep or sliding by Obratsov-Strazhesko), indicate their purpose?
20. What types of percussion techniques are known to you (immediate and mediate)? Please indicate key points of mediate percussion. Indicate the main purpose of loud, light, and lightest percussion. Give the definition for comparative and topographic percussion.
21. Indicate the main purpose of such diagnostic method as auscultation. What helps us to perform auscultation? Specify the key points of auscultation.
22. What types of general patient's condition may be? What are the criteria's of patient's condition?
23. List types of consciousness (sensorium). What causes of deranged consciousness you know? Into what two groups is divided deranged consciousness? What are most common forms of coma? What causes and symptoms of this coma are known to you?
24. What types of posture of the patients may be? What forced posture or specific patients position are known to you? What are the possible causes and symptoms of this forced posture?
25. What specific gaits according to the pathological processes are known to you, please list?
26. What criteria includes concept of habitus? Indicate the normal height for men and women. What may be pathological changes of height and what can cause it? Specify how we calculate body mass index (BMI). Specify the classification of overweight and obesity in adults. On which two groups is divided body-build?
27. What faces of patient with pathology of respiratory, cardiovascular, nervous, blood, digestive, kidney, endocrine system are known to you, describe them? What faces of patient with infectious pathologies are known to you, describe them? What faces of patient that not associated with systemic diseases and infections are known to you, describe them?
28. During the inspection of the skin on what we should pay attention. Describe the skin of a healthy person. What are pathological changes of the skin color? Please indicate physiological and pathological causes of pale color of the skin. Please indicate physiological and pathological causes of red color of the skin. What forms of cyanosis are known to you, describe what can cause them? Please indicate physiological and pathological causes of yellow skin and mucosa. Who can have physiological jaundice and when it occurs? Exogenic jaundice or xanthosis what it is and due to what reasons it occurs? Please indicate physiological and pathological causes of brown or bronze skin. Please indicate causes of local hyperpigmentation (chloasma), grayish ("dirty") color and depigmentation (depigmentatio) of the skin.
29. What eruptions of the skin did you know, indicate their manifestations and causes?
30. How we have to determine the turgor and elasticity of the skin and what diagnostic meanings have diminished turgor? Indicate diagnostic value for

- moisture of the skin. What physiological and pathological causes for dry (xeroderma) and moist skin (hyperhidrosis) you know?
31. What include skin derivatives? Describe nails in normal conditions. What pathological changes of nails are known to you? What types of hair growth indicates disorder?
 32. What did you know about general and local edema? Please list the causes of edema and their types. Transcribe the following terms: ascitis, hydrothorax, hydropericardium, anasarca.
 33. How we measure the degrees of subcutaneous fat, also indicate the size of subcutaneous fat for normosthenic person, for obesity and for sign of cachexia. Specify types and causes of obesity and weight loss.
 34. What signs of pathological changes in lymph nodes can be determined during their palpation? Describe lymph nodes in normal conditions. Please specify main reasons for enlarged lymph nodes. Specify diseases which are manifested by increasing of occipital, cervical, axillary, inguinal, cubital (local) lymph nodes.
 35. What main methods of examination of muscular system you know? On what key points you should pay attention during the examination of muscular system? Describe muscular system in normal conditions. What pathological manifestations of muscular system you can find during the examination?
 36. What main methods of examination of bones system you know? On what key points you should pay attention during the examination of bones system? What common causes of the bones system abnormalities you can find during the examination?
 37. What consequence we should perform during examination of the joints system. What two kinds of movement are distinguished? What inflammatory diseases develop to affection of the joints? List all known about pathological changes of the spine?
 38. What are the signs that you as a doctor have to pay attention during the examination of the head? What pathological state can cause macrocephalia and microcephalia? List shapes of the head that you know. What diseases or conditions can lead to changes in head position? Transcribe such symptoms as St. Vitus's dance and Musset's sign? When they occur?
 39. What are the signs that you as a doctor have to pay attention during the examination of the eyes? What pathological conditions can be displayed on eyelids? What pathological changes can happen with sclera, conjunctiva and cornea of the eye and they can be as a result of what causes? Transcribe such terms as myosis, mydriasis, anisocoria, pupilla pulsation.
 40. What are the signs that you as a doctor have to pay attention during the examination of the mouth? What causes changes in the size, shape and symmetry of the angles of the mouth and how it manifests? Color of the lips may vary as a result of disease, provide reasons.
 41. On what key points you should pay attention during the examination of cavity of the mouth? What pathological signs of disease may be detected

- during the examination of color of the mucous membrane? In what diseases and poisonings may exhibit changes of the gums?
42. On what key points you should pay attention during the examination of tongue? Describe tongue of a healthy person. What diagnostic significance has fur of the tongue in pathological conditions? Describe the possible pathological changes surface of the tongue.
 43. What signs of pathological changes on neck can be determined during palpation? On what key points you should pay attention during the examination of neck?
 44. Where we palpate thyroid gland and how? Specify diseases which are manifested by increasing of thyroid gland.
 45. What includes upper respiratory tract? What includes lower respiratory tract?
 46. Where we have median (or midsternal) line? How we estimate midclavicular line? How we estimate anterior, posterior and midaxillary lines? Where we have vertebral line? Where we have paraspinal lines? How we estimate scapular lines?
 47. What types of pleurae you know and what it is?
 48. What lobes have left lung? What lobes have right lung? How divided bronchi?
 49. What topographic regions and lines of the chest you know?
 50. What are the main complaints of the patients with disease of the respiratory system?
 51. Please describe the concept of dyspnea. Add a possible causes for physiological and pathological dyspnea.
 52. Define a term as subjective and objective dyspnea. Define a term such as inspiratory, expiratory and mixed dyspnea. Add five categories of dyspnea based on the speed and duration of its occurrence.
 53. Please describe the concept of cough. List the main causes of cough. What cough is called dry and moist? Specify the causes of dry cough?
 54. List the diseases that cause periodic and permanent cough. What four points you should try to determine if the patient complains on cough with sputum?
 55. Define the concept of hemoptysis. By what signs we distinguish blood that entered from the respiratory tract and not from the digestive tract? List pulmonary and extrapulmonary diseases that can cause hemoptysis.
 56. Specify the parts of the lungs that are sensitive to pain. List pulmonary diseases that can cause chest pain.
 57. Indicate extrapulmonary disease manifested by pain in the chest and wrongly treated as chest pain of lung disease.
 58. Describe the scheme that you have to comply during the inspection of the chest.
 59. Indicate signs that we define during static inspection. Indicate signs that we define during dynamic inspection.
 60. Please indicate normal shapes of the chest. Describe normosthenic chest. Describe hypersthenic chest. Describe asthenic chest.

61. Please indicate pathological shapes of the chest. What main causes of pathological shapes of the chest you know?
62. Please indicate pathological shapes of the chest caused by chronic pulmonary diseases.
63. Describe emphysematous chest. List the diseases that can cause such shape of the chest.
64. Describe paralytic chest. List the diseases that can cause such shape of the chest.
65. Please indicate pathological shapes of the chest caused by pathology of the thorax costal skeleton.
66. Describe rachitic chest. List the diseases that can cause such shape of the chest.
67. Describe funnel chest. List the diseases that can cause such shape of the chest.
68. Please indicate pathological shapes of the chest caused by various deformities of the spine as a result of injuries, tuberculosis of the spine, rheumatoid arthritis, etc. Give them a brief description
69. Indicate possible causes and describe the signs for enlarged volume of one half of the chest.
70. Indicate possible causes and describe the signs for decreased volume of the one part of the chest.
71. What respiration types are known to you? What are the signs typical for thoracic (costal) respiration? What are the signs typical for abdominal respiration? What are the signs typical for mixed respiration?
72. Describe the method for determining the respiratory rate. Specify standards of respiratory rate for adult and newborn.
73. How do we call rapid shallow and slow breathing? What respiratory rate is typical for tachypnea and bradypnea? Specify causes of tachypnea and bradypnea.
74. What types of respiration depth are known to you? Indicate their main characteristics and causes.
75. What are the signs that characterized respiratory rhythm in norm? List known to you periodic types of respiration. Describe the typical signs and causes for these types of periodic breathing.
76. What are the main points we need to define during palpation of the chest?
77. Describe the basic method for identification of the tender areas.
78. Describe the basic method for assessment of elasticity of the chest.
79. Describe the basic method for assessment of tactile fremitus.
80. Indicate causes for increased, decreased and absent vocal fremitus.
81. What types of percussion of the lungs you know?
82. What is the main task of comparative percussion of the lungs?
83. Describe the main points of technique of comparative percussion.
84. Describe the technique of comparative percussion on anterior view.
85. Describe the technique of comparative percussion on axillary regions.
86. Describe the technique of comparative percussion on posterior view.

87. What basic qualities of percussion sound do you need to distinguish?
88. What characteristics of intensity, pitch, and duration of percussion sound are known to you?
89. Provide main causes of sound changes during percussion.
90. Physiological changes of the percussion sounds over the lungs.
91. Define the concept of intermediate sound. Specify main causes of the intermediate sound.
92. Define the concept of dullness. Specify main causes of the dullness.
93. Indicate the main purpose of topographic percussion.
94. Indicate basic technique in determination of the upper borders of the lungs.
95. Indicate basic technique in determination of the lower borders of the lungs.
96. Indicate types of displacement of the lower borders of the lungs.
97. Indicate causes for bilateral lowering of the lower borders of the lungs.
98. Indicate causes for unilateral lowering of the lower borders of the lungs.
99. Indicate causes for bilateral elevation of the lower borders of the lungs.
100. Indicate causes for unilateral elevation of the lower borders of the lungs.
101. For what purpose and with what technique determined respiratory excursion of the lungs.
102. Cardiac conduction system, please list the structural elements that it includes.
103. Sinoatrial (SA) node, please list its function and location.
104. Atrioventricular (AV) node please list its function and location.
105. Bundle of His please list its function and location.
106. Cardiac automaticity function. Please indicate the main accents of this function of the heart.
107. Cardiac conductivity function. Please indicate the main accents of this function of the heart.
108. Depolarization. What this means?
109. Repolarization. What this means?
110. Refractoriness. What this means?
111. What do you know about ECG paper? On what speeds can be made ECG recording?
112. What (bipolar) Standard leads do you know? Please list.
113. What (unipolar) Augmented leads do you know? Please list.
114. What (unipolar) Chest leads do you know? Please list.
115. Please indicate placement of electrode in Standard Limb lead.
116. Please indicate placement of electrode in Standard Chest lead.
117. Please indicate normal position of the heart direction. What values of R wave amplitude in normal position of the heart?
118. Please indicate horizontal position of the heart direction. What values of R wave amplitude in horizontal position of the heart?
119. Please indicate vertical position of the heart direction. What values of R wave amplitude in vertical position of the heart?
120. What reflects P wave, indicate its main characteristics?
121. What reflects P-Q interval, indicate its main characteristics?

