

MINISTRY OF HEALTH OF UKRAINE  
Zaporizhzhia State Medical University

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# **Propedeutics of Internal Medicine**

## **SECTION 1**

Collection of tests for the third-year foreign students specialty: 222 "Medicine"

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and it is recommended for the use in educational process for foreign students.  
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## PREFACE

The academic discipline "Propedeutics of Internal Medicine" includes mastering to conduct questioning and physical examination of patients and analyze their results in the clinic of internal medicine; investigate the results of basic laboratory and instrumental methods of research; define leading syndromes and symptoms in the clinic of internal diseases.

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.

Interdisciplinary connections: discipline "Propaedeutics of Internal Medicine" based and integrates with subjects: normal anatomy, topographic anatomy, pathological anatomy, normal physiology, pathological physiology, pharmacology.

The collection of tests is intended for preparation for the semester final test and covers all topics from Module 1.

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

***Subsection 1. Introduction in Clinic of Internal Diseases. Main Rules of Questioning and Inspection of the Patient.***

*Topic 1. The scheme of case history. Conducting questioning of the patient.*

1. For anamnesis of the disease, the following data are required except:

- A. When the disease began?
- B. How the disease began?
- C. Heredity
- D. What research was carried out, their results?
- E. What treatment was carried out and what is its effect?

2. For a life history, the following data are required except:

- A. General biographical information
- B. Housing and living conditions
- C. Heredity
- D. What surveys were carried out?
- E. Patients' diseases

3. Family and hereditary history is all except:

- A. The health of the parents
- B. Brother's health
- C. Sisters' health
- D. The health of the wife
- E. Children's health

4. Allergic history is everything except:

- A. Dust allergy

- B. Food allergy
- C. Pollen allergy
- D. Lactose intolerance
- E. Allergy to cat saliva

5. The medical history plan includes:

- A. Anamnesis of disease
- B. Complaints
- C. Anamnesis of life
- D. An objective examination of the patient
- E. All of the above

6. Complaints from the cardiovascular system do not include:

- A. Pain in the region of the heart
- B. Shortness of breath
- C. Edema
- D. Cough
- E. Vomit

7. The case history contains all sections except:

- A. Complaints
- B. Anamnesis of disease
- C. Anamnesis of life
- D. Patient`s history
- E. Epicrisis

8. From what system you should start Interrogation of systems?

- A. Doesn't matter
- B. Cardiovascular

- C. Respiratory
- D. Complaints about general condition
- E. Nervous

9. The patient complains about inspiratory shortness of breath, which occurs during normal physical exertion, palpitations, discomfort and pain in the heart area, weakness and fatigue. What system (s) should be considered defeated?

- A. Digestive
- B. Respiratory
- C. Cardiovascular
- D. Digestive and cardiovascular
- E. Respiratory and cardiovascular

10. The patient complains about a cough with a viscous, difficult to separate sputum "rusty" color, weakness, sweating, fever 39°C and dizziness. What system (s) should be considered defeated?

- A. Digestive
- B. Respiratory
- C. Cardiovascular
- D. Digestive and cardiovascular
- E. Respiratory and cardiovascular

11. The patient complains of dizziness, pain in the occipital region, increased irritability. Which system is affected?

- A. General state
- B. Respiratory
- C. Cardiovascular
- D. Digestive
- E. Nervous

12. The appearance of acute pain in the left side of the chest during deep breathing and coughing indicates a lesion of system:

- A. Respiratory
- B. Cardiovascular
- C. Digestive
- D. Urinary
- E. Nervous

13. What complaint is not related to dyspeptic symptoms?

- A. Belching
- B. Enlargement of the abdomen
- C. Heartburn
- D. Nausea
- E. Vomiting

14. The patient has been suffering from bronchial asthma for 8 years. He was admitted to the hospital with complaints of dry cough, expiratory dyspnea, attacks of asthma, repeated 2-3 times a day, chest pain, sweating, rapid fatigue. Highlight a secondary complaint:

- A. Asthma attacks
- B. Expiratory dyspnea
- C. Dry cough
- D. Chest pain
- E. Sweating

15. The man was taken to the hospital with complaints of burning pain in the region of the heart, which radiates to the left shoulder and left scapula, lasts about an hour. What is not indicated in the description of the pain syndrome?

- A. Localization of pain
- B. Nature of pain
- C. Cause of pain



- D. Irradiation of pain
- E. Duration of pain

16. In what sequence you should ask the patient?

- A. Anamnesis of life, Anamnesis of disease, Complaints, Passport part
- B. Passport part, Complaints, Interrogation of systems, Anamnesis of disease, Anamnesis of life
- C. Complaints, Anamnesis of disease, Anamnesis of life
- D. Passport part, Interrogation of systems, Anamnesis of disease, Anamnesis of life, Complaints
- E. Anamnesis of disease, Complaints, Interrogation of systems

17. Determine the order of doctor`s diagnostic search:

- A. Anamnesis of the disease - preliminary diagnosis - interrogation of systems
- B. Complaints - interrogation of systems - medical history – past history - objective examination of the patient - preliminary diagnosis
- C. Complaints - interrogation of systems - preliminary diagnosis - anamnesis of the disease - anamnesis of life - objective examination of the patient
- D. Anamnesis of the disease - anamnesis of life - preliminary diagnosis - complaints - objective examination of the patient
- E. Questioning by systems - medical history – past history - objective examination of the patient - complaints - preliminary diagnosis

18. Complaints are divided into:

- A. Main and additional
- B. Important and unimportant
- C. Subjective and objective
- D. Motivated by illness and unmotivated

E. First and secondary

19. During collecting an anamnesis of the disease, the doctor asks questions about:

- A. The time of onset of the first symptoms of the disease
- B. The time of the first visit to the doctor about the disease
- C. The course of the disease: exacerbations, improvements
- D. The cause of the recent deterioration in health, which led to hospitalization
- E. All of the above

20. From the list of questions, indicate the one that relates to the medical history:

- A. Place of birth
- B. Family history
- C. Exacerbations of the disease
- D. Bad habits
- E. Work history

21. What is propaedeutics?

- A. Introductory course to the clinical discipline, which involves learning the methods of examination of the patient and the semiotics of the disease
- B. Introductory course to the theoretical discipline, which involves teaching semiotics of disease
- C. Introductory course to the clinical discipline, which involves teaching methods of treatment of the patient
- D. Introductory course to the clinical discipline, which involves training in methods of prevention of life-threatening diseases
- E. The main course to the clinical discipline, which involves learning the methods of laboratory examination of the patient

22. How describe pain (dolor)?

- A. Character, localization, irradiation, intensity, in connection with which it arises or intensifies, from what it stops or decreases, what accompanies it, duration, periodicity
- B. Character, localization, irradiation
- C. Character, in connection with which it arises or intensifies, from what it stops or decreases, what accompanies it, duration, periodicity
- D. Character, localization, intensity, in connection with which it arises or intensifies, from what it stops or decreases, what accompanies it, duration, periodicity
- E. Character, localization, irradiation, in connection with which it arises or intensifies, from what it stops or decreases, what accompanies it, duration, periodicity

23. What is a symptom?

- A. The set of symptoms combined with a common pathogenesis; a combination of symptoms characteristic of one or more diseases
- B. Sign, manifestation of a pathological condition, disease
- C. Complaints of the patient
- D. Habitus
- E. A sign of the disease that determines only laboratory change

24. Medical history:

- A. It is the most important medical document drawn up for every patient who is examined or treated in a hospital
- B. It is the most important medical document drawn up for several patients in the ward who have been hospitalized at the same time, who are being examined or treated in a hospital
- C. It is the most important medical document drawn up for every patient who is only treated in hospital

- D. This is the most important medical document drawn up for each patient who is examined in the hospital
- E. It is the most important medical document drawn up only for an adult patient who is being examined or treated in a hospital

25. What does the term "tenesmus" mean?

- A. Pain during defecation
- B. Constipation
- C. False urges to defecate
- D. Diarrhea
- E. Alternation of loose stools and constipation

26. Complaints can be:

- A. Main complaints and complementary complaints (basic and additional)
- B. basic, additional, insignificant
- C. First, second and third
- D. Basic, additional, insignificant, erroneous
- E. Systemic

27. Main complaints (basic) is:

- A. Those that forced the patient to see a doctor, and they are usually the main symptoms of the disease
- B. Those that forced the patient to see a doctor, however, are not the main symptoms of the disease
- C. Complaints that the patient could either forget or ignore
- D. The most common
- E. Those that have localization, nature, irradiation, duration, causes and means to eliminate pain, which are accompanied by other unpleasant sensations

28. Irradiation of pain is:

- A. Nature of pain
- B. Spread of pain
- C. Increased pain
- D. Aggravation of pain
- E. Pain intensity

29. What is remission of the disease?

- A. This is the activation of the disease with the most difficult sensation for the patient
- B. This is a mild course of the disease
- C. This is the absence of clinical manifestations of the disease, but there are general complaints
- D. This is a temporary improvement in the patient's condition, which is manifested in the slowing or cessation of disease progression, partial or reversible development, complete disappearance of clinical manifestations of the pathological process
- E. This is a deliberate exaggeration of the symptoms of the existing disease

30. Dysuric complaints are:

- A. Patient complaints of discomfort in the upper third of the abdomen, early satiety, feeling of fullness after eating, epigastric heartburn
- B. Frequent painful cough
- C. Frequent painful urination
- D. Pain in the heart
- E. Painless urination

31. Dyspeptic complaints are:

- A. Complaints about epigastric heartburn, regurgitation and vomit
- B. Complaints about constipation
- C. Complaints about the inability to master the skills of reading texts
- D. Complaints about discomfort in the low part of the abdomen
- E. Complaints about discomfort in the upper third of the abdomen

32. The effectiveness of questioning the patient depends mostly on:

- A. Places of interrogation
- B. Establishing contact with relatives
- C. Doctor communication skills
- D. Patient`s desire
- E. Time of day

33. Complementary complaints (additional):

- A. Those that forced the patient to see a doctor, and they are usually the main symptoms of the disease
- B. Those that forced the close people to see a doctor, however, are not the main symptoms of the disease
- C. Complaints that the patient could either forget or ignore
- D. The most common
- E. Those that have localization, nature, irradiation, duration, causes and means to eliminate pain, which are accompanied by other unpleasant sensations

34. A 35-year-old patient come to a doctor with complaints of the pain in the epigastric region, nausea, cough with sputum, dizziness, noise in ears. In what order should the system be questioned?