122. What reflects QRST complex, indicate its main characteristics?
123. What reflects Q wave, indicate its main characteristics?
124. What reflects R wave, indicate its main characteristics?
125. What reflects S wave, indicate its main characteristics?
126. What reflects QRS interval, indicate its main characteristics?
127. What reflects ST segment, indicate its main characteristics?
128. What reflects T wave, indicate its main characteristics?
129. What reflects Q-T interval, indicate its main characteristics?
130. What reflects T-P interval, indicate its main characteristics?
131. What included interpretation of the ECG? Please list.
132. ECG signs of Coronary heart disease.
133. What additional (instrumental) methods of examination can be used for establishing of myocardial infarction?
134. Instrumental diagnosis of myocardial infarction: ECG signs of myocardial infarction.
135. Please indicate ECG signs of right ventricular hypertrophy.
136. Please indicate ECG signs of left ventricular hypertrophy.
137. Please indicate meaning of P-mitrale.
138. Please indicate meaning of P-pulmonale.
139. Please list abnormalities of the impulse formation.
140. Please list abnormalities of conduction.
141. Describe the characteristics of normal sinus rhythm.
142. Describe the signs of sinus tachycardia. Indicate pathological factors and conditions that can cause it.
143. Describe the signs of sinus bradycardia. Indicate pathological factors and conditions that can cause it.
144. Describe the signs of sinus arrhythmia. Indicate pathological factors and conditions that can cause it.
145. Describe the signs of junctional (atrioventricular) rhythm. Indicate pathological factors and conditions that can cause it.
146. Describe the characteristics of atrial rhythm.
147. Describe the signs of idioventricular rhythm. Indicate pathological factors and conditions that can cause it.
148. Describe the signs of wandering pacemaker.
149. ECG signs of premature atrial contraction (AVCs). How you understand this violation.
150. ECG signs of junctional premature contraction. How you understand this violation.
151. ECG signs of ventricular premature contraction (PVCs). How you understand this violation.
152. Describe the supraventricular paroxysmal tachycardia.
153. Describe the ventricular paroxysmal tachycardia.
154. Specify the main characteristics of atrial fibrillation and flutter.
155. Specify the main characteristics of ventricular fibrillation and flutter.

- 156.**How you understand the concept of sinoatrial block. Indicate its ECG signs.
- 157.**How you understand the concept of atrioventricular block. What types of it you know.
- 158.**What you know about first degree atrioventricular block? Indicate its ECG signs.
- 159.**What you know about second degree atrioventricular block? What types of it you know.
- 160.**What you know about Mobitz type I second degree atrioventricular block? Indicate its ECG signs.
- 161.**What you know about Mobitz type II second degree atrioventricular block? Indicate its ECG signs
- 162.**What you know about type III second degree atrioventricular block? Indicate its ECG signs.
- 163.**What you know about third degree atrioventricular block? Indicate its ECG signs.
- 164.**Describe the concept of bundle branch block.
- 165.**Describe the concept of right bundle branch block. Indicate its ECG signs.
- 166.**Describe the concept of left bundle branch block. Indicate its ECG signs.
- 167.**Describe Wolff-Parkinson-White syndrome. Indicate its ECG signs.
- 168.**Conduct questioning of patients with disorders of digestive system. Identify the main complaints.
- 169.**Conduct inspection of abdomen. Determine examination plan, specify signs of abdomen in the normal conditions and pathological causes that lead to abdomen changes.
- 170.**Superficial palpation of the abdomen. Show the technique of palpation. Indicate main signs that are defined during superficial palpation of the abdomen.
- 171.**Penetrative palpation of the abdomen. Indicate main points that are determined during penetrative palpation of the abdomen.
- 172.**Deep sliding palpation of the abdomen (by Obratsov-Strazhesko). Indicate recommended sequence of the examination. Show the technique of deep sliding palpation of the sigmoid colon.
- 173.**Deep sliding palpation of the abdomen (by Obratsov-Strazhesko). Indicate recommended sequence of the examination. Show the technique of deep sliding palpation of the caecum colon.
- 174.**Deep sliding palpation of the abdomen (by Obratsov-Strazhesko). Indicate recommended sequence of the examination. Show the technique of deep sliding palpation of the ascending colon.
- 175.**Deep sliding palpation of the abdomen (by Obratsov-Strazhesko). Indicate recommended sequence of the examination. Show the technique of deep sliding palpation of the descending colon.
- 176.**Deep sliding palpation of the abdomen (by Obratsov-Strazhesko). Indicate recommended sequence of the examination. Show the technique of deep sliding palpation of the transverse colon.

177. Deep sliding palpation of the abdomen (by Obraztsov-Strazhesko). Indicate recommended sequence of the examination. Show the technique of deep sliding palpation of the stomach.
178. Erythrocytes. What it is? Describe their meaning? Indicate normal values of this index.
179. Erythrocytosis and erythrocytopenia. What it is? Under what conditions these pathological states arise?
180. Hemoglobin. What it is? Describe its meaning? Indicate normal values of this index.
181. Color index. What it is? Describe its meaning? Indicate normal values of this index.
182. Leukocytes. What it is? Describe its meaning? Indicate normal values of this index.
183. Leukocyte formula. Describe its meaning? Indicate normal values of this index.
184. Indicate clinical significance of leukocyte formula changes?
185. Neutrophilia. Please indicate pathological factors that cause it?
186. Leukemoid reactions. What it is and what pathological factors cause it?
187. Neutropenia. What it is? Please indicate pathological factors that cause it?
188. Eosinophilia and Eosinopenia. What it is? Please indicate pathological factors that cause it?
189. Basophilia. What it is? Please indicate pathological factors that cause it?
190. Monocytosis. What it is? Please indicate pathological factors that cause it?
191. Lymphocytosis and Lymphopenia. What it is? Please indicate pathological factors that cause it?
192. Indicate clinical significance of thrombocytes changes? Indicate normal values of this index.
193. Erythrocyte sedimentation rate (ESR). Indicate clinical significance of the Erythrocyte Sedimentation Rate. Indicate normal values of this index.
194. Please indicate clinical significance of hemoglobin changes.
195. Hyperchromia, Hypochromia and Normochromia. What it is? Please indicate pathological factors that cause it?
196. Leukocytosis and Leukopenia. Please indicate pathological and physiological factors that can cause them?

MODULE 2. Basic Symptoms and Syndromes of Diseases of Internal Organs

1. Give the definition of "Heart failure".
2. Into what 2 groups is divided "Syndrome of cardiovascular failure"?
3. What common causes of heart failure do you know?
4. What compensatory mechanisms in heart failure do you know?
5. Indicate basic symptoms and signs of heart failure.
6. Indicate additional methods of examination for establishing heart failure.
7. Give the definition of "Acute left ventricular failure".

8. What causes of acute left ventricular failure you know?
9. What two clinical forms of acute left ventricular failure you know?
10. Give the definition of "Cardiac asthma".
11. Indicate clinical features of cardiac asthma.
12. What signs of cardiac asthma can be observed during objective examination of patient.
13. Give the definition of "Pulmonary edema".
14. Indicate clinical features of pulmonary edema.
15. What signs of pulmonary edema can be observed during objective examination of patient.
16. Indicate additional methods of examination for establishing pulmonary edema.
17. Give the definition of "Acute left atrial failure".
18. Give the definition of "Acute right ventricular heart failure".
19. What causes of acute right ventricular heart failure you know?
20. Indicate basic symptoms and signs of acute right ventricular heart failure.
21. What signs of acute right ventricular heart failure can be observed during objective examination of patient.
22. Indicate additional methods of examination for establishing acute right ventricular heart failure.
23. Give the definition of "Chronic left ventricular heart failure".
24. What causes of chronic left ventricular heart failure you know?
25. Indicate basic patient complaints with chronic left ventricular heart failure.
26. What signs of chronic left ventricular heart failure can be observed during objective examination of patient.
27. Indicate additional methods of examination for establishing chronic left ventricular heart failure.
28. Give the definition of "Chronic left atrial heart failure".
29. Give the definition of "Chronic right ventricular heart failure".
30. What causes of chronic right ventricular heart failure you know?
31. Indicate basic patient complaints with chronic right ventricular heart failure.
32. What signs of chronic right ventricular heart failure can be observed during objective examination of patient.
33. Indicate additional methods of examination for establishing chronic right ventricular heart failure.
34. List all classification of heart failure.
35. Describe Classification of heart failure according to New York Heart Association.
36. Give the definition of "Vascular failure".
37. What includes the concept of vascular failure?
38. Give the definition of "Syncope".
39. Indicate classification of syncope.
40. What signs of syncope can be observed during objective examination of patient.
41. Give the definition of "Collapse".

42. What causes of collapse you know?
43. What signs of collapse can be observed during objective examination of patient.
44. Give the definition of "Shock"
45. Indicate classification of shock according to pathophysiological picture.
46. Indicate classification of shock according to etiology.
47. What clinical features of shock can be observed during examination of patient?
48. What complications of shock you know?
49. Indicate additional methods of examination for establishing shock.
50. Give the definition of "Mitral regurgitation".
51. What causes of mitral regurgitation you know?
52. Indicate main disorders of hemodynamics which may occur under appearance of mitral regurgitation.
53. What clinical features of mitral regurgitation can be observed during examination of patient?
54. What signs of mitral regurgitation can be observed during objective examination of patient.
55. Indicate additional methods of examination for establishing mitral regurgitation.
56. Give the definition of "Mitral stenosis".
57. What causes of mitral stenosis you know?
58. Indicate main disorders of hemodynamics which may occur under appearance of mitral stenosis.
59. What clinical features of mitral stenosis can be observed during examination of patient?
60. What signs of mitral stenosis can be observed during objective examination of patient.
61. Indicate additional methods of examination for establishing mitral stenosis.
62. Give the definition of "Aortic regurgitation".
63. What causes of aortic regurgitation you know?
64. Indicate main disorders of hemodynamics which may occur under appearance of aortic regurgitation.
65. What clinical features of aortic regurgitation can be observed during examination of patient?
66. What signs of aortic regurgitation can be observed during objective examination of patient?
67. Indicate additional methods of examination for establishing aortic regurgitation.
68. Give the definition of "Aortic stenosis".
69. What causes of aortic stenosis you know?
70. Indicate main disorders of hemodynamics which may occur under appearance of aortic stenosis.
71. What clinical features of aortic stenosis can be observed during examination of patient?