- A. General complaints, respiratory, cardiovascular, digestive, urinary, nervous systems
- B. Digestive, respiratory, nervous, cardiovascular, urinary, general

complaints

- C. Cardiovascular, digestive, nervous, respiratory, urinary, musculoskeletal systems
- D. General complaints, cardiovascular, digestive, respiratory, urinary
- E. Digestive, nervous, respiratory, cardiovascular, urinary, musculoskeletal

35. A 20-year-old patient after 3 weeks of the sore throat has edema on the face, pain in back on both sides. The defeat of which system can be assumed?

- A. Nervous
- B. Respiratory
- C. Cardiovascular
- D. Urinary
- E. Digestive

*Topic 2. General inspection of patient. Inspection of separate parts of a body:  
head and neck, extremities, trunk and its diagnostic value*

1. Which localization of edemas have patients with heart failure?
  - A. Back
  - B. Face
  - C. On the chest
  - D. On the lower extremities
  - E. On the upper extremities
  
2. Which localization of edemas have patients with kidney diseases?
  - A. Back
  - B. Face
  - C. On the chest
  - D. On the lower extremities
  - E. On the upper extremities
  
3. A 67-year-old man complains of expiratory dyspnea during physical activity, cough with mucopurulent sputum. History of chronic bronchitis. The most likely type of cyanosis this patient will have:
  - A. Diffuse
  - B. Peripheral
  - C. Local
  - D. Lower extremities
  - E. Cyanosis is not typical
  
4. What is the skin color in patients with erythema?
  - A. Yellow
  - B. Pale
  - C. Crimson-red



- D. Cyanotic
- E. Gray

5. What is the skin color in patients with anemias?

- A. Yellow
- B. Pale
- C. Crimson-red
- D. Cyanotic
- E. Gray

6. What is the skin color in patients with jaundice?

- A. Yellow
- B. Pale
- C. Crimson-red
- D. Cyanotic
- E. Gray

7. A state of impaired consciousness, characterized by a complete loss of reactions to external stimuli, reflexes are absent, relaxation of all muscles is observed and the maintenance of respiratory and circulatory functions at a minimum level is called:

- A. Lethargy
- B. Obtundation
- C. Stupor
- D. Coma (unconsciousness)
- E. Alert

8. Deep sleep, patient can be aroused only by vigorous and repetitive stimulation. Reflexes are preserved, but somewhat slower.

- A. Delirium

- B. Dizziness
- C. Stupor
- D. Coma
- E. Obtundation

9. Deformation of nails in the form of "watch glasses" and the terminal phalanges of the fingers in the form of "drumsticks" can be observed in all of the listed diseases, EXCEPT:

- A. Liver cirrhosis
- B. Acute bronchitis
- C. Lung abscess
- D. Congenital heart disease
- E. Infectious endocarditis

10. Patient D., 28 years old. The condition is serious. The position in the bed is forced with the head thrown back and the limbs bent to the torso. Abundant hemorrhagic rash on the skin. About what disease can you think at first?

- A. Exudative pleurisy
- B. Liver cirrhosis
- C. Acute appendicitis
- D. Tetanus
- E. Meningitis

11. Patient M., 35 years old, was admitted to the emergency department, unconscious. The skin is pale, dry. The smell of acetone from the mouth. Breathing is rare, noisy and deep. The tone of the eyeballs is reduced. The pupil does not respond to light, tendon reflexes are depressed. Suppositional diagnosis?

- A. Cerebral coma
- B. Hypoglycemic coma
- C. Diabetic coma
- D. Hepatic coma

E. Uremic coma

12. Patient K., 57 years old. Moderate condition. The body weight is reduced. The skin is yellow, dry. On the skin of the face, those anterior surfaces of the chest are single "spider veins", a bright crimson tongue and hyperemia on the palms. Suppositional diagnosis?

- A. Liver cancer
- B. Cholecystitis
- C. Hepatitis
- D. Liver cirrhosis
- E. Pancreatitis

13. Facial expression in patients with heart failure is called:

- A. Facies mitralis
- B. Facies aortalis
- C. Facies Corvisara
- D. Facies Hippocratica
- E. Facies selenica

14. Facies mitralis is characterized by:

- A. Pallor
- B. Yellow skin
- C. Cyanotic blush
- D. Moon-shaped face
- E. Mask-shaped face

15. Facies aortalis is characterized by:

- A. Cyanosis
- B. Pallor
- C. Jaundice

- D. Subicteric
- E. Chlorosis

16. Which disease is characterized by a blush in the form of a "butterfly"?

- A. Pneumonia
- B. Glomerulonephritis
- C. Systemic lupus erythematosus
- D. Peptic ulcer disease
- E. Mitral regurgitation

17. Which disease is characterized by blushing cheek on the affected side?

- A. Pneumonia
- B. Bronchitis
- C. Systemic lupus erythematosus
- D. Mitral stenosis
- E. Peptic ulcer disease

18. Which complaint does not relate to a "general complaints"?

- A. Weakness
- B. Headache
- C. Itchy skin
- D. Edema
- E. Changes by the organs of movement

19. What is an exophthalmos?

- A. Pain in the eyeballs
- B. Feeling of sand in the eyes
- C. Bulging or protruding eyeballs
- D. Injection of scleral vessels

E. Swelling of the eyelids

20. Patient 37 years old, body weight is reduced. Exophthalmos, sparkling eyes and rare blinking. About what disease can you think first of all?

- A. Hypothyroidism
- B. Thyrotoxicosis
- C. Acromegaly
- D. Lymphogranulomatosis
- E. Thyroid cancer

21. Patient 27 years old, face is dull, narrowed eye slits, the face features smoothed down, the hair is absent on the outward portions of the. About what disease can you think first of all?

- A. Hypothyroidism
- B. Thyrotoxicosis
- C. Acromegaly
- D. Lymphogranulomatosis
- E. Thyroid cancer

22. Which disease is accompanied by lymph node enlargement to a huge size?

- A. Lymph node tuberculosis
- B. Acute leukemia
- C. Lymphogranulomatosis
- D. Hemophilia
- E. Hemolytic anemia

23. What type of jaundice is accompanied by severe itching of the skin?

- A. Mechanical
- B. Parenchymal
- C. Hemolytic

- D. Nutritional
- E. Jaundice of newborns

24. Posture of an 'arrogant' person is a characteristic for:

- A. Left atrioventricular stenosis
- B. Caseous pericarditis
- C. Fibrinous pericarditis
- D. Ascites
- E. Pleuritis

25. What is orthopnea?

- A. Horizontal with raised lower limbs
- B. Half-sitting or sitting position
- C. Lying on his back
- D. Lying on his back at an angle of 15-30 degrees, feet raised above his head
- E. Vertically

26. Patient has face with enlarged prominent parts (such as nose, chin, and cheek bones) and enlarged hands. About what disease can you think first of all?

- A. Hypothyroidism
- B. Thyrotoxicosis
- C. Acromegaly
- D. Lymphogranulomatosis
- E. Thyroid cancer

27. Patient has an intense red, moon-like glittering face with a beard and mustaches in women. About what disease can you think first of all?

- A. Hypothyroidism
- B. Thyrotoxicosis
- C. Acromegaly

- D. Itsenko-Cushing disease
- E. Thyroid cancer

28. Patient`s face is characterized by sunken eyes, pinched nose, deadly livid and cyanotic skin, which is sometimes covered with large drops of cold sweat. About what disease can you think first of all?

- A. Hypothyroidism
- B. Thyrotoxicosis
- C. Acromegaly
- D. Itsenko-Cushing disease
- E. Diffuse peritonitis

29. Patient`s face is characterized by sunken eyes, pinched nose, deadly livid and cyanotic skin, which is sometimes covered with large drops of cold sweat. About what type of face do you think?

- A. Facies mitralis
- B. Facies aortalis
- C. Facies Corvisara
- D. Facies Hippocratica
- E. Facies selenica

30. Patient`s face with renal diseases is puffy, pale. About what type of face do you think?

- A. Facies mitralis
- B. Facies nephritica
- C. Facies Corvisara
- D. Facies Hippocratica
- E. Facies selenica

31. Patient's face is edematous, pale yellowish, with a cyanotic hue. The mouth is always half open, the lips are cyanotic, the eyes are dull and the eyelids sticky puffy, pale. About what type of face do you think?

- A. Facies mitralis
- B. Facies nephritica
- C. Facies Corvisara
- D. Facies Hippocratica
- E. Facies selenica

32. What position in bed has patient with dry pleurisy?

- A. Horizontal with raised lower limbs
- B. Half-sitting or sitting position
- C. Lie on the affected side
- D. Lying on his back at an angle of 15-30 degrees, feet raised above his head
- E. Vertically

33. What position in bed has patient with the ribs fracture?

- A. Horizontal with raised lower limbs
- B. Half-sitting or sitting position
- C. Lie on the affected side
- D. Lie on the healthy side
- E. Vertically

34. What tasks of skin examination?

- A. Colour
- B. Elasticity
- C. Moisture
- D. Eruptions and scars
- E. All above them



35. What colour of the skin has patient with anemia?

- A. Red
- B. Yellow
- C. Pale
- D. Blue
- E. Grey

36. What colour of the skin has patient with chronic pulmonary diseases?

- A. Red
- B. Yellow
- C. Pale
- D. Cyanotic
- E. Grey

***Subsection 2. Physical and Instrumental Methods of Examination of the State of Broncho-Pulmonary System.***

*Topic 3. Main complaints of the patients with lung diseases. Static and dynamic examination of the chest. Chest palpation.*

1. What is dyspnea?

- A. Abnormal rate, depth, and rhythm of respiration
- B. Abnormal of respiratory rate
- C. Abnormal depth of respiration
- D. Respiratory arrhythmias
- E. Abnormal frequency, depth, rhythm of respiration with the obligatory change of color of each integument

2. Dyspnea is one of the important symptoms of the disease:

- A. Cardiovascular system
- B. Respiratory system
- C. Nervous system
- D. Respiratory system, cardiovascular system, nervous system
- E. Urinary system

3. Asthma (gasp, suffocation) is:

- A. Attacks of intense shortness of breath that occur suddenly
- B. Attacks of intense shortness of breath that occur slowly
- C. Attacks of moderate shortness of breath that occur suddenly
- D. Attacks of moderate shortness of breath that occur slowly
- E. Attacks of intense shortness of breath that occur suddenly with the loss of consciousness

4. What is the patient's position - orthopnea?

- A. Horizontal with raised lower limbs
- B. Half-sitting or sitting position
- C. Lying on his back
- D. Lying on his back at an angle of 15-30 degrees, feet raised above his head
- E. Vertically

5. When does Pleural pain increases?

- A. Does not increase
- B. While inhaling
- C. During exhalation
- D. While driving
- E. While eating

6. The normal respiratory rate in an adult per minute is:

- A. 5-10
- B. 10 - 15
- C. 15-25
- D. 16-20
- E. 20-30

7. Pathological rapidity of breathing (tachypnea) can be caused by the indicated reasons EXCEPT:

- A. Narrowing of the lumen of small bronchi
- B. Decrease in the respiratory surface of the lungs
- C. Insufficient depth of breathing (shallow breathing)
- D. Inhibition of the function of the respiratory center
- E. Pleurisy

8. Pathological decrease in the frequency of respiratory movements (bradypnea) can be caused by these reasons EXCEPT:

- A. Inhibition of the function of the respiratory center
- B. Increased intracranial pressure
- C. Uremia
- D. Diabetic coma
- E. Decrease in the respiratory surface of the lungs

9. Periodic breathing is called all EXCEPT:

- A. Cheyne-Stokes` respiration
- B. Biot`s respiration
- C. Grocco's respiration
- D. Wave-like respiration
- E. Kussmaul`s respiration

10. Tasks of palpation of the chest:

- A. Determination of the shape of the chest
- B. Determination of chest pain
- C. Study of the elasticity of the chest
- D. Determination of vocal resonance
- E. All of the above

11. The elasticity of the chest decreases:

- A. In the presence of effusion in the pleural cavity
- B. Pleural tumors
- C. Emphysema of the lungs
- D. In elderly
- E. All the above

12. Increase in vocal resonance is observed:

- A. Induration of lung tissue
- B. Fluid in the pleural cavity
- C. Air in the pleural cavity
- D. Rib fracture
- E. Obstructive atelectasis

13. Weakening of vocal resonance is observed:

- A. Induration of lung tissue
- B. Fluid in the pleural cavity
- C. Air cavity in the lungs connected with bronchus
- D. Large bronchiectasis
- E. Lung infarction

14. Rare, deep breathing is called:

- A. Cheyne-Stokes` respiration
- B. Biot`s respiration
- C. Grocco's respiration
- D. Wave-like respiration
- E. Kussmaul`s respiration

15. Increase vocal resonance is observed:

- A. Cavity in the lungs connected with bronchus
- B. Fluid in the pleural cavity
- C. Air in the pleural cavity
- D. Rib fracture
- E. Obstructive atelectasis

16. Deep noisy and rare breath on patient with coma:

- A. Cheyne-Stokes` respiration
- B. Biot`s respiration
- C. Grocco's respiration
- D. Wave-like respiration
- E. Kussmaul`s respiration

17. For what syndrome is hemoptysis most typical?

- A. Syndrome of increased airiness of the lung tissue
- B. Syndrome of fluid accumulation in the pleural cavity
- C. Syndrome of accumulation of fluid and gas in the pleural cavity
- D. Lung`s cavity syndrome
- E. Lung`s tissue infiltration syndrome

18. Respiration in meningitis patients with long respiratory pauses:

- A. Cheyne-Stokes` respiration
- B. Biot`s respiration
- C. Grocco's respiration
- D. Wave-like respiration
- E. Kussmaul`s respiration

19. Specify the most typical changes of thorax in patients with lung emphysema:

- A. Conical chest
- B. Hypersthenic chest
- C. Asthenic chest
- D. Barrell-like chest
- E. Scaphoid chest

20. Indicate the shape of the chest associated with lung pathology:

- A. Asthenic
- B. Rachitic
- C. Emphysematous
- D. Hypersthenic
- E. Scaphoid

21. Respiratory diseases are characterized by complaints, EXCEPT:

- A. Dyspnea
- B. Cough
- C. Hemoptysis
- D. Heartburn
- E. Chest pain

22. Intensified of voice resonance occurs with the following diseases EXCEPT:
- A. Lobar pneumonia in hepatization stage
  - B. Lung cancer in the stage of infiltration
  - C. Tuberculosis in the stage of infiltration
  - D. Pneumothorax
  - E. Lung infarction
23. Expiratory dyspnea is most common for:
- A. Exudative pleurisy
  - B. Bronchial asthma attack
  - C. Cardiac asthma
  - D. Bronchiectasis
  - E. Acute bronchitis
24. What pathological type of chest is characterized by a pronounced lengthening of the anteroposterior size due to the prominence of the sternum?
- A. Emphysematous chest
  - B. Paralytic chest
  - C. Rachitic chest
  - D. Funnel chest
  - E. Scaphoid chest
25. Palpation of the chest allows you to determine everything EXCEPT:
- A. Chest resistance
  - B. Tenderness of the chest
  - C. Voice resonance
  - D. Moist rales

E. Elasticity of the chest

26. Periodic breathing with changing amplitude of the respiratory movements and long periods of apnea:

- A. Cheyne-Stokes` respiration
- B. Biot`s respiration
- C. Grocco's respiration
- D. Wave-like respiration
- E. Kussmaul`s respiration

27. What complaints are not typical for patients with lung disease?

- A. Cough
- B. Chest pain associated with the act of breathing
- C. Dyspnea
- D. Frequent painful urination
- E. Asthma attacks

28. What type of respiration can be in women with dry pleurisy?

- A. Abdominal
- B. Thoracic
- C. Mixed
- D. Costal
- E. Medium

29. Thorax is long, narrow, and flat. Supra- and subclavian fossae are distinctly pronounced. The epigastric angle is acute. The ribs in the lateral parts directed more vertically. The muscles are poorly developed. What is called this chest?

- A. Paralytic
- B. Emphysematous
- C. Asthenic



- D. Hypersthenic
- E. Normosthenic

30. What is the name of spinal curvature in a lateral direction?

- A. Lordosis
- B. Scoliosis
- C. Kyphosis
- D. Kyphoscoliosis
- E. Upright

31. What is the name of spinal curvature forward?

- A. Lordosis
- B. Scoliosis
- C. Kyphosis
- D. Kyphoscoliosis
- E. Upright

32. What is cause enlargement of the volume of one half of the chest?

- A. Lung emphysema
- B. Pneumothorax
- C. Bronchopneumonia
- D. Chronic bronchitis
- E. Tuberculosis

33. What is cause enlargement of the volume of one half of the chest?

- A. Lung emphysema
- B. Fluid in the pleural cavity
- C. Bronchopneumonia
- D. Chronic bronchitis

E. Tuberculosis

34. What is cause diminish of the volume of one half of the chest?

- A. Lung emphysema
- B. Fluid in the pleural cavity
- C. Bronchopneumonia
- D. Chronic bronchitis
- E. Pneumosclerosis

35. What is cause diminish of the volume of one half of the chest?

- A. Lung emphysema
- B. Fluid in the pleural cavity
- C. Obstructive atelectasis
- D. Chronic bronchitis
- E. Pneumothorax

*Topic 4. Percussion of the Lungs. Methods and techniques of comparative percussion of the Lungs. Methods and techniques of topographic percussion of the Lungs.*

1. What is percussion sounds appear in patient with pleural effusion syndrome?

- A. Clear lung sounds
- B. Dull sound
- C. Tympanic sound
- D. Dull with a tympanic tone
- E. Hyperresonant sound

2. What percussion sound occurs over a large air cavity in the lung?

- A. Clear lung sounds
- B. Tympanic (metallic) sound

- C. Dull with a tympanic tone
- D. Dull sound
- E. Hyperresonant sound

3. What percussion sound is typical for inflammation of lung tissue (hepatization stage of pneumonia)?

- A. Clear lung sounds
- B. Dull (femoral) sound
- C. Tympanic sound
- D. Dull with a tympanic tone
- E. Hyperresonant sound