72. What signs of aortic stenosis can be observed during objective examination of patient.
73. Indicate additional methods of examination for establishing aortic stenosis.
74. Define the concept of "syndrome of arterial hypertension".
75. Define the concept of "Symptomatic arterial hypertension".
76. What renal diseases can cause second hypertension?
77. What endocrine diseases can cause second hypertension?
78. What hemodynamic diseases can cause second hypertension?
79. What neurogenic diseases can cause second hypertension?
80. What special forms of second hypertension do you know?
81. List diagnostic criteria of the renovascular hypertension?
82. List diagnostic criteria of the renovascular hypertension?
83. List diagnostic criteria of the pheochromocytoma?
84. List diagnostic criteria of the primary hyperaldosteronism (Conn's syndrome)?
85. List diagnostic criteria of the Cushing's syndrome?
86. List diagnostic criteria of the Hemodynamic arterial hypertension?
87. Define the concept of "Essential hypertension".
88. What predisposing factors of essential hypertension do you know?
89. Please write Classification of hypertension according to blood pressure level.
90. Please write Classification of hypertension according to organ damage.
91. What signs of hypertension can be found during objective examination of patients?
92. Please list Protocol of diagnostic procedures for patients with hypertension I-II stages.
93. Please list Protocol of diagnostic procedures for patients with hypertension III stages.
94. What additional methods of examination of hypertension do you know?
95. Give the definition of "Myocarditis".
96. Please write Classification of myocarditis according to etiology.
97. Please write Classification of myocarditis according to course of disease.
98. Please write Classification of myocarditis according to severity of course.
99. List complaints of patients and signs during objective examination of mild course myocarditis.
100. Indicate additional methods of examination for establishing mild course myocarditis. What signs of mild course myocarditis can be detected during additional methods of examination?
101. List complaints of patients and signs during objective examination of moderate course myocarditis.
102. Indicate additional methods of examination for establishing moderate course myocarditis. What signs of moderate course myocarditis can be detected during additional methods of examination?
103. List complaints of patients and signs during objective examination of severe course myocarditis.

- 104.**Indicate additional methods of examination for establishing severe course myocarditis. What signs of severe course myocarditis can be detected during additional methods of examination?
- 105.**Give the definition of "Pericarditis".
- 106.**Please write Classification of pericarditis according to etiology.
- 107.**Please write clinical Classification of pericarditis.
- 108.**Describe the pathogenesis of pericarditis.
- 109.**List clinical features and signs of dry pericarditis during additional methods of examination.
- 110.**List clinical features and signs of exudative pericarditis during objective examination.
- 111.**Indicate additional methods of examination for exudative pericarditis. What signs of exudative pericarditis can be detected during additional methods of examination?
- 112.**Define the concept of "Ischemic (coronary) heart disease".
- 113.**Please write Classification of Ischemic (coronary) heart disease.
- 114.**Please write Classification of Angina pectoris.
- 115.**Please write Classification of Myocardial infarction (MI).
- 116.**What are the main etiological factors of Ischemic (coronary) heart disease?
- 117.**Describe the pathogenesis of Ischemic (coronary) heart disease.
- 118.**Define the concept of "Stable angina".
- 119.**What clinical features of stable angina you know?
- 120.**Please write Canadian Cardiovascular Society Classification of stable angina.
- 121.**What main signs of stable angina can be detected during objective examination?
- 122.**What signs of stable angina can be detected during additional methods of examination?
- 123.**Exercise ECG for stable angina: describe the method and explain its importance.
- 124.**Pharmacological stress testing with imaging techniques: describe the method and explain its importance.
- 125.**Define the concept of "Acute coronary syndrome".
- 126.**What clinical features of acute coronary syndrome you know?
- 127.**What main signs of acute coronary syndrome can be detected during objective examination?
- 128.**What signs of acute coronary syndrome can be detected during additional (laboratory) methods of examination?
- 129.**What instrumental examinations are used for establishing acute coronary syndrome and explain why?
- 130.**Please write Braunwald Classification system for unstable angina.
- 131.**Define the concept of "Myocardial infarction".
- 132.**Indicate clinical features of myocardial infarction.
- 133.**What main signs of myocardial infarction can be detected during objective examination?

134. List atypical forms of myocardial infarction and their signs.
135. List complications of myocardial infarction.
136. Please write Classification of acute heart failure by Killip.
137. What additional (laboratory) methods of examination can be used for establishing of myocardial infarction?
138. What additional (instrumental) methods of examination can be used for establishing of myocardial infarction?
139. List markers of myocardial infarction.
140. ECG signs of myocardial infarction.
141. Define the concept of "Sudden cardiac death".
142. List the causes of "Sudden cardiac death".
143. What clinical signs of sudden cardiac death you know?
144. What main signs of sudden cardiac death can be detected during objective examination?
145. What additional methods of examination can be used for establishing sudden cardiac death?
146. What the main syndromes of the diseases of respiratory system you know?
147. Syndrome of the pulmonary tissue consolidation, give the definition.
148. What are the main etiological factors of syndrome of the pulmonary tissue consolidation?
149. Name mechanisms of pulmonary tissue consolidation.
150. List all forms of pulmonary tissue consolidation.
151. List the main complaints of patients and their characteristics in the presence of syndrome of the pulmonary tissue consolidation.
152. What the main features of the syndrome of the pulmonary tissue consolidation can be detected during objective examination?
153. What additional methods of examination can be used to identify the syndrome of the pulmonary tissue consolidation and what signs of this syndrome can be detected?
154. Syndrome of increased airiness of the pulmonary tissue, give the definition.
155. What are the main etiological factors of syndrome of increased airiness of the pulmonary tissue?
156. Describe the pathogenesis of increased airiness of the pulmonary tissue.
157. List all forms of increased airiness of the pulmonary tissue.
158. List the main complaints of patients and their characteristics in the presence of syndrome of increased airiness of the pulmonary tissue.
159. What the main features of the syndrome of increased airiness of the pulmonary tissue can be detected during objective examination?
160. What additional methods of examination can be used to identify the syndrome of increased airiness of the pulmonary tissue and what signs of this syndrome can be detected?
161. Syndrome of bronchium obstruction (bronchospastic syndrome), give the definition.

162. What are the main etiological factors of syndrome of bronchium obstruction (bronchospastic syndrome)?
163. Describe the pathogenesis of bronchium obstruction.
164. List the main complaints of patients and their characteristics in the presence of syndrome of bronchium obstruction (bronchospastic syndrome).
165. What are the main features of the syndrome of bronchium obstruction (bronchospastic syndrome) that can be detected during objective examination?
166. What additional methods of examination can be used to identify the syndrome of bronchium obstruction (bronchospastic syndrome) and what signs of this syndrome can be detected?
167. Syndrome of fluid accumulation in pleural cavity (hydrothorax), give the definition.
168. What are the main etiological factors of syndrome of fluid accumulation in pleural cavity (hydrothorax)?
169. Describe the pathogenesis of fluid accumulation in pleural cavity.
170. List all forms of fluid accumulation in pleural cavity.
171. List the main complaints of patients and their characteristics in the presence of syndrome of fluid accumulation in pleural cavity (hydrothorax).
172. What are the main features of the syndrome of fluid accumulation in pleural cavity (hydrothorax) that can be detected during objective inspection?
173. Describe particularities of objective examination depending on the stage of pleural syndrome development.
174. What signs can be detected in the presence of exudate?
175. List the clinical and diagnostic zones that occur in the presence of exudate.
176. What auscultative records are observed according to distinguish zones?
177. What signs can be detected in the presence of transudate?
178. What additional methods of examination can be used to identify hydrothorax and what signs of this syndrome can be detected?
179. Syndrome of air accumulation in pleural cavity (pneumothorax), give the definition.
180. Describe the pathogenesis of pneumothorax.
181. List all forms of pneumothorax.
182. List the main complaints of patients and their characteristics in the presence of syndrome of air accumulation in pleural cavity (pneumothorax).
183. What are the main features of the syndrome of air accumulation in pleural cavity (pneumothorax) that can be detected during objective examination?
184. What additional methods of examination can be used to identify pneumothorax and what signs of this syndrome can be detected?
185. Syndrome of the cavity in the lungs, give the definition.
186. What are the main etiological factors of syndrome of the cavity in the lungs?
187. Describe the pathogenesis of cavity in the lungs.
188. List the main complaints of patients and their characteristics in the presence of syndrome of the cavity in the lungs.

189. What are the main features of the syndrome of the cavity in the lungs that can be detected during objective examination?
190. What additional methods of examination can be used to identify the syndrome of the cavity in the lungs and what signs of this syndrome can be detected?
191. Define the concept of "bronchitis". Specify basic forms of bronchitis.
192. Specify etiologic factors and clinical features of acute bronchitis.
193. Describe the signs of acute bronchitis that can be detected during objective examination and additional methods of study.
194. Indicate etiological factors and pathogenesis of chronic bronchitis.
195. Specify classification of chronic bronchitis by N.P. Paleev.
196. What clinical features of chronic bronchitis do you know?
197. What signs of chronic bronchitis can be found during objective examination?
198. What signs of chronic bronchitis can be found during additional methods of examination?
199. Indicate etiological factors and pathogenesis of bronchiectatic disease.
200. What clinical features of bronchiectatic disease do you know?
201. What signs of bronchiectatic disease can be found during objective examination?
202. What signs of bronchiectatic disease can be found during additional methods of examination?
203. Define the concept of "bronchial asthma".
204. Indicate etiological factors of bronchial asthma.
205. Specify classification of bronchial asthma according to the complex of clinical and functional signs of bronchial obstruction.
206. Describe the clinical features of bronchial asthma in the prodromal period and the period of asthma attack reverse.
207. Describe the clinical features of bronchial asthma in the period of clinical manifestation (bronchial asthma attack).
208. What signs of bronchial asthma can be found during additional methods of examination?
209. Define the concept of "emphysema of the lungs". Specify basic forms of bronchitis.
210. What signs of emphysema of the lungs can be found during objective examination?
211. What signs of emphysema of the lungs can be found during additional methods of examination?
212. Define the concept of "pneumonia". Specify basic forms of bronchitis.
213. Specify classification of pneumonia according to the particularities of infection.
214. The category of the patients with nonhospital pneumonia: specify classification.
215. The groups with intrahospital pneumonia: specify classification.
216. Define the concept of "nonhospital" and "intrahospital" pneumonia.