4. What percussion sound is typical for pneumothorax?

- A. Clear lung sounds
- B. Dull (femoral) sound
- C. Tympanic sound
- D. Dull with a tympanic tone
- E. Hyperresonant sound

5. When could we detect displacement of the lower border of the lungs upward during topographic percussion of the lungs?

- A. Pneumothorax
- B. Pneumosclerosis
- C. Accumulation of fluid in the pleural cavity
- D. Low lobe pneumonia
- E. All the above

6. Specify the percussion sound, which is normally determined by lung percussion:

- A. Clear lung sounds
- B. Tympanic sounds

- C. Dull (femoral) sounds
- D. Hyperresonant sound
- E. Dull with a tympanic tone

7. Comparative percussion starts anteriorly:

- A. Over suprascapular regions
- B. Over interscapular space
- C. Over apices in front
- D. Over clavicle
- E. From the 2nd intercostal space

8. Position of the pleximeter finger below the clavicle during comparative percussion of the lungs:

- A. Only along the ribs
- B. Only on the intercostal space
- C. Along the ribs and intercostal spaces
- D. In intercostal space strictly symmetrical points the right and left sides of the chest
- E. Over scapula

9. The patient was hospitalized with pneumothorax. What percussion sound will be over the affected site?

- A. Clear pulmonary sound
- B. Bandbox sound
- C. Dull sound
- D. Tympanic sound
- E. Dull with a tympanic tone

10. The total mobility of the lower border of the right lung along the mid-axillary line is:

- A. 2-3 cm
- B. 3-4 cm
- C. 6-8 cm
- D. 8-10 cm
- E. 10-12 cm

11. Percussion sound over empty large (8-10 cm in diameter) smooth-wall cavity in the lung communicated with the bronchus:

- A. Bandbox sound
- B. Metallic sound
- C. Clear lung sounds
- D. Dull sound
- E. Dull with a tympanic tone

12. What diseases of the lungs is characterized a tympanic percussion sound?

- A. Compression atelectasis
- B. Closed pneumothorax
- C. Pulmonary emphysema
- D. Acute lobar pneumonia at its first stage
- E. All the above

13. What pathological process is accompanied by infiltration of the lung tissue?

- A. Emphysema
- B. Tuberculous cavern
- C. Lung abscess
- D. Pleural adhesions
- E. Pneumonia

14. What pathological process is accompanied by increased airiness of the lung tissue?

- A. Pneumonia
- B. Atelectasis
- C. Edema
- D. Emphysema
- E. Pneumosclerosis

15. What pathology is determined dull percussion sound over the lungs?

- A. Lung cavity
- B. Pneumothorax
- C. Pneumonia (stage of hepatization)
- D. Lung abscess
- E. Emphysema

16. What pathology is determined the tympanic percussion sound over the lungs?

- A. Hydrothorax
- B. Exudative pleurisy
- C. Pleural transudate
- D. Pneumothorax
- E. Compression atelectasis

17. What percussion sound is typical for pneumothorax?

- A. Clear pulmonary sound
- B. Bandbox sound
- C. Dull sound
- D. Tympanic sound
- E. Dull with a tympanic tone

18. Bilateral lowering of the lower borders of the lungs is observed in the all states EXCEPT:

- A. Pneumosclerosis
- B. Attack of bronchial asthma
- C. Splachnoptosis
- D. Pulmonary emphysema
- E. Acute emphysema

19. What percussion sound is determined over the semilunar Traube's space?

- A. Clear pulmonary sound
- B. Bandbox sound
- C. Dull sound
- D. Tympanic sound
- E. Dull with a tympanic tone

20. What percussion sound is typical for pulmonary emphysema?

- A. Clear pulmonary sound
- B. Dull sound
- C. Tympanic sound
- D. Bandbox sound
- E. Metallic sound

21. What percussion sound occurs when there is no air in the whole lobe of the lung or part of it?

- A. Clear pulmonary
- B. Tympanic
- C. Dull
- D. Bandbox
- E. Amphoric

22. Which line start to determine the lower border of the right lung?

- A. Parasternal
- B. Midclavicular
- C. Anterior axillary
- D. Midaxillary
- E. Posterior axillary

23. What percussion sound is characteristic for obstructive atelectasis?

- A. Clear pulmonary sound
- B. Dull sound
- C. Tympanic sound
- D. Dull with a tympanic tone
- E. Hyperresonant sound

24. What will be the results of percussion in patients with acute bronchitis?

- A. Clear pulmonary sound
- B. Dull sound
- C. Tympanic sound
- D. Dull with a tympanic tone
- E. Hyperresonant sound

25. What will be the percussion sound in exudative pleurisy?

- A. Clear pulmonary sound
- B. Dull sound
- C. Tympanic sound
- D. Dull with a tympanic tone
- E. Hyperresonant sound

26. What percussion sound is heard over the lungs in a patient with attack of bronchial asthma?



- A. Clear pulmonary sound
- B. Dull sound
- C. Tympanic sound
- D. Dull with a tympanic tone
- E. Hyper resonant sound

27. What is the tasks of comparative percussion?

- A. Determination the lower borders of the lungs
- B. Determination of the presence of pathological processions
- C. Determination of the upper borders of the lungs
- D. Determination of the Kroenig's fields
- E. All the above

28. The width of the so-called Kroenig's area are normally:

- A. 1-2 cm
- B. 2-3 cm
- C. 5-6 cm
- D. 6-10 cm
- E. 10-12 cm

29. Kroenig's area can be 9 cm with the following pathology of the lungs:

- A. Emphysema of the lungs
- B. Edema of the lungs
- C. Atelectasis of the lungs
- D. Pneumonia
- E. Cavern in the lungs

30. Normally the lower border of the right lung on anterior axillary line is:

- A. On 5th intercostal space

- B. On 6th intercostal space
- C. On 7th intercostal space
- D. On 9th intercostal space
- E. On 10th intercostal space

31. What are causes of dull percussion sound?

- A. Pleural effusion
- B. Pneumonia
- C. Pneumosclerosis
- D. Lung cancer
- E. All the above

32. Bilateral lowering of the lower border of the lungs can occur:

- A. Asthma attack
- B. Splachnoptosis
- C. Severe emphysema
- D. All the answers are right
- E. All the answers are wrong

33. The elevation of the lower border of the lungs is observed in such states, EXCEPT:

- A. Accumulation fluid in the pleural cavity
- B. Accumulation air in the pleural cavity
- C. Lung`s emphysema
- D. Severe ascites
- E. Marked enlargement of the liver

34. The Kroenig`s area decreases:

- A. Asthma attack

- B. Tuberculosis
- C. Lung`s emphysema
- D. Accumulation fluid in the pleural cavity
- E. Accumulation air in the pleural cavity

35. Normal height of the lung`s apices (posterior) is:

- A. Level of the spinous process of the 5th cervical vertebra
- B. Level of the spinous process of the 6th cervical vertebra
- C. Level of the spinous process of the 7th cervical vertebra
- D. Level of the spinous process of the 1st thoracic vertebra
- E. Level of the spinous process of the 2nd thoracic vertebra

*Topic 5. Auscultation of the Lungs: main respiratory sounds (vesicular and bronchial respiration). Accessory respiratory murmurs (rales, crepitation, pleura friction rub)*

1. When can fine bubbling rales occur?

- A. In the presence of liquid in the fine bronchi
- B. In the presence of viscous contents in the small bronchi
- C. In the presence of large caverns
- D. In the presence of liquid in the large bronchi
- E. In an attack of bronchial asthma

2. In patient with acute bronchitis and liquid sputum we can listen:

- A. Decreased vesicular respiration
- B. Crepitation
- C. Moist rales
- D. Dry rales
- E. All of the above

3. What can be heard in the area of dull percussion sound in patient with massive exudative pleurisy?

- A. Bronchial respiration
- B. Vesicular respiration
- C. Decreased vesicular respiration
- D. Not heard
- E. Amphoric respiration

4. What will be the main respiratory sound at the acute bronchitis?

- A. Moist fine bubbling rales
- B. Moist medium bubbling rales
- C. Crepitation
- D. Abnormally increased vesicular breathing
- E. Bronchial breathing

5. Which of the following auscultation data are pathognomonic for dry pleurisy?

- A. Increasing of vesicular respiration
- B. Bronchial respiration
- C. Moist rales
- D. Pleural friction sound
- E. Crepitation

6. Bronchial respiration occurs:

- A. In the bronchi of small caliber during the passage of air through them
- B. In the bronchi of medium caliber during the passage of air through them
- C. When air passes through the vocal slit
- D. In the alveoli
- E. In pleural cavity

7. Vesicular respiration occurs due to:

- A. Vibrations of the elastic elements of the walls of the bronchioles
- B. Vibrations of tense alveolar walls
- C. Air turbulence during passing through the airways
- D. Stretching of the interalveolar septa
- E. Air passage through the glottis

8. Decreased vesicular respiration is heard:

- A. In children
- B. Patient with chronic bronchitis
- C. In healthy adolescents
- D. In an attack of bronchial asthma
- E. In pneumothorax

9. Which of the listed respiratory murmurs is accessory?

- A. Vesicular respiration
- B. Bronchial respiration
- C. Abnormally increased vesicular breathing
- D. Crepitation
- E. Pathologically decreased vesicular respiration

10. What are the characteristics of bronchial respiration?

- A. Heard on the inhale and exhale, reminiscent of the sound "f"
- B. Heard in both phases of breathing, reminiscent of the sound "h"
- C. Heard on exhale, reminiscent of the sound "f"
- D. Heard on the inhale, reminiscent of the sound "h"
- E. Heard only on exhale, reminiscent of the sound "h"

11. What are the characteristics of normal vesicular respiration?

- A. Heard on the inhale and exhale, reminiscent of the sound "h"

- B. Heard in inhale, first 1/3 of the exhale, reminiscent of the sound "f"
- C. Heard on the inhale, reminiscent of the sound "h"
- D. Heard on exhalation, reminiscent of the sound "f"
- E. Heard on exhalation, reminiscent of the sound "h"

12. During auscultation of the patient in both phases of respiration, the student is heard to respiratory sound resembling the crunch of snow. How pleural friction sounds can be differentiated?

- A. Ask the patient to hold their breath
- B. Ask the patient simulate breathing by moving the diaphragm with his mouth and nose closed
- C. Ask the patient to cough
- D. Listen in different positions of the patient
- E. Listen with deep breathing

13. During auscultation of the patient with bronchopulmonary pathology the student heard moist coarse bubbling rales. What is the mechanism of occurrence of these rales?

- A. Narrowing of the bronchial lumen due to spasm
- B. Accumulation of viscous sputum in the bronchi
- C. Accumulation of liquid sputum in the lumen of small bronchi
- D. Accumulation of fluid in the alveoli
- E. Accumulation of liquid secretion in the large cavity

14. In the presence of a smooth-wall cavity (not less than 5-6 cm in diameter) communicated with a large bronchus, you can be heard:

- A. Puerile respiration
- B. Stenotic respiration
- C. Vesicular respiration
- D. Abnormally increased vesicular respiration
- E. Amphoric respiration

15. Dry rales can be heard during:

- A. Pneumonia, especially lobar
- B. Acute obstructive bronchitis
- C. Dry pleurisy
- D. Pulmonary emphysema
- E. Hydrothorax

16. Dry rales can be heard during:

- A. Lobar pneumonia
- B. Lung abscess
- C. Pulmonary emphysema
- D. Asthma attacks
- E. Dry pleurisy

17. In a patient with exacerbation of chronic non-obstructive bronchitis, moist medium bubbling rales are heard, which change after coughing. What is the mechanism of their occurrence?

- A. Narrowing of the bronchial lumen due to spasm
- B. Accumulation of viscous sputum in the bronchi
- C. Accumulation of liquid sputum in the lumen of the bronchi
- D. Accumulation of fluid in the alveoli
- E. Pleural friction rub

18. What is synonym of vesicular respiration?

- A. Bronchial
- B. Laryngotracheal
- C. Alveolar
- D. Amphoric
- E. Bell

19. Puerile respiration is:

- A. Physiological intensification of vesicular respiration
- B. Pathological intensification of vesicular respiration
- C. Physiological intensification of bronchial respiration
- D. Pathologically intensification of bronchial respiration
- E. Stenotic respiration

20. Harsh respiration is:

- A. Physiological intensification of vesicular respiration
- B. Pathological intensification of vesicular respiration
- C. Physiological intensification of bronchial respiration
- D. Pathologically intensification of bronchial respiration
- E. Stenotic respiration

21. At what points of auscultation normally bronchial respiration doesn't heard:

- A. Over trachea
- B. Over larynx
- C. Over thyroid cartilage
- D. At the level of III-IV thoracic vertebra between shoulder-blades
- E. At lower parts of lungs

22. What pathology of the lungs is characterized by consonating moist rales?

- A. Pneumosclerosis
- B. Emphysema of the lungs
- C. Dry pleurisy
- D. Obstructive atelectasis
- E. Bronchopneumonia



23. At what pathology can be heard decreased vesicular respiration over the lungs?
- A. Acute bronchitis
  - B. Emphysema of the lungs
  - C. Pneumonia
  - D. Lung abscess
  - E. Smooth-wall cavity
24. At what pathology can be heard diffused dry sibilant rales?
- A. Hydrothorax
  - B. Attack of bronchial asthma
  - C. Pneumonia
  - D. Emphysema of the lungs
  - E. Dry pleurisy
25. What pathology of the lungs can you heard crepitation over the affected lobe?
- A. Pneumosclerosis
  - B. Acute lobar pneumonia 1st stage
  - C. Chronic bronchitis
  - D. Bronchial asthma
  - E. Lung abscess
26. In what type of pathology of the lungs can you heard pathological bronchial breathing over the affected lobe?
- A. Chronic bronchitis
  - B. Acute lobar pneumonia 2nd stage
  - C. Exudative pleurisy
  - D. Bronchial asthma
  - E. Emphysema of the lungs
27. Characterize normal vesicular respiration:

- A. Auscultation in the trachea projection
- B. Auscultation better in the lying position
- C. Listening during inhalation and exhalation
- D. Listening during inspiration and one third of expiration
- E. Change after coughing

28. Characterize normal bronchial breathing:

- A. Heard over all area of the lungs
- B. Auscultation better in the lying position
- C. Tubular breathing arise in the larynx
- D. Change after coughing
- E. Heard better in the lying position

29. A focus of amphoric respiration over the lower lobe of the right lung was found during auscultation. What disease do you mean?

- A. Cavity in the lung
- B. Obstructive bronchitis
- C. Bronchial asthma
- D. Pneumonia
- E. Exudative pleurisy

30. Absence of breathing sounds below the fifth rib on the left side of the chest was found during auscultation. What pathology do you mean?

- A. Pneumonia
- B. Dry pleurisy
- C. Emphysema of the lungs
- D. Exudative pleurisy
- E. Bronchial asthma

31. What type of adventitious sound occurs when accumulation of a small amount of liquid secretion of the alveoli?

- A. Pleural friction
- B. Crepitation
- C. Dry rales
- D. Pleuropericardial murmur
- E. Moist rales

33. Dry rales can be due to:

- A. Swelling of the bronchial mucosa during its inflammation
- B. Spasms of smooth muscles during bronchial asthma attack
- C. Accumulation of viscous sputum in the bronchi
- D. Vibration of viscous sputum in the lumen of large and medium size bronchi
- E. All the statements are right

34. What type of adventitious sound occurs when accumulation of liquid secretion in the bronchus?

- A. Pleural friction
- B. Crepitation
- C. Dry rales
- D. Pleuropericardial murmur
- E. Moist rales

35. What type of adventitious sound occurs when spasms of smooth muscles of the bronchus?

- A. Pleural friction
- B. Crepitation
- C. Dry rales
- D. Pleuropericardial murmur

## E. Moist rales

***Subsection 3. Physical Methods of Examination of Cardiovascular System.***

*Topic 6. Questioning and general examination of the patients with the disorders of cardiovascular system. The pulse and arterial pressure study.*

1. Main complaints of the patients with heart diseases are:
  - A. Pain in the heart area
  - B. Palpitation
  - C. Dyspnea
  - D. Leg`s edema
  - E. All of the above is true
  
2. Which of the following does not characterize the "cardiac edema"?
  - A. Localized on the lower extremities
  - B. Appear in the evening
  - C. Occur in the morning
  - D. Pressing on the skin forms a fossa
  - E. Cold to the touch
  
3. During the examination of the patient were revealed blue color on the tips of the fingers and nose. What is type of cyanosis?
  - A. Local
  - B. Central
  - C. Diffuse
  - D. Acrocyanosis
  - E. Mix
  
4. What is forced position typical for patient with exudative pericarditis?
  - A. On the left side
  - B. On the right side
  - C. Sits leaning forward
  - D. Orthopnea

E. Lying on the back

5. During palpation of the patient was found the absence of a pulse on one of the radial arteries. What pathology is this typical for?

- A. Atherosclerosis
- B. Left ventricular hypertrophy
- C. Nonspecific aorto-arteritis
- D. Arterial hypertension
- E. Aortic aneurysm

6. For patients with an attack of angina pectoris, the presence of this type of pain is NOT typical:

- A. Pressing
- B. Stitching
- C. Burning
- D. With the irradiation to the left hand
- E. Squeezing

7. A rapid and forceful distension of the arterial pulse with a quick collapse (Corrigan's pulse) is sign of:

- A. Hypertension
- B. Mitral stenosis
- C. Aortic stenosis
- D. Heart failure
- E. Aortic regurgitation

8. The phenomenon known as "pulsus parvus et tardus" refers to a weak (parvus) and delayed (tardus) carotid upstroke is a sign of:

- A. Aortic stenosis
- B. Heart failure

- C. Aortic regurgitation
- D. Mitral stenosis
- E. Mitral regurgitation

9. What disease is determined of pulse difference?

- A. Aortic stenosis
- B. Heart failure
- C. Aortic regurgitation
- D. Mitral stenosis
- E. Mitral regurgitation

10. What valvular heart disease is systolic blood pressure sharply reduced, and diastolic blood pressure normal or slightly increased?