217. Indicate main risk factors of pneumonia.
218. Indicate main pathogenic links of pneumonia.
219. What clinical features of pneumonia do you know?
220. What signs of pneumonia can be found during objective examination?
221. What signs of pneumonia can be found during additional methods of examination?
222. Give the definition for "Pleuritis".
223. Give the definition for "Dry pleuritis".
224. Indicate etiological factors and pathogenesis of dry pleuritis.
225. What clinical features of dry pleuritis do you know?
226. Describe the signs of dry pleuritis that can be detected during objective examination and additional methods of examination.
227. Give the definition for "Exudative pleuritis".
228. Indicate etiological factors and pathogenesis of exudative pleuritis.
229. What clinical features of exudative pleuritis do you know?
230. What signs of exudative pleuritis can be found during objective examination?
231. What signs of exudative pleuritis can be found during additional methods of examination?
232. What are the main syndromes of the diseases of the digestive system do you know?
233. Syndrome of jaundice, give the definition. What types of jaundice do you know? (please list).
234. What are the main etiological factors of syndrome of jaundice? (suprahepatic – hemolytic, hepatic – parenchymatous, subhepatic – mechanical).
235. Indicate pathogenesis of suprahepatic jaundice.
236. Indicate pathogenesis of hepatic jaundice.
237. Indicate pathogenesis of subhepatic jaundice.
238. What clinical features of suprahepatic – hemolytic, hepatic – parenchymatous, subhepatic – mechanical do you know?
239. What are the main features of the syndrome of jaundice that can be detected during objective examination?
240. What additional methods of examination can be used to identify the syndrome of jaundice and what signs of this syndrome can be detected?
241. Describe changes in the activity of enzymes that occur in the presence of cholestasis syndrome, cholestatic syndrome, hepatic-cellular failure syndrome, immunoinflammatory syndrome.
242. Provide interpretation of changes in the levels of total protein in the blood.
243. Provide interpretation of changes in globulin levels and indicate what they reflect.
244. Syndrome of bile ducts dyskinesia (dysfunctional bile tract disorders), give the definition. What are the main etiological factors of this syndrome?
245. Indicate pathogenesis of syndrome of bile ducts dyskinesia (dysfunctional bile tract disorders).

- 246.**Specify classification of syndrome of bile ducts dyskinesia according to the etiology, localization and functional state.
- 247.**List the main clinical features and their characteristics in the presence of syndrome of bile ducts dyskinesia (dysfunctional bile tract disorders).
- 248.**What main features of the syndrome of bile ducts dyskinesia (dysfunctional bile tract disorders) can be detected during objective examination?
- 249.**What additional methods of examination can be used to identify the syndrome of bile ducts dyskinesia (dysfunctional bile tract disorders) and what signs of this syndrome can be detected?
- 250.**Syndrome of gastrointerstitial bleeding, give the definition. Specify classification of syndrome of gastrointerstitial bleeding according to the etiology, localization, functional state and intensity.
- 251.**Define the concept of “hematomesis”, “melena” and “hematochezia”.
- 252.**What are the main etiological factors of syndrome of gastrointerstitial bleeding? (Please list the most common causes of upper gastrointestinal hemorrhage and of lower gastrointestinal bleeding).
- 253.**Indicate pathogenesis of syndrome of gastrointerstitial bleeding.
- 254.**What clinical features of syndrome of gastrointerstitial bleeding you know?
- 255.**What additional methods of examination can be used to identify the syndrome of gastrointerstitial bleeding and what signs of this syndrome can be detected?
- 256.**Describe all the possible results of Coprological study including bleeding from different departments of gastrointestinal tract.
- 257.**What tests for occult bleeding you know and what they define?
- 258.**Syndrome of portal hypertension, give the definition. Specify classification of syndrome of portal hypertension depending on the etiology and mechanism of developing.
- 259.**What clinical features of syndrome of portal hypertension you know?
- 260.**Describe the signs of syndrome of portal hypertension that can be detected during objective examination.
- 261.**Describe the signs of syndrome of portal hypertension that can be detected during additional methods of examination.
- 262.**Syndrome of functional dyspepsia, give the definition. What are the main etiological factors of this syndrome?
- 263.**Specify classification of syndrome of functional dyspepsia according to the type of dyspepsia and stage of dyspepsia. Indicate pathogenesis of syndrome of functional dyspepsia.
- 264.**What clinical features of syndrome of functional dyspepsia you know?
- 265.**What additional methods of examination can be used to identify the syndrome of functional dyspepsia and what signs of this syndrome can be detected?
- 266.**Define the concept of “gastritis and duodenitis”.
- 267.**Indicate etiological factors and pathogenesis of chronic gastritis (*Helicobacter pylori*).

- 268.**Specify classification of chronic gastritis according to the types of gastritis and special forms.
- 269.**What clinical features of gastroduodenitis you know? What signs of gastroduodenitis can be found during objective examination?
- 270.**What additional methods of examination can help in the diagnosis of gastroduodenitis and what changes can be detected?
- 271.**Give the definition for "Ulcer disease or peptic ulcer". Indicate etiological factors of ulcer disease.
- 272.**Specify classification of ulcer disease (According to the localization, According to the etiology, According to the stage of the process, According to the accompanied morphological changes, According to the complications development).
- 273.**Describe detailed the nature of pain in patients with ulcer disease.
- 274.**What clinical features of ulcer disease you know?
- 275.**What signs of ulcer disease can be found during objective examination?
- 276.**What complications can occur in patients with peptic ulcer?
- 277.**What additional methods of examination can help in the diagnosis of peptic ulcer and what changes can be detected?
- 278.**Define the concept of "calculus cholecistitis", "cholelithiasis" and "choledocholithiasis". Indicate etiological factors of cholecistitis.
- 279.**Indicate pathogenesis and of classification cholecistitis.
- 280.**What clinical features of cholecistitis you know?
- 281.**What signs of cholecistitis can be found during objective examination?
- 282.**What additional methods of examination can help in the diagnosis of cholecistitis and what changes can be detected?
- 283.**Define the concept of "chronic hepatitis". Indicate etiological factors of chronic hepatitis.
- 284.**Specify classification of chronic hepatitis (I. According to the etiology and pathogenesis; II. According to the clinico-biochemical and histological criteria: a. According to the degree of activity, b. According to the index of histologic activity (IHA) on Knodell in points; III. According to the stage of a chronic hepatitis (defined by prevalence of fibrosis and development of liver cirrhosis).
- 285.**Define the concept of "Chronic virus hepatitis (CVH)". Specify classification of "Chronic virus hepatitis (CVH)".
- 286.**What clinical features of CVH you know?
- 287.**What signs of CVH can be found during objective examination?
- 288.**What additional methods of examination can help in the diagnosis of CVH and what changes can be detected?
- 289.**Define the concept of "liver cirrhosis". Indicate etiological factors of liver cirrhosis.
- 290.**Indicate pathogenesis of liver cirrhosis.
- 291.**What clinical features of liver cirrhosis you know?
- 292.**What signs of liver cirrhosis can be found during objective examination?
- 293.**What complications can occur in patients with liver cirrhosis?

- 294.**What signs of liver cirrhosis can be found during additional methods of examination?
- 295.**List all syndromes typical for the diseases of urinary system.
- 296.**Nephritic syndrome, give the definition.
- 297.**What are the main etiological factors of nephritic syndrome (nephritic syndrome caused by chronic renal disease, acute renal diseases and fast advance renal affection)?
- 298.**Indicate pathogenesis of nephritic syndrome.
- 299.**Specify forms of nephritic syndrome (according to the cause, according to the variants of duration).
- 300.**What the main clinical features of nephritic syndrome can be detected during objective examination?
- 301.**What additional methods of examination can be used to identify the nephritic syndrome and what signs of this syndrome can be detected?
- 302.**Urinary syndrome, give the definition.
- 303.**Indicate etiological factors of urinary syndrome (urinary syndrome caused by pathology of the kidney and urinary tract and extrarenal pathology).
- 304.**What clinical features of urinary syndrome you know? (Indicate manifestations depending on the disease).
- 305.**Syndrome of acute renal failure, give the definition.
- 306.**Indicate classification of syndrome of acute renal failure depending on the cause, character of duration and period.
- 307.**What the main clinical features of syndrome of acute renal failure can be detected during objective examination?
- 308.**Please list syndromes associated with syndrome of acute renal failure and can be detected during objective examination of patient.
- 309.**What additional methods of examination can be used to identify the syndrome of acute renal failure and what signs of this syndrome can be detected?
- 310.**Syndrome of chronic renal failure, give the definition.
- 311.**Specify etiological factors of chronic renal failure syndrome (main causes).
- 312.**Describe pathogenesis of chronic renal failure syndrome.
- 313.**Please list syndromes associated with syndrome of chronic renal failure and can be detected during objective examination of patient.
- 314.**Please list signs of chronic renal failure according to the periods.
- 315.**What additional methods of examination can be used to identify the syndrome of chronic renal failure and what signs of this syndrome can be detected?
- 316.**What is glomerulus's filtration rate? By what formula we calculate glomerulus's filtration rate (GFR)?
- 317.**Indicate classification of chronic renal diseases (according to GFR).
- 318.**Please list additional instrumental methods of examination for establishing syndrome of chronic renal failure.
- 319.**Define glomerulonephritis. What etiologic factors of glomerulonephritis you know?

- 320.** Provide basic classification of glomerulonephritis.
- 321.** Describe pathogenesis of glomerulonephritis.
- 322.** Describe pathogenesis of arterial hypertension on glomerulonephritis.
- 323.** Define acute glomerulonephritis. Specify the main clinical features of acute glomerulonephritis that can be detected during objective examination.
- 324.** What additional methods of examination can be used to identify the acute glomerulonephritis (indicate changes that can be detected)?
- 325.** List complications of acute glomerulonephritis.
- 326.** Define fast advance glomerulonephritis. Specify the main clinical features of fast advance glomerulonephritis that can be detected during objective examination.
- 327.** What additional methods of examination can be used to identify the fast advance glomerulonephritis (indicate changes that can be detected)?
- 328.** List complications of fast advance glomerulonephritis.
- 329.** List known to you forms of chronic glomerulonephritis.
- 330.** Specify main clinical features of chronic glomerulonephritis (nephritic form) that can be detected during objective examination and violations that can be detected by additional methods of examination.
- 331.** Specify main clinical features of chronic glomerulonephritis (hypertensive form) that can be detected during objective examination and violations that can be detected by additional methods of examination.
- 332.** Specify main clinical features of chronic glomerulonephritis (mixed form) that can be detected during objective examination and violations that can be detected by additional methods of examination.
- 333.** Specify main clinical features of chronic glomerulonephritis (latent form) that can be detected during objective examination and violations that can be detected by additional methods of examination.
- 334.** Define pyelonephritis and specify classification of pyelonephritis.
- 335.** Describe the etiology and pathogenesis of pyelonephritis.
- 336.** Specify main clinical features of acute pyelonephritis that can be detected during objective examination and violations that can be detected by additional methods of examination. List complications of acute pyelonephritis.
- 337.** Specify main clinical features of chronic pyelonephritis that can be detected during objective examination and violations that can be detected by additional methods of examination. List complications of chronic pyelonephritis.
- 338.** List the major syndromes in the blood system. Define these syndromes.
- 339.** Indicate known to you types of anemias. Define these anemias.
- 340.** Syndrome of anemia, give the definition.
- 341.** Classification of anemia.
- 342.** Indicate known to you symptoms and signs of anemia.
- 343.** Describe the main clinical features of syndrome of anemia that can be detected during an objective examination.