- A. Aortic stenosis
- B. Heart failure
- C. Aortic regurgitation
- D. Mitral stenosis
- E. Mitral regurgitation

11. At what pathology is the high pulse pressure?

- A. Hypertension
- B. Mitral stenosis
- C. Aortic stenosis
- D. Heart failure
- E. Aortic regurgitation

12. Blood pressure measurement is carried out:

- A. Only sitting and lying down
- B. Only lying down

- C. Standing only
- D. Only sitting, standing and lying down
- E. There is no right answer

13. What indicator of blood pressure can we notice when Korotkov's tones appear over the brachial artery?

- A. Pulse
- B. Systolic
- C. Diastolic
- D. Arterial
- E. Working

14. During the patient's first visit, blood pressure measurement is necessary:

- A. Once on one hand
- B. Twice on one hand
- C. Three times on one hand
- D. Once on both hands
- E. Twice on both hands

15. What is the correct position of the patient's hand when measuring blood pressure?

- A. Bent at the elbow, palm up
- B. Bent at the elbow with the palm down
- C. Unbent at the elbow, palm up
- D. Unbent at the elbow joint, palm down
- E. The hand is down

16. Normal systolic blood pressure according to the WHO classification:

- A. 100-110 mmHg
- B. Less than 120 mmHg



- C. 120-139 mmHg
- D. 130-139 mmHg
- E. 120-140 mmHg

17. Pulse deficiency occurs when:

- A. Tachycardia
- B. Blood pressure decrease
- C. Blood pressure increase
- D. Atrial fibrillation
- E. Bradycardia

18. The most interrelated properties of the pulse:

- A. Tension and filling
- B. Tension and rhythm
- C. Frequency and rhythm
- D. Speed and frequency
- E. Filling and rhythm

19. The irregular pulse in an adult is counted:

- A. 10 seconds
- B. 15 seconds
- C. 20 seconds
- D. 30 seconds
- E. 60 seconds

20. By tension, the pulse is distinguished:

- A. Rhythmic, arrhythmic
- B. Fast, slow
- C. Full, empty

- D. Hard, soft
- E. Tonic, atonic

21. Blood pressure measurement is carried out:

- A. No food or drink for 30 minutes
- B. Put both feet flat on the ground and keep legs uncrossed
- C. Don't drink a caffeinated beverage or smoke during the 30 minutes before the test
- D. Sit quietly for five minutes before the test begins
- E. All of the above is true

22. A normal heart rate in an adult is:

- A. 30-40 beats per minute
- B. 40-50 beats per minute
- C. 60-80 beats per minute
- D. 80-100 beats per minute
- E. 110-130 beats per minute

23. Tachycardia is:

- A. Pulse rate 30-40 per minute
- B. Pulse rate 40-50 per minute
- C. Pulse rate 60-70 per minute
- D. Pulse rate 70-80 per minute
- E. Pulse rate 90 per minute and above

24. When is observed Pulse deficiency?

- A. Low blood pressure
- B. When heart rate is less than pulse rate
- C. When pulse rate is less than heart rate

- D. Blood pressure increase
- E. Tachycardia

25. Increasing of the heart rate more than 90 per minute is called:

- A. Normocardia
- B. Tachycardia
- C. Bradycardia
- D. Atrial fibrillation
- E. Extrasystole

26. Cardiac edema is characterized by:

- A. Location on the face
- B. Location on the feet, legs
- C. Appear in the morning
- D. Easily shift when changing body position
- E. Warm to the touch

27. The pulse of a healthy person is NOT characterized by the property:

- A. Regular
- B. Thready pulse
- C. Satisfactory filling
- D. Satisfactory tension
- E. Symmetrical on both radial arteries

28. During palpation of the pulse examiner does NOT determine:

- A. Pulse rhythm
- B. Pulse rate
- C. Pulse filling
- D. Pulse tension

E. Pulse pressure

29. Specify the typical signs of Thready pulse:

- A. Absence of pulsation in one radial artery
- B. A small fine pulse, feeling like a small cord on both radial arteries
- C. Number of pulse waves on the radial artery is greater than the number of heartbeats
- D. number of pulse waves on the radial artery is less than the number of heartbeats
- E. Irregular pulse

30. Specify the typical signs of Pulse deficit:

- A. Absence of pulsation in one radial artery
- B. A small fine pulse, feeling like a small cord on both radial arteries
- C. Irregular pulse
- D. When the heart beats faster than the pulse rate
- E. When the pulse rate faster than the heart beats

31. What is the name of the pulse in a patient with shock or collapse?

- A. Pulsus dificiens
- B. Pulsus filiformis
- C. Pulsus differens
- D. Pulsus plenus
- E. Pulsus durus

32. What are the causes of low blood pressure?

- A. Shock
- B. Collapse
- C. Profuse hemorrhage

- D. Myocardial infarction
- E. All of the above is true

33. What is the cause of high diastolic blood pressure?

- A. Increased cardiac output
- B. Reduction of aortic wall elasticity
- C. Increased peripheral arteries resistance
- D. Hyperthyroidism
- E. All of the above is true

34. The man was taken to the hospital with complaints of burning pain in the region of the heart, which radiates to the left shoulder and left scapula, lasts about 10 minutes. What is not indicated in the description of the pain syndrome?

- A. Localization of pain
- B. Nature of pain
- C. Cause of pain
- D. Irradiation of pain
- E. Duration of pain

35. Irradiation of pain is:

- A. Nature of pain
- B. Spread of pain
- C. Increased pain
- D. Aggravation of pain
- E. Pain intensity

*Topic 7. Inspection and palpation of the precordial area.*

*Determination of the borders of relative and absolute heart dullness.*

1. Low apex beat in case of:

- A. Mitral valve insufficiency
- B. Aortic stenosis
- C. Left ventricular hypertrophy
- D. Insufficiency of the semilunar aortic valves
- E. Dilation of the left ventricle with contractile problems

2. The apical beat is formed:

- A. Aortic arch
- B. Abdominal aorta
- C. Right ventricle
- D. Left ventricle
- E. Left atrium

3. An increase in the area of absolute cardiac dullness is characteristic of:

- A. Dilatation of the right ventricle
- B. Dilatation of the left ventricle
- C. Dilatation of the left atrium
- D. Dilatation of the right atrium
- E. Dilatation of the aorta

4. Jugular vein pulsation is a pathognomonic symptom for:

- A. Insufficiency of the semilunar aortic valves
- B. Mitral valve insufficiency
- C. Tricuspid valve insufficiency
- D. Left atrioventricular stenosis

E. Stenosis of the tricuspid foramen

5. The apex beat shifts to the left due to this pathology:

- A. Left-sided exudative pleurisy
- B. Left atrioventricular stenosis
- C. Emphysema of the lungs
- D. Left-sided exudative pleurisy
- E. Aortic valvular disease

6. What is normal localization of the apex beat?

- A. In 2nd intercostal space to the left side of the sternum
- B. In 2<sup>nd</sup>-3d intercostal space on the left side of the sternum
- C. In 5th intercostal space 1-1.5 cm inside from left midclavicular line
- D. In 2nd intercostal space to the right side of the sternum
- E. In the epigastric region

7. What is the cardiac beat?

- A. Diffuse pulsation on the left of the sternum, extending to the epigastric region
- B. Pulsation in 2nd intercostal space to the left side of the sternum
- C. Pulsation in 2<sup>nd</sup>-3d intercostal space on the left side of the sternum
- D. Pulsation in 5th intercostal space 1-1.5 cm inside from left midclavicular line
- E. Pulsation in 2nd intercostal space to the right side of the sternum

8. Visual cardiac beat and epigastric pulsation are observed in:

- A. Left ventricular hypertrophy
- B. Left atrial hypertrophy
- C. Hypertrophy and dilatation of the right ventricle
- D. Right atrial hypertrophy

E. Abdominal aortic aneurysm

9. The enlargement of the absolute cardiac dullness is observed in all cases EXCEPT:

- A. Dilatation of the right ventricle
- B. High standing of the diaphragm
- C. Low standing of the diaphragm
- D. Wrinkling of the lung edges
- E. Dilatation of both ventricles

10. Pulsation of the veins of the neck, if it coincides with the systole of the ventricles and the pulse of the carotid artery and most often appears in case of insufficiency of the tricuspid valve, it is called:

- A. Positive venous pulse
- B. Negative venous pulse
- C. Pulse Quincke
- D. Transfer pulsation
- E. True pulsation

11. When the cardiac beat is detected?

- A. Left ventricular hypertrophy
- B. Right ventricular hypertrophy
- C. Dilatation of the left ventricle
- D. Dilatation and hypertrophy of the right atrium
- E. Dilatation and hypertrophy of the left atrium

12. Data detected by palpation with mitral stenosis:

- A. Diffuse apex beat
- B. Domelike apical impulse
- C. Apical impulse is displaced to the left and down



- D. Systolic "cat's purr"
- E. Diastolic "cat's purr"

13. What is apex beat?

- A. Pulsation in the second intercostal space on the right at the sternum
- B. Pulsation in the second intercostal space on the left at the sternum
- C. Pulsation in the heart`s apex
- D. Pulsation in the epigastric region
- E. Pulsation in the jugular veins

14. Pulsation of the pupils is typical for:

- A. Mitral stenosis
- B. Tricuspid valve insufficiency
- C. Aortic stenosis
- D. Aortic valve insufficiency
- E. Tricuspid stenosis

15. What are characteristics of the apex beat in patients with aortic valve insufficiency?

- A. Low, weakened, limited
- B. High, weakened, limited
- C. High, strong, limited
- D. High, strong, diffused
- E. Shift to the right

16. Arterial pulsation of the liver (Rosenbach sign) can occur due to:

- A. Mitral regurgitation
- B. Aortic regurgitation
- C. Mitral stenosis

- D. Aortic stenosis
- E. Tricuspid stenosis

17. What pathology is characterized by systolic "cat's purr" and where is it felt?

- A. Mitral stenosis - at the heart's apex
- B. Aortic stenosis - in the second intercostal space to the right of the sternum
- C. Aortic regurgitation - in the second intercostal space to the right of the sternum
- D. Dry pericarditis - at the heart's apex
- E. Dry pericarditis - in the area of absolute dullness of the heart

18. Diastolic pulsation ("cat's purr") at the apex of the heart is palpable in the case of:

- A. Mitral valve insufficiency
- B. Tricuspid valve insufficiency
- C. Tricuspid stenosis
- D. Mitral stenosis
- E. Aortic stenosis

19. The diffuse apex beat is typical for:

- A. Tricuspid valve insufficiency
- B. Tricuspid stenosis
- C. Left ventricular hypertrophy and dilatation
- D. Emphysema of the lungs
- E. Exudative pleurisy on the left side

20. A negative apical impulse is typical for:

- A. Exudative pericarditis
- B. Left ventricular hypertrophy

- C. Left ventricular dilation
- D. Adhesive pericarditis (pericardium fuses with the anterior chest wall)
- E. Right ventricular hypertrophy

21. Pathological displacement of the apical impulse to the left and downward is typical for:

- A. Left ventricular hypertrophy with dilatation
- B. Ascites
- C. Right ventricular hypertrophy
- D. Emphysema of the lungs
- E. Pneumosclerosis

22. Diastolic pulsation above the base of the xiphoid process is palpable in the case of:

- A. Mitral valve insufficiency
- B. Tricuspid valve insufficiency
- C. Aortic valve insufficiency
- D. Mitral stenosis
- E. Aortic stenosis

23. Systolic pulsation in the second intercostal space to the left of the sternum is a symptom of:

- A. Aortic stenosis
- B. Mitral stenosis
- C. Pulmonary hypertension
- D. Mitral valve insufficiency
- E. Tricuspid valve insufficiency

24. For the apical impulse in healthy individuals is NOT typical:

- A. Localization in the V intercostal space 1-1.5 cm medially from the midclavicular line
- B. Medium strength
- C. Medium height
- D. Area 2 cm<sup>2</sup>
- E. Negative

25. The right border of relative cardiac dullness is normally located:

- A. IV intercostal space 0.5 cm outward from the right edge of the sternum
- B. IV intercostal space 2.5 cm outward from the right edge of the sternum
- C. IV intercostal space 1.0 cm outward from the left edge of the sternum
- D. V intercostal space 0.5-1.5 cm medially from the left mid-clavicular line
- E. V intercostal space 2.5 cm outward from the left mid-clavicular line

26. The upper border of relative cardiac dullness is normally located:

- A. In the 4th intercostal space
- B. In the 3rd intercostal space
- C. In the 2nd rib
- D. In the 2nd intercostal space
- E. In the 1st intercostal space

27. The upper border of relative cardiac dullness is formed by:

- A. Auricle of the left atrium and the trunk of the pulmonary artery
- B. Right atrium
- C. Left ventricle
- D. Left and right ventricles
- E. Right atrium

28. What diseases are characterized displacement the left border of the relative cardiac dullness to the left?

- A. Mitral regurgitation
- B. Aortic regurgitation
- C. Arterial hypertension
- D. Aortic stenosis
- E. All above

29. Displacement of the borders of the relative cardiac dullness in all directions can be present in:

- A. Chronic bronchitis
- B. Mitral stenosis
- C. Aortic stenosis
- D. Mitral regurgitation
- E. Myocarditis

30. Pulsation in the cardiac area associated with left ventricle systole is called:

- A. Quincke`s Pulse
- B. Diastolic "cat's purr"
- C. Systolic "cat's purr"
- D. Apical thrust or apical beat (ictus apicalis)
- E. Cardiac beat

31. Displacement outward of the right border of the relative cardiac dullness can be present in:

- A. Arterial hypertension
- B. Mitral stenosis
- C. Aortic stenosis
- D. Mitral regurgitation
- E. Myocarditis

32. Patient with aortic regurgitation has the following symptoms EXCEPT:

- A. Pulsation of the carotid arteries
- B. Head shaking - symptom of Musset
- C. Quincke's capillary pulse
- D. Systolic "cat's purr"
- E. Pulsation of the pupils - a symptom of Landolfi

33. Stokes collar is a sign of:

- A. Aortic stenosis
- B. Aortic valve insufficiency
- C. Compression of the inferior vena cava
- D. Superior vena cava syndrome
- E. Dry pericarditis

34. Displacement upward of the upper border of the relative cardiac dullness can be present in:

- A. Chronic bronchitis
- B. Mitral stenosis
- C. Aortic stenosis
- D. Tricuspid regurgitation
- E. Myocarditis

35. What pathology is formed "dome-like" apex beat?

- A. Aortic stenosis
- B. Mitral stenosis
- C. Pulmonary stenosis
- D. Mitral valve insufficiency
- E. Tricuspid valve insufficiency

*Topic 8. Auscultation of the heart: heart sounds, their reduplication and splitting and additional sounds*

1. At the base of the xiphoid process of the sternum is listened the valve:
  - A. Pulmonary artery
  - B. Mitral
  - C. Tricuspid
  - D. Aortic
  - E. All answers are wrong
  
2. Listening point at the apex of the heart:
  - A. Pulmonary artery
  - B. Mitral valve
  - C. Tricuspid valve
  - D. Aortic valve
  - E. All answers are wrong
  
3. In the second intercostal space at the left sternal border auscultated the valve:
  - A. Pulmonary artery
  - B. Mitral
  - C. Aortic
  - D. Tricuspid
  - E. All the answers are wrong
  
4. The PROJECTION point of the mitral valve on the anterior chest wall:
  - A. In the middle of the sternum at the level of 3rd costal cartilages
  - B. In the 2nd intercostal space on the left at the edge of the sternum
  - C. In the middle of the line connecting the place of attachment of cartilage 3rd left and 5th right ribs

- D. To the left of the sternum at the level of the 3rd costosternal articulation
- E. In the 2nd intercostal space on the right at the edge of the sternum

5. The middle of the sternum at the level of 3rd rib cartilages is the point of the PROJECTION:

- A. Mitral valve
- B. Pulmonary valve
- C. Aortic valve
- D. Tricuspid valve
- E. All the answers are wrong

6. The muscular is a component of heart sounds:

- A. S1
- B. S2
- C. S1 and S2
- D. S3
- E. S4

7. For S1 the following statement is true:

- A. Follows the long pause
- B. Listening point in the apex of the heart
- C. Synchronous with the apex beat
- D. Synchronous with carotid pulse
- E. All above

8. For the S2 the following statement is true:

- A. Follows the short pause
- B. Louder at the heart base
- C. Asynchronous with the apex beat



- D. Asynchronous with carotid pulse
- E. All above

9. What is component of 2nd heart sound?

- A. Tension and contraction of the right atrium
- B. Tension and contraction of the left atrium
- C. Closure and vibration of the aortic valve cusps
- D. Closure and vibration of mitral valve cusps
- E. Isometric tension and contraction of the left ventricle

10. The mechanism of formation of S1 does not include:

- A. Atrial component
- B. Valvular component
- C. Rheological component
- D. Muscular component
- E. Vascular component

11. Reduplication of S2 over pulmonary trunk is observed when:

- A. Mitral heart disease
- B. Aortic heart disease
- C. Symptomatic arterial hypertension
- D. Atherosclerotic cardiosclerosis
- E. Essential arterial hypertension

12. Strengthening of both heart sounds is observed with:

- A. Asthenic chest in young people
- B. Hydrothorax
- C. Pneumothorax
- D. Pulmonary emphysema

E. Obesity

13. Weakening of S1 at the apex of the heart can be observed with:

- A. Mitral stenosis
- B. Thyrotoxicosis
- C. Mitral valve insufficiency
- D. Tachycardia
- E. Right ventricular hypertrophy

14. Strengthening of S2 over the aorta is observed when:

- A. Aortic atherosclerosis
- B. Mitral stenosis
- C. Aortic stenosis
- D. Left ventricular hypertrophy
- E. Insufficiency of the aortic valves

15. Reduplication of S1 is observed when:

- A. Arterial hypertension
- B. Pulmonary hypertension
- C. Sinus tachycardia
- D. His bundle branches Block
- E. Atrioventricular blockade

16. How can S1 be distinguish from S2?

- A. To incline a patient forward
- B. To conduct auscultation of patient on left side
- C. Listen to the tones in Botkin-Erb point
- D. S1 concurs with apex beat, carotid pulse
- E. S2 concurs with apex beat, carotid pulse

17. What pathology is characterized “Quail’s rhythm”?
- A. Mitral stenosis
  - B. Mitral regurgitation
  - C. Severe heart failure
  - D. Paroxysmal tachycardia
  - E. Bradicardia
18. Ventricular (prodiastolic) gallop is caused by:
- A. Opening of diseased valves
  - B. Closing of diseased valves
  - C. Turbulence in blood flow
  - D. The large amount of blood striking a very compliant LV
  - E. Arrhythmia
19. Appearance time of S4:
- A. Just before S1
  - B. Just after S1
  - C. Just before S2
  - D. Just after S2
  - E. Just after S3
20. Closure and vibration of the aortic and pulmonary valves is a valvular component:
- A. S1
  - B. S2
  - C. Mitral valve opening snap
  - D. S3
  - E. S4
21. «Quail’s rhythm» is typical for:
- A. Mitral valve insufficiency
  - B. Mitral stenosis
  - C. Paroxysmal tachycardia

- D. Bradycardia
- E. Severe heart failure

22. In patients with lung emphysema, heart sounds are:

- A. Reinforced
- B. Unchanged
- C. Weakened
- D. Strengthening S2 on the aorta
- E. Strengthening S1 on the aorta