344. Describe the main signs features of syndrome of anemia that can be detected during additional methods of examination.
345. Bone marrow examination: specify the main purpose of this research and diagnostic value.
346. Specify diagnostic value of biochemical blood analysis in establishing syndrome of anemia.
347. Evaluation of hemoglobin structure and biosynthesis. Diagnostic value.
348. Provide additional methods of examination that helps in diagnosing syndrome of anemia.
349. Classification of syndrome of bleeding disorders.
350. Describe the main clinical features of syndrome of bleeding disorders that can be detected during an objective examination.
351. Describe the main signs features of syndrome of bleeding disorders that can be detected during additional methods of examination.
352. Tests for plasma factors involved in coagulation and fibrinolysis. Diagnostic value.
353. Iron deficiency anemia, give the definition.
354. Provide main etiological factors of Iron deficiency anemia.
355. Describe the main clinical features of Iron deficiency anemia that can be detected during an objective examination.
356. Provide additional methods of examination that helps in diagnosing Iron deficiency anemia.
357. Megaloblastic anemia, give the definition.
358. Etiology of vitamin B12-deficiency anemia.
359. Etiology of folic acid deficiency anemia.
360. Describe the main clinical features of Megaloblastic anemia that can be detected during an objective examination.
361. Provide additional methods of examination that helps in diagnosing Megaloblastic anemia.
362. Hemolytic anemias, give the definition.
363. Classification of Hemolytic anemias.
364. Describe the main clinical features of Hemolytic anemias that can be detected during an objective examination.
365. Describe the main signs features of Hemolytic anemias that can be detected during additional methods of examination.
366. Hereditary spherocytic anemia, give the definition.
367. Provide three main mechanisms causing hereditary spherocytic anemia.
368. Describe the main clinical features of hereditary spherocytic anemia that can be detected during an objective examination.
369. Describe the main signs features of hereditary spherocytic anemia that can be detected during additional methods of examination.
370. Glucose-6-phosphate dehydrogenase (G-6-PD) deficiency anemia, give the definition.
371. Etiology of Glucose-6-phosphate dehydrogenase (G-6-PD) deficiency anemia.

- 372.** Describe the main clinical features of Glucose-6-phosphate dehydrogenase (G-6-PD) deficiency anemia that can be detected during an objective examination.
- 373.** Describe the main signs features of Glucose-6-phosphate dehydrogenase (G-6-PD) deficiency anemia that can be detected during additional methods of examination.
- 374.** Thalassemias syndrome, give the definition.
- 375.** Describe the main clinical features of α -thalassemia and β -thalassemia that can be detected during an objective examination.
- 376.** Describe the main signs features of α -thalassemia and β -thalassemia that can be detected during additional methods of examination.
- 377.** What special tests to establish α -thalassemia and β -thalassemia you know?
- 378.** Sickle cell anemia - chronic hemolytic anemia give the definition.
- 379.** Indicate the main clinical features of chronic hemolytic anemia that can be detected during an objective examination.
- 380.** Indicate the main signs features of chronic hemolytic anemia that can be detected during additional methods of examination.
- 381.** Define the concept of hemoblastosis.
- 382.** Classification of hemoblastosis.
- 383.** Indicate etiology and pathogenesis acute myeloblastic leukemia.
- 384.** Indicate the main clinical features of acute myeloblastic leukemia that can be detected during an objective examination.
- 385.** Indicate the main signs features of acute myeloblastic leukemia that can be detected during additional methods of examination.
- 386.** Define the concept of chronic myelocytic leukemia.
- 387.** Indicate etiology and pathogenesis chronic myelocytic leukemia.
- 388.** Indicate the main clinical features of chronic myelocytic leukemia that can be detected during an objective examination.
- 389.** Indicate the main signs features of chronic myelocytic leukemia that can be detected during additional methods of examination.
- 390.** Define the concept of polycythemia vera.
- 391.** Indicate the main clinical features of polycythemia vera that can be detected during an objective examination.
- 392.** Indicate the main signs features of polycythemia vera that can be detected during additional methods of examination.
- 393.** Define the concept of acute lymphoblastic leukemia.
- 394.** Specify etiology and pathogenesis acute lymphoblastic leukemia.
- 395.** FAB-classification.
- 396.** Specify the main clinical features of acute lymphoblastic leukemia that can be detected during an objective examination.
- 397.** Specify the main signs features of acute lymphoblastic leukemia that can be detected during additional methods of examination.
- 398.** Specify the main clinical features of chronic lymphoblastic leukemia that can be detected during an objective examination.

- 399.**Specify the main signs features of chronic lymphoblastic leukemia that can be detected during additional methods of examination.
- 400.**Hemophilia (hemophilia B, hemophilia C), give the definition.
- 401.**Indicate the main clinical features of hemophilia that can be detected during an objective examination.
- 402.**Describe the main signs features of hemophilia that can be detected during additional methods of examination.
- 403.**Define Idiopathic thrombocytopenic purpura (Werlhoff's disease), and specify the main features of this disease that can be detected during an objective examination and additional methods of examination.
- 404.**Define Henoch-Schoenlein syndrome, and specify the main features of this disease that can be detected during an objective examination and additional methods of examination.

6. Individual work

The students can do individual work after normal working hours and get a mark. The list and content of individual tasks can be determined depending on the logistical support of the departments.

Indicative list of individual tasks:

- Technique of carrying out of the general inspection of the patient.
Diagnostic value of the signs received during the general inspection of the patient.
- Methodically properly conduct questioning and physical examination of patients with respiratory diseases.
- Method of ECG registration. Basic elements of ECG.
- Preparing essay about modern methods of examination of patients.

Typical test:

Choose a variant of normal shape of the chest:

1. Emphysematous
2. Conical
3. Paralytic
4. Funnel
5. Keeled

Intensive bronchophony is characteristic for:

1. Emphysema
2. Presence of liquid in pleural cavity
3. Pneumothorax
4. Infiltration of pulmonary tissue
5. Bronchitis

What is normal diastolic blood pressure in healthy people?

1. 50 – 80 mm Hg
2. 60 – 70 mm Hg
3. 60 – 89 mm Hg
4. 80 – 95 mm Hg
5. 70 – 90 mm Hg

When is positive of Gregersen's reaction (benzidine test)?

1. Mechanical jaundice
2. Duodenal ulcer
3. Gastrointestinal bleeding
4. Chronic hepatitis
5. Chronic pancreatitis

7. Provision of educational process

1. Multimedia projectors, computers, screens for multimedia presentations, lecture presentations.

2. Demonstration screens, laptops, files in Power Point and Word with KROK-1 tasks for practical and final exercises.

3. Examination tickets.

The discipline uses all kinds of teaching methods, which are recommended for high school, namely:

- by sources of knowledge: verbal (explanation, lecture, conversation, discussion); visual (demonstration); practical (practical work, mastering practical skills),
- by the logic of the educational process: analytical (isolation of individual symptoms of the disease), synthetic (clarifying the relationship of symptoms and isolation of syndromes of the disease), their combination - analytical-synthetic, as well as inductive method (mainly in the study of Module 1), deductive (when the study of Module 2), their combination - the traditional method (in the study of both modules);
- by the level of independent mental activity: problematic, partially search, research.

By combining and summarizing the above methods of teaching, it is advisable to introduce such methods of organization of training as:

- clinical case method,
- problem-research method,
- method of individual research tasks,
- method of competing groups,
- method of training technologies,
- a method of conducting scientific conferences using interactive, interdisciplinary and information-computer technologies

Lecture and practical stages of student learning are formed in such a sequence that the topics of lectures are preceded by practical classes.

Practical classes of 2.5 academic hours (113 minutes) in the study of module # 1 and 2.0 academic hours (90 minutes) in the study of module # 2 take place in a therapeutic clinic (department of therapeutic profile) and consist of four structural parts:

- 1) mastering the theoretical part of the topic,
- 2) demonstration by the teacher methods of research of the thematic patient,
- 3) work of students to develop practical skills at the bedside of the patient under the supervision of the teacher,
- 4) solving of situational problems and test control of mastering of material.

Independent work of students takes a significant place in the study of discipline. In addition to traditional pre-classroom training in theoretical internal medicine propedeutics, it includes student work in the departments of therapeutic inpatients, clinical laboratories, and functional diagnostics departments in extracurricular time, the effectiveness of which should be provided by teachers and auxiliary staff. Independent work includes the supervision of patients with writing a medical history, which involves interrogation and complete physical examination of the patient with the definition of leading syndromes, the appointment of diagnostic procedures and participation in the algorithm of providing medical care to the patient.

8. Methodical support

Methodological support is provided by all kinds of educational activities: lectures, practical classes, independent work of students.

Methodical provision of the lecture course:

1. Presentation of lectures.
2. Audio recordings of auscultation data of the heart and lungs.
3. Videos and training films with instrumental survey data.
4. Demonstration materials for the analysis of case patients and clinical cases.

Methodical provision of practical classes:

1. Guidelines for practical training for teachers.
2. Guidelines for practical classes for students.
3. Variants of test questions and tasks to check the initial level of knowledge on each topic of the module.
4. Variants of situational tasks to check the assimilation of topics, content modules.
5. Standardized data of instrumental and laboratory examination methods.
6. Variants of tasks (theoretical and practical) for final control.

Methodical support of students' independent work:

1. Guidelines for pre-classroom preparation for practical classes.
2. Guidelines for the study of topics not included in the lesson plan.
3. Methodical recommendations on methods of physical examination of the patient and writing of medical history.
4. Tasks for students to work independently and individually.

Methodological support of carrying out final control:

1. A4 format test tasks.
2. Structured writing assignments.
3. Practical tasks to test the acquisition of practical skills.
4. Sets of medical terms to control the mastery of Latin terminology

5. Sets of results of general clinical laboratory examination of patients:

- General blood test
- Biochemical blood test
- General urin alysis
- Urine tests by Zymnitsky, Nechiporenko methods
- Analysis of duodenal content
- Results of intragastric pH-metry

6. Sets of results of instrumental examinations of patients:

- Radiographs
- Electrocardiograms
- Echocardiograms
- Phonocardiograms
- Ultrasound examination of abdominal organs and retroperitoneal space

The development of test-control questions and the formation of structured writing assignments used to diagnose theoretical learning success should be based on a list of questions that a student must acquire when studying modules # 1 and 2 of the discipline "Propedeutics of Internal Medicine".

9. FINAL CONTROL

MODULE 1. Basic methods of examination of the patients in clinic of internal diseases

1. Methodological principles of diagnostics of intemal diseases.
2. The basic methods of examination of patients in clinic of intemal diseases.
3. A scheme of inquiry of the patient. The basic structural parts of the anamnesis.
4. Technique of carrying out of the general inspection of the patient.
5. A body build and their basic criteria.
6. Sequence of palpation of lymph nodes and characteristics of the data.
7. Technique of carrying out and sequence of inspection of a head and a neck.
8. Technique of carrying out and sequence of inspection of extremities and trunks.
9. Static examination of the chest, diagnostic value of basic symptoms.
10. Dynamic examination of the chest, diagnostic value of basic symptoms.
11. Chest palpation: The sequence of determining, clinical value of basic symptoms.
12. Comparative percussion of the. lungs. The characteristics of the percussion sound.
13. Basic tasks and sequence of topographic percussion of the lungs.
Determination of the upper and lower borders of the lungs, mobility of the lungs border in normal and pathology.

14. Auscultation of the lungs. Main respiratory sounds: vesicular and bronchial respiration (mechanism of formation, changes).
15. Auscultation of the lungs. Classification of accessory respiratory murmurs.
16. Mechanism of formation of accessory respiratory murmurs and their diagnostic significance.
17. Mechanism of formation of crepitation, pleura friction rub. Discrimination of accessory respiratory murmurs.
18. Bronchophony and its diagnostic significance.
19. Examination of the precordial area, diagnostic value of basic symptoms.
20. Determination of the borders of relative cardiac dullness: normal borders and their changes.
21. Determination of the borders of absolute cardiac dullness: normal borders and their changes.
22. Determination of the vascular bundle, its diagnostic value.
23. Auscultation of the heart. Mechanism of sounds formation. Normal heart melody. Changes of the heart sounds.
24. Reduplication and splitting of the heart sounds. Concept about accenting II heart sound.
25. Additional heart sounds: gallop rhythm, triple rhythm.
26. Auscultation of the heart. Heart murmurs: mechanism of formation and classification of murmurs.
27. Heart murmurs: determination of the loudness, timber and character of the murmurs. Discrimination of organic and functional murmurs.
28. Diastolic functional murmurs (Graham Steel murmur, Flint murmur): mechanism of formation, diagnostic value.
29. Pulse properties. Places of pulse investigation.
30. Technique of the blood pressure measurement. Phases of acoustic phenomena according to Korotkoff. Systolic, diastolic, mean, pulse pressure.
31. Visual examination of the abdomen and identify basic symptoms.
32. Superficial palpation of the abdomen: technique and analyze the results of examination.
33. Deep sliding palpation of the abdominal organs. Sequence of palpation of the abdominal organs according to Obrastsov and Strazhesko.
34. Technique of deep palpation of the sigmoid colon, cecum and their normal signs.
35. Technique of deep palpation of the ascending and descending colons and their normal signs.
36. Methods of definition of the greater curvature of the stomach.
37. Technique of deep palpation of the transverse colon and its signs.
38. Technique of palpation of the liver and identify basic symptoms.
39. Spleen palpation.
40. Determination free fluid in the abdominal cavity.
41. Percussion of the liver according to Obrastsov: determining the size and borders.

42. Percussion of the liver according to Kurlov: determining the size and borders.
43. Percussion of the spleen and main causes of its enlargement.
44. ECG conclusion. Determination of the heart rate and electrical axis of the heart.
45. ECG signs of infringements of automatism.
46. ECG signs of infringements of excitation. Differentiation of premature heart contractions.
47. ECG signs abnormalities of conduction. Heart blocks.
48. ECG and clinical signs of atrial fibrillation and atrial flutter. Mechanism of their formation.

MODULE 2. Basic Symptoms and Syndromes of Diseases of Internal Organs

1. The syndrome of pulmonary tissue consolidation: etiology, pathogenesis, clinical, laboratory and instrumental methods of diagnosis.
2. The syndrome of increased airiness of lung tissue: etiology, pathogenesis, clinical, laboratory and instrumental methods of diagnosis.
3. The syndrome of fluid accumulation in pleural cavity: etiology, pathogenesis, clinical, laboratory and instrumental methods of diagnosis.
4. The syndrome of air accumulation in pleural cavity: etiology, pathogenesis, clinical, laboratory and instrumental methods of diagnosis.
5. The syndrome of bronchial obstruction: etiology, pathogenesis, clinical, laboratory and instrumental methods of diagnosis.
6. The syndrome of the pain in the heart: etiology, pathogenesis, clinical, laboratory and instrumental methods of diagnosis.
7. The syndrome of cardiovascular incompetence: etiology, pathogenesis, clinical, laboratory and instrumental methods of diagnosis.
8. Left ventricular heart failure syndrome: etiology, pathogenesis, clinical, laboratory and instrumental methods of diagnosis.
9. Right ventricular heart failure syndrome: etiology, pathogenesis, clinical, laboratory and instrumental methods of diagnosis.
10. Vascular failure syndrome: etiology, pathogenesis, clinical, laboratory and instrumental methods of diagnosis.
11. The syndrome of arterial hypertension: etiology, pathogenesis, clinical, laboratory and instrumental methods of diagnosis.
12. The syndrome of dyspepsia: etiology, pathogenesis, clinical, laboratory and instrumental methods of diagnosis.
13. The syndrome of dysphagia: etiology, pathogenesis, clinical, laboratory and instrumental methods of diagnosis.
14. The types of bile tract dyskinesia: etiology, pathogenesis, clinical, laboratory and instrumental methods of diagnosis.
15. The syndrome of portal hypertension: etiology, pathogenesis, clinical, laboratory and instrumental methods of diagnosis.

16. The syndrome of jaundice: etiology, pathogenesis, clinical, laboratory and instrumental methods of diagnosis.
17. The syndrome of gastro-intestinal haemorrhage: etiology, pathogenesis, clinical, laboratory and instrumental methods of diagnosis.
18. Nephritic syndrome: etiology, pathogenesis, clinical, laboratory and instrumental methods of diagnosis.
19. The urinate syndrome: etiology, pathogenesis, clinical, laboratory and instrumental methods of diagnosis.
20. The syndrome of acute renal failure: etiology, pathogenesis, clinical, laboratory and instrumental methods of diagnosis.
21. The syndrome of chronic renal failure: etiology, pathogenesis, clinical, laboratory and instrumental methods of diagnosis.
22. The syndrome of anemia: etiology, pathogenesis, clinical, laboratory and instrumental methods of diagnosis.
23. Hyperplastic syndrome on Blood system diseases: etiology, pathogenesis, clinical, laboratory and instrumental methods of diagnosis.
24. Hemorrhagic syndromes: classification, pathogenesis, clinical, laboratory and instrumental methods of diagnosis.
25. The syndrome of hyperthyroidism: etiology, pathogenesis, clinical features, laboratory and instrumental methods of diagnosis.
26. The syndrome of hypothyroidism: etiology, pathogenesis, clinical features, laboratory and instrumental methods of diagnosis.
27. The syndrome of hyperglycemia and the syndrome of hypoglycemia: etiology, pathogenesis, clinical features, laboratory and instrumental methods of diagnosis.
28. Etiology of vitamin B12-deficiency anemia.
29. Etiology of folic acid deficiency anemia.
30. Megaloblastic anemia, give the definition.
31. Give the definition of "Heart failure".
32. Give the definition of "Cardiac asthma".
33. Indicate clinical features of cardiac asthma.
34. Give the definition of "Pulmonary edema".
35. Give the definition of "Acute left atrial failure".
36. Give the definition of "Acute right ventricular heart failure".
37. Give the definition of "Syncope".
38. Give the definition of "Collapse".
39. Please write Classification of Ischemic (coronary) heart disease.
40. Please write Classification of Angina pectoris.
41. Classification of Myocardial infarction (MI).

LIST OF PRACTICAL SKILLS:

MODULE 1. Basic methods of examination of the patients in clinic of internal diseases

1. To conduct question the patient. To draw conclusion in relation to the anamnestic findings.
2. To conduct question the patient with pathology of lungs. To define basic symptoms.
3. To conduct question the patient with pathology of the cardiovascular system. To define basic symptoms.
4. To conduct question the patient with pathology of digestive organs. To define basic symptoms.
5. To conduct the general inspection of model patient. To define leading symptoms.
6. To conduct the inspection of head and necks of model patient. To define the clinical value of symptoms.
7. To conduct the inspection of trunk and extremities of model patient. To define the clinical value of symptoms.
8. Conduct the inspection of thorax of patient with pathology of respiratory organs, to estimate static signs.
9. Conduct the inspection of thorax of patient with pathology of respiratory organs, to estimate dynamic signs.
10. To conduct the inspection of the heart region, define the clinical value of symptoms.
11. To conduct the inspection of abdomen, define the clinical value of symptoms.
12. To conduct the palpation of thorax, to define the clinical value of symptoms.
13. To conduct the palpation of lymph nodes, estimate results.
14. To conduct the palpation of thyroid, estimate findings.
15. To conduct the palpation of pulse, define the clinical value of symptoms.
16. To conduct the palpation of the heart region, define the clinical value of symptoms.
17. To conduct the superficial palpation of abdomen, define the clinical value of symptoms.
18. To conduct the deep palpation of sigmoid colon, define the clinical value of symptoms.
19. To conduct the deep palpation of blind gut, define the clinical value of symptoms.
20. To conduct the deep palpation of ascending colon, to define the clinical value of symptoms.
21. To conduct the deep palpation of descending colon, define the clinical value of symptoms.
22. To conduct the deep palpation of transverse colon, define the clinical value of symptoms.
23. To conduct the deep palpation of livers, define the clinical value of symptoms.
24. To conduct the deep palpation of spleen, define the diagnostic value of symptoms.
25. To conduct palpation and percussion of kidneys, to define the diagnostic value of symptoms.

26. To define the lower edge of stomach, estimate findings.
27. Define the presence of liquid in an abdominal cavity, to give a clinical estimation.
28. Conduct measuring of blood pressure on upper extremities, to estimate findings.
29. Conduct measuring of blood pressure on lower extremities, to estimate findings.
30. To conduct comparative percussion of lungs and define the clinical value of symptoms.
31. To conduct topographical percussion of lungs and define the diagnostic value of symptoms.
32. To define active mobile of lower edge of lungs, estimate the diagnostic value of symptoms.
33. To conduct percussion of heart, define the borders of relative dullness of heart, give a clinical estimation.
34. To conduct percussion of heart, define the borders of absolute dullness of heart, give a clinical estimation.
35. By the method of percussion to define the width of vascular bunch, estimate findings.
36. By the method of percussion to define the borders of liver, estimate the diagnostic value of symptoms.
37. By the method of percussion to define the borders of spleen, give a clinical estimation.
38. To conduct auscultation of lungs, define the quantitative and qualitative changes of breathing, give a clinical estimation.
39. To conduct auscultation of lungs, define additional clinical noises, give a clinical estimation.
40. To conduct research of bronchophony, give a clinical estimation.
41. To conduct auscultation of arteries, define the diagnostic value of symptoms.
42. To conduct an auscultation of the heart, define the changes of his tones, give a clinical estimation.
43. To conduct an auscultation of the heart, define the diagnostic value of cardiac murmurs.
44. To analyse ECG of patient with violation of automatism of heart.
45. To analyse ECG of patient with violation of excitability of heart. To conduct differential diagnostics of extrasystoles.
46. To analyse ECG of patient with the asequence of heart.
47. To analyse ECG of patient with the combined violation of excitability and conductivity of heart.
48. To analyse FCG of patient with the pathology of valvular apparatus of heart.

MODULE 2. Basic Symptoms and Syndromes of Diseases of Internal Organs

1. To carry out examination of the patient with mitral valve disease. To define the major symptoms and syndromes.

2. To conduct examination of the patient with aortic valve disease. To identify the major symptoms and syndromes.
3. To carry out examination of the patient with arterial hypertension. To define the major symptoms and syndromes.
4. To make inquiring of the patient with coronary heart disease (stable angina pectoris), to detail the complain pain in the heart, to define the functional class of the patient.
5. To conduct general inspection and objective examination of the patient with acute myocardial infarction. To identify the major symptoms and syndromes.
6. To evaluate the ECG of the patient with acute myocardial infarction. To define the character and localization of myocardial damage.
7. To carry out examination of the patient with heart failure. To define the major symptoms, syndromes and functional class of the patient.
8. To carry out inquiring of the patient with obstructive lung disease. To define the major symptoms, syndromes, with taking into consideration spirometry results determine the stage of the disease.
9. To conduct palpation, percussion of the chest and auscultation of the lung in the patient with obstructive lung disease. To define the major symptoms and syndromes.
10. To conduct inquiring and objective examination of the patient with pneumonia. To identify the major symptoms and syndromes.
11. To carry out inquiring and objective examination of the patient with pleuritis. To identify the character of pleuritis and chief symptoms and syndromes on this.
12. To conduct inquiring, inspection and palpation of the abdomen in patient with gastritis. To recognize the major syndromes.
13. To carry out inquiring, inspection and palpation of the abdomen in patient with peptic ulcer disease. To identify the chief syndromes and try to recognize the localization of ulcer.
14. To conduct inquiring, inspection and palpation of the abdomen in patient with chronic cholecystitis. To check the prominent symptoms specific for Biliary system damage. To define the major syndromes.
15. To conduct inquiring, inspection and palpation of the abdomen in patient with chronic cholangitis. To define the major syndromes.
16. To evaluate the results of duodenal sound examination in patient with Biliary system damage. To identify the major symptoms and syndromes.
17. To carry out inquiring and objective examination in patient with chronic hepatitis or liver cirrhosis. To define the major symptoms and syndromes.
18. To carry out inquiring and objective examination in patient with chronic hepatitis or liver cirrhosis. To define the major syndromes based on Biochemical blood and urinary tests.
19. To conduct inquiring and objective examination in patient with chronic renal diseases (glomerulonephritis or pyelonephritis). To classify the major syndromes.

20. To analyze the results of laboratory examination: general urine test, urine analysis By Nechiporenko and Zemnitsky. To define the major symptoms and syndromes. To make conclusion on the subject of the character of renal damage.
21. To conduct inquiring and objective examination in patient with anemia. To identify the chief symptoms and syndromes, with taking into consideration results of clinical blood test determine the type of anemia.
22. To analyze the results of clinical blood test in patient with leukemia. To determine the chief laboratory symptoms and type of chronic leukemia.
23. To carry out inquiring and objective examination in patient with diabetes mellitus. To assess the pulse on the arteries of upper and low extremities and blood pressure. To define the major symptoms and syndromes.

«0» variant of examination ticket

Petro Mohyla Black Sea National University
Medical institute
Department of propaedeutic and surgical disciplines

Higher education level - Master of Science
studying direction: 22 "Health Care"
specialty: 222 "Medicine"

Name of the discipline – **PROPEDEUTICS OF INTERNAL MEDICINE**

Variant № 0

1. What respiration types are known to you? What are the signs typical for thoracic (costal) respiration? What are the signs typical for abdominal respiration? What are the signs typical for mixed respiration? – **maximum 20 points.**
2. Cardiac conduction system, please list the structural elements that it includes – **maximum 20 points.**
3. Practical skill: To conduct palpation and percussion of kidneys, to define the diagnostic value of symptoms.– **maximum 20 points.**
4. Situational problems: In patient K. borders of relative cardiac dullness are the following: right - 1cm laterally of the right edge of the sternum; left - along anterior axillary line; upper - upper edge of the 3rd rib; borders of absolute cardiac dullness are following: right - along the left edge of the sternum; left - 2cm medially of the anterior axillary line; upper - 4 rib. Dilation of which part of the heart is observed in patient? And why?– **maximum 20 points.**

Head of the Department

prof. Zak M.

Examiner

prof. Zak M.

An example of the final control work for Module 1

KROK tests

A 37 y.o. woman is suffering from squeezing substernal pain on physical exertion. On examination: AP- 130/80 mm Hg, heart rate=pulse rate 72 bpm, heart borders are dilated to the left side, aortic systolic murmur. ECG- signs of the left venticle hypertrophy. What method of examination is the most informative in this case?

- A. Echocardiography
- B. Phonocardiography
- C. Coronarography
- D. Sphygmography
- E. X-ray

After objective clinical examination a 12 year old child was diagnosed with mitral valve prolapse. What complementary instrumental method of examination should be applied for the diagnosis confirmation?

- A. Echocardiography
- B. Roentgenography of chest
- C. Phonocardiography
- D. ECG
- E. Velocergometry

A 54 year old female patient was admitted to the hospital with evident acrocyanosis, swollen cervical veins, enlarged liver, ascites. Cardiac borders are dilated. Heart sounds cannot be auscultated, apical beat is undetectable. AP is 100/50 mm Hg. X-ray picture of chest shows enlarged heart shadow in form of a trapezium. What pathology might have caused these symptoms?

- A. Cardiac tamponade
- B. Exudative pleuritis
- C. Complex heart defect
- D. Acute cardiac insufficiency
- E. Hiatal hernia

And so 26 tests with the following parsing of typical mistakes.

10.METHODS OF CONTROL AND EVALUATION OF STUDENTS

Methods of control

Assessment of the discipline is carried out in accordance with the program and Instruction of the European Credit Transfer and Accumulation System (ECTS) which had been

approved by the Ministry of Health of Ukraine (Letter of the Ministry of Health of Ukraine No. 08.01-47 / 10395 dated 15.04.2014).

Students study current educational activities in practical classes in accordance with specific goals. Such means are used to determine the level of students' training: test control, solution of situational problems, control of practical skills.

Methods of control:

Theoretical knowledge - testing, individual interviewing, writing.

Practical skills:

- Technique of carrying out of complains;
- Technique of carrying out of the general and local inspection of the patient;
- Palpation, percussion, auscultation;
- To analyse the data of Instrumental and Laboratory Examination;

Forms of control:

The current control - is carried out in accordance with the specific goals of each practical lesson. For control it is recommended to use the following means of diagnosing the level of student training: computer tests, control of practical skills from methods of examination of the patient with further interpretation of the data obtained, analysis of the results of instrumental and laboratory studies.

Differential control (Submodule) - is carried out at the last lesson of the content module with the grading of "pass" or "not pass" (in the latter case, the student must pass an Submodule for the second time).

Assessment of independent work - Assessment of students' independent work, which is envisaged in the topic along with classroom work, is carried out during the current control of the topic at the appropriate classroom session. The evaluation of topics that are made only for independent work and not included in the topics of classroom training is monitored at the final control.

Final control - conducted to evaluate the results of the training on the national scale and the ECTS scale and carried out at the last lesson of the Module.

11. Form of final control

The final control consists of the following parts:

10.1 Computer Testing: work is evaluated as "pass" or "not pass". The student must receive 70.0 points in order to be allowed to take the theoretical part of the exam.

10.2 Practical skills: palpation, percussion, auscultation, Methods of arterial pressure measurement investigation of pulse. Practical skills are evaluated in the next way:

Criteria:

Mark "excellent" – without remarks.

Mark "good" - methodologically correct, but there are some remarks.

Mark "satisfactory" – answer isn't full and there are mistakes in methods of making physical examination.

Mark "unsatisfactory" - there are critical mistakes in answering and in the methods and rules of physical examination methods.

10.3 Important types of educational process are examination of patient and writing a case history. Module 1 includes writing anamnestic part of case history. Module 2 includes writing full case history. Student will receive marks for both of case histories.

Criteria:

Mark "excellent" – without remarks and methodologically correct.

Mark "good" - methodologically correct, but some sections are not detailed enough.

Mark "satisfactory" – there are mistakes in completeness and consistency of the section description;

Mark "unsatisfactory" - there are critical mistakes in structure of case history and in the methods and rules of physical examination methods. (Student will receive 0 points and will have a possibility to write it for a second time.)

10.4 Student will have a oral examination , for which student can receive a MAX 80 points.

Student's current educational activities are evaluated on a 4-point (traditional) scale (excellent, good, satisfactory, unsatisfactory).

Mark "excellent" – 61 – 80;

Mark "good" – 41 – 60;

Mark "satisfactory" – 20 – 40;

Mark "unsatisfactory" - < 20.

Scheme of calculation and distribution of points

The current evaluation of students on the proper topics is conducted the traditional 4-mark system (excellent, good, satisfactory, unsatisfactory) with the subsequent count in a multimark scale. It takes into account all types of works provided for by the curriculum. The student should get an assessment on each topic.

Mark "excellent" it is proposed in the case when a student knows sense practical training with clinical examples; gives exhaustively exact and specific answers without questions; lays out material without errors and inaccuracies; freely decides tasks and executes the practical tasks of different degree of complication.

Mark "good" is when a student knows content of practical training and well understands it, correctly answers on the question, consistently and systematic, but they are not exhaustive, although on additional questions a student answers without errors; decides all tasks and executes the practical tasks, feeling complications only in difficult cases.

Mark "satisfactory" belongs to the student on the basis of his knowledge of the content of practical training and at the satisfactory level of his understanding. A student is able decides the tasks (simplified) tasks with help of the additional questions; decides tasks and executes practical skills, feeling complications in simple cases; not be able to independently systematic to expound an answer, but on the simple questions answers correctly.

Mark "unsatisfactory" is proposed in the cases when knowledge and ability of student does not respond to request "satisfactory" estimation.

Module 1 – 17 lessons; Module 2 – 11 lessons.

BALL DISTRIBUTION

№ з/п	Topics	Кількість балів, що відповідають традиційній оцінці			
		«5»	«4»	«3»	«2»
MODULE 1. Basic methods of examination of the patients in clinic of internal diseases					
1.	The scheme of case history. Conducting questioning of the patient.	6	5	4	0
2.	General inspection of patient. Inspection of separate parts of a body: head and neck, extremities, trunks and its diagnostic	6	5	4	0

№ з/п	Topics	Кількість балів, що відповідають традиційній оцінці			
		«5»	«4»	«3»	«2»
	value. Diagnostic value of the signs received during the inspection of the patient.				
3.	Main complaints of the patients with lung diseases. Static and dynamic examination of the chest. Chest palpation.	6	5	4	0
4.	Percussion of the Lungs. Methods and techniques of comparative percussion of the Lungs. Methods and techniques of topographic percussion of the Lungs.	6	5	4	0
5.	Auscultation of the Lungs: main respiratory sounds (vesicular and bronchial respiration).	6	5	4	0
6.	Auscultation of the Lungs: accessory respiratory murmurs (rales, crepitation, pleura friction rub).	6	5	4	0
7.	Questioning and general examination of the patients with the disorders of cardiovascular system. Conducting patients. Writing anamnestic part of case history.	6	5	4	0
8.	The pulse and arterial pressure study.	6	5	4	0
9.	Inspection and palpation of the precordial area. Determination of the borders of relative and absolute heart dullness.	6	5	4	0
10.	Auscultation of the heart: heart sounds, their reduplication and splitting and additional sounds.	6	5	4	0
11.	Auscultation of the heart: organic and functional heart murmurs.	6	5	4	0
12.	Methods of the registration and detailed study of ECG. ECG signs of atrial and ventricular hypertrophy.	6	5	4	0
13.	Electrocardiographical examination of the patients with disorders of automaticity and excitability.	6	5	4	0
14.	ECG Examination of the Patients with Infringement of Conductive Function. Basis of Realization of Electroimpulse Therapy. ECG signs of combined cardiac arrhythmias.	6	5	4	0
15.	Questioning and inspection of the patients with the disorders of digestive system. Inspection and superficial palpation of the abdomen.	6	5	4	0
16.	Deep sliding methodical palpation of intestine, stomach.	6	5	4	0
17.	Deep sliding methodical palpation of liver, spleen and kidneys.	6	5	4	0
	Case history(Anamnestic part of the case history)	6	5	4	0
	Individual work	The maximum score -12 points			
	Total points of current semester training *	The maximum score –120 The minimum score – 72			
	Final module control	The maximum score – 80 It is considered passed – 50			

№ з/п	Topics	Кількість балів, що відповідають традиційній оцінці			
		«5»	«4»	«3»	«2»
	Total Module1	The maximum score – 200 The minimum score – 122			
<p>The maximum number of points that a student can score for the current semester training for admittance to the score is 120 points. This score is calculated by multiplying the number of points that are rated "excellent" by the number of topics in the module ($6 \times 17 = 102$) and add points of case history (max 6 points) and individual work (max 12 points): $6 \times 17 + 6 + 12 = 120$.</p> <p>The minimum number of points that the student should collect for the current training semester work for admission to the score is 72 points.</p> <p>This score is calculated by multiplying the number of points that are rated "satisfactory" by the number of topics in the module ($4 \times 17 = 68$) and add minimum amount points of case history $4 \times 17 + 4 = 72$.</p>					
MODULE 2. Basic Symptoms and Syndromes of Diseases of Internal Organs.					
1.	Mitral and Aortal Valvular Diseases of the Heart: the Main Symptoms and Syndromes on the Based on Clinical and Instrumental Methods of Investigation.	9	7	5	0
2.	Syndrome of Heart Failure: the main Clinical and Instrumental Methods of Investigation. Acute and chronic heart failure.	9	7	5	0
3.	The Main Syndromes and Symptoms of Essential and Symptomatic Arterial Hypertension. Hypertonic Crisis.	9	7	5	0
4.	Ischemic Heart Disease. The Main Symptoms and Syndromes of Angina Pectoris and Myocardial Infarction.	9	7	5	0
5.	The Basic Clinical Signs of Chronic Bronchitis and Bronchial Asthma. Chronic Obstructive Pulmonary Disease. Syndrome of increased airiness of the pulmonary tissue.	9	7	5	0
6.	Pneumonias: Symptoms and Syndromes on the Basis of Clinical - Instrumental and Laboratory Methods of Examination. Pneumosclerosis. Lung cancer. Syndrome of the pulmonary tissue consolidation . Syndrome of Respiratory Failure.	9	7	5	0
7.	The Main Symptoms and Syndromes on Dry and Exudative Pleuritis. Instrumental and Laboratory Methods of Examination. Syndromes of the fluid and air accumulation in pleural cavity.	9	7	5	0
8.	Clinical, Instrumental and Laboratory Examination of the Patients with Chronic Gastritis, Gastric and Duodenal Ulcer. Main symptoms and syndromes.	9	7	5	0
9.	The Basic Symptoms and Syndroms of Hepato-biliary Diseases: Chronic Cholecystitis, Cholangitis, Cholelithiasis, Chronic Hepatitis and Hepatic Cirrhosis.	9	7	5	0
10.	The Main Symptoms and Syndromes of Renal Diseases -	9	7	5	0

№ з/п	Topics	Кількість балів, що відповідають традиційній оцінці			
		«5»	«4»	«3»	«2»
	Acute and Chronic Glomerulonephritis and Pyelonephritis. General clinical analysis of urine				
11.	The Main Symptoms and Syndromes of Anemias. Clinical Blood Analysis.				
	Case history	9	7	5	0
	Individual work	The maximum score 12 points			
	Total points of current semester training *	The maximum score – 120 The minimum score – 60			
	Final module control	The maximum score – 80 It is considered passed – 50			
	Total Module 2	The maximum score – 200 The minimum score – 110			
<p>The maximum number of points that a student can score for the current semester training for admittance to the score is 120 points. This score is calculated by multiplying the number of points that are rated "excellent" by the number of topics in the module and add points of case history and individual work: $9 \times 11 + 9 + 12 = 120$.</p> <p>The minimum number of points that the student should collect for the current training semester work for admission to the score is 60 points. This score is calculated by multiplying the number of points that are rated "satisfactory" by the number of topics in the module ($5 \times 11 = 55$) and add minimum amount points (5) of case history $5 \times 11 + 5 = 60$.</p>					

The maximum number of points that a student can get during a module is 200, including the current educational activity - 120 points (60%). As a result of module final control - 80 points (40%).

Score module is defined as the sum of marks for current educational activity (in points) and assessment of the final module control (in points), which is proposed in the assessment of theoretical knowledge and practical skills according to lists of discipline within the program.

Assessment of the discipline "Propedeutics of Internal Medicine" is given to students who passed all modules. The grade of the discipline is the average of the grades of the modules of which the discipline is structured. The minimum grade for the discipline is 116 points.

Additional discipline points are added to students who have scholarly publications or have won any prizes in international and all-Ukrainian competitions and competitions, but the total amount of credits for the discipline may not exceed 200 points.

The objectivity of evaluating student educating activity should be verified by statistical methods (the correlation coefficient between current performance and the results of total module control).

The final conversion of the points in accordance with the European Credit Transfer and Accumulation System (ECTS) and 4-point (traditional) scale.

Score points are independently converted into both ECTS and 4-point scales. Students' points are ranked on the ECTS scale as follows:

Points ECTS	The statistical indicator
A	The best 10% of students
B	The next 25% of students
C	The next 30% of students
D	The next 25% of students
E	The last 10% of students

Students who have received FX and F grades ("2") are not included in the list of students who are ranked, even after the module has been reassigned. After repeating an examination such students will automatically receive an "E" grade.

Estimation from discipline of FX, F ("2") is proposed to the students which are not passed although one module from discipline after completion of its study. Estimation of FX ("2") is proposed to the students, which collected the least of marks for current educational activity, but did not make the module final control. They have a right to the repeated drafting of final module control no more than two times with permission, ratified by the rector. Students which got mark F for the completed studies of discipline must pass the repeated studies from the proper module. Decision is made under the guidance of the university in accordance with normative documents, ratified in accordance with established procedure.

Scores of practice for students who successfully completed the program, converted into traditional 4-point scale for absolute criteria:

Points from discipline	Grade 4-point scale score
From 170 to 200 points	5
From 140 to 169 points	4
From 139 points to the minimum	3
The number of points that student must collect	2

The ECTS score is not converted to the traditional 4-point scale because the ECTS scale and the four-point scale are independent.

METHODICAL SUPPORT (RECOMMENDED BOOKS)

Basic literature

1. Propaedeutics yo Internal Medicine: Diagnostics; textbook for English learning Students of higher medical schools; Part 1.; Ed. 2 / O.N. Kovalyova, T.V. Ashcheulova – Vinnytsya: Nova Knyha publishers, 2011. – 424 p.
2. Propaedeutics to Internal Medicine: Syndromes and diseases; textbook for English learning Students of higher medical schools; Part 2; Ed. 2 / O.N. Kovalyova, S. Shapovalova, O.O. Nizhegorodtseva – Vinnytsya: Nova Knyha publishers, 2011. – 264 p.
3. Macleod's Clinical Examination / Ed. G.Douglas, F.Nicol, C.Robertson.– 13th ed.– Elsevier. 2013. – 471 p.

Additional literature:

1. Internal diseases: introductory course - edited by V. Vasilenko and A. Grebenev, Moscow, 1990.
2. Internal diseases edited by V.M. Bogolyubov. Moscow, 1987.
3. Hutchison's Clinical methods: Michael Swash, London, 1999.

4. How to read ECG. Third editn. Oradell. New Jersey.1983.
5. Bates' Guide to Physical Examination and History Taking /Ed. Lynn S. Bickley, Peter G. Szilagyi. – Wolters Kluwer, 2017. – 1066 p.