23. What is «Quail`s rhythm»:

- A. Three-component rhythm, which consists of S1 flapping sound, S2 and sound of opening of the mitral valve
- B. Rhythm with a split S2
- C. Rhythm with a split S1
- D. Pendulum rhythm
- E. Rhythm due to increased physiological sounds III or IV

24. Weakening of both heart sounds is NOT typical for:

- A. Pneumothorax
- B. Tumor of the posterior mediastinum
- C. Obesity
- D. Pulmonary emphysema
- E. Left-sided hydrothorax

25. Weakening of S1 at the 1st point of auscultation can be detected in all cases, EXCEPT:

- A. Mitral stenosis
- B. Insufficiency of the mitral valve
- C. Insufficiency of the aortic valves
- D. Aortic stenosis
- E. Severe left ventricular dilatation

26. The opening snap (OS) of the mitral valve is listened at:

- A. Mitral valve insufficiency
- B. Mitral stenosis
- C. Left ventricular hypertrophy
- D. Dilatation of the left ventricle
- E. Violation of the conduction of excitation along the legs of the bundle of His

27. The tone of the opening of the mitral valve is listened:

- A. At the apex of the heart
- B. In the second intercostal space on the right at the sternum
- C. In the second intercostal space on the left at the sternum
- D. At the base of the xiphoid process
- E. In Erb`s point

28. A systolic click is a sign of:

- A. Mitral insufficiency
- B. Mitral valve prolapse
- C. Left ventricular aneurysm
- D. Hypertension of the pulmonary circulation
- E. Mitral stenosis

29. Accent S2 on the pulmonary artery is NOT typical for:

- A. Mitral stenosis
- B. Mitral insufficiency
- C. Pulmonary hypertension
- D. Chronic pulmonary disease
- E. Arterial hypertension

30. Strengthening of S1 at the base of the xiphoid process is observed when:

- A. Tricuspid stenosis

- B. Mitral valve insufficiency
- C. Mitral stenosis
- D. Insufficiency of the aortic valve
- E. All the answers are wrong

31. The presence of an accent of S2 on the aorta is NOT typical for:

- A. Secondary arterial hypertension
- B. Aortic regurgitation
- C. Atherosclerosis of the aorta
- D. Syphilitic aortitis
- E. Essential arterial hypertension

32. A physiologic split S2 occurs when:

- A. During expiration
- B. Throughout the respiratory cycle
- C. Happens during inspiration when increased venous return to the right side of the heart delays the closure of the pulmonic valve
- D. During exercise
- E. Lying down

33. Closure and vibration of the mitral and tricuspid valves is a valvular component of:

- A. S1
- B. S2
- C. Mitral valve opening tones
- D. S3
- E. S4

34. S3 can be an important sign of:

- A. Secondary arterial hypertension
- B. Systolic heart failure
- C. Atherosclerosis of the aorta

- D. Syphilitic aortitis
- E. Essential arterial hypertension

35. The S4 sound is low pitched and best heard:

- A. At the apex with the patient in the left lateral decubitus position
- B. In the second intercostal space on the right at the sternum
- C. In the second intercostal space on the left at the sternum
- D. At the base of the xiphoid process
- E. In Erb`s point

Topic 9. *Auscultation of the heart: organic and functional heart murmurs*

1. Diastolic murmur at the apex of the heart can be detected with heart disease:

- A. Aortic stenosis
- B. Mitral insufficiency
- C. Mitral stenosis
- D. Insufficiency of the tricuspid valve
- E. Pulmonary artery stenosis

2. Functional systolic murmur is typical for:

- A. Vitamin B12-deficiency anemia
- B. Iron deficiency anemia
- C. Post-hemorrhagic anemias
- D. Hypochromic anemias
- E. Al anemias

3. What is the name of the functional murmur that is heard in patients with aortic regurgitation?

- A. Austin Flint
- B. Corrigan
- C. Coomb's
- D. "top".

E. Graham-Steell

4. The main symptom of functional murmurs are everything EXCEPT:

- A. More often diastolic
- B. Short, quiet
- C. Change their character when the position of the body changes
- D. Are characterized by insignificant conductivity
- E. There are no signs of organic heart damage

5. Configuration of murmur in mitral stenosis:

- A. Decreasing
- B. Increasing
- C. Increasing and decreasing
- D. Decreasing and increasing
- E. Long

6. Area of murmur conduction at aortic regurgitation:

- A. In the interscapular region
- B. In the carotid arteries
- C. In the armpit
- D. To the Erb's point
- E. In the supraclavicular region

7. A systolic murmur over the aorta is typical for:

- A. Aortic aneurysms
- B. Aortic stenosis
- C. Mitral stenosis
- D. Insufficiency of the tricuspid valve
- E. Pulmonary artery stenosis

8. The patient has diastolic murmur in the Erb's point. This is typical for:

- A. Mitral insufficiency
- B. Mitral stenosis



- C. Aortic stenosis
- D. Aortic regurgitation
- E. Tricuspid valve insufficiency

9. Pericardial friction rub is characterized by:

- A. Auscultated at the sites of valve auscultation
- B. Is carried out in the axillary region
- C. Increases when pressed stethoscope on the chest
- D. It is heard at the heart apex
- E. Disappears when inhaled

10. Area of murmur`s conduction at mitral regurgitation:

- A. In the interscapular region
- B. On the carotid arteries
- C. Left axillary area
- D. In the epigastric region
- E. In the supraclavicular region

11. At aortic insufficiency is heard:

- A. Systolic murmur
- B. Graham-Steell murmur
- C. Diastolic murmur
- D. Midsystolic click
- E. Pericardial friction rub

12. For aortic stenosis all signs can be detected, EXCEPT:

- A. Decreasing of the S1 sound at the 1st point of auscultation
- B. Conducting murmur on interscapular region
- C. Loud systolic murmur over the aorta
- D. Conducting murmur on the carotid arteries
- E. Conducting murmur n the epigastric region

13. Aortic valve insufficiency is characterized by:

- A. Decreasing of the S2 sound on the aorta
- B. Accent S2 sound on the aorta
- C. Systolic murmur at the 4th point
- D. Quail rhythm
- E. Gallop rhythm

14. Auscultation: A patient has a loud systolic murmur of growing-decreasing character in the right second intercostal space which is conducted into the carotid arteries. What syndrome does the patient have?

- A. Mitral stenosis
- B. Mitral valve incompetence
- C. Aortic stenosis
- D. Aortic valve incompetence
- E. Tricuspid valve incompetence

15. A patient has a decreasing systolic murmur at the heart apex. This murmur occupies the 2/3 of the systole and conducted to the left axillary region. What syndrome does the patient have?

- A. Mitral stenosis
- B. Mitral valve incompetence
- C. Aortic stenosis
- D. Aortic valve incompetence
- E. Tricuspid valve incompetence

16. A patient has a decreasing diastolic murmur in the second right intercostal space. This murmur appears after the S2 sound and occupies 2/5 of the diastole. The murmur is conducted to the Erb's point. What syndrome does the patient have?

- A. Mitral stenosis
- B. Mitral valve incompetence
- C. Aortic stenosis
- D. Aortic valve incompetence
- E. Tricuspid valve incompetence

17. A patient has a decreasing diastolic murmur, which appears in a small interval after the second heart sound. It occupies all diastole. The murmur has presystolic amplification, not conducted anywhere. What syndrome does the patient have?

- A. Mitral stenosis
- B. Mitral valve incompetence
- C. Aortic stenosis
- D. Aortic valve incompetence
- E. Tricuspid valve incompetence

18. A patient has a decreasing systolic murmur on the level of low third of the sternal and it is conducted to the right and upwards. The murmur is intensified on breathing in. What syndrome does the patient have?

- A. Mitral stenosis
- B. Mitral valve incompetence
- C. Aortic stenosis
- D. Aortic valve incompetence
- E. Tricuspid valve incompetence

19. The murmur of aortic valve insufficiency will be better heard:

- A. At the top
- B. In the II intercostal space to the right of the sternum
- C. In the II intercostal space to the left of the sternum
- D. At the base of the xiphoid process on the right
- E. At Botkin-Erb's point

20. Select the intracardiac murmur:

- A. Pericardial friction rub
- B. Pleural rub
- C. Murmur with a defect of the interventricular septum
- D. Duroziez's sign
- E. Pleuropericardial murmur

21. Diastolic murmur is heard with such defects, EXCEPT:

- A. Aortic regurgitation
- B. Aortic stenosis
- C. Pulmonary regurgitation
- D. Mitral stenosis
- E. Tricuspid regurgitation

22. Systolic murmur is heard with such defects, EXCEPT:

- A. Aortic stenosis
- B. Mitral regurgitation
- C. Mitral stenosis
- D. Tricuspid regurgitation
- E. Pulmonary stenosis

23. Diastolic murmur at the heart apex is heard when:

- A. Mitral regurgitation
- B. Mitral stenosis
- C. Aortic regurgitation
- D. Tricuspid stenosis
- E. Aortic stenosis

24. What is the loudest and roughest murmur?

- A. Systolic at the apex
- B. Diastolic at the apex
- C. Systolic in the II intercostal space to the right of the sternum
- D. Diastolic in the II intercostal space to the right of the sternum
- E. Systolic in the II intercostal space to the left of the sternum

25. Which murmur and at what point of auscultation is heard in case of pulmonary regurgitation?

- A. Diastolic murmur at the apex of the heart
- B. Diastolic murmur at the base of the xiphoid process
- C. Systolic murmur in the II intercostal space to the left of the sternum
- D. Diastolic murmur in the II intercostal space to the left of the sternum
- E. Systolic murmur in the II intercostal space to the right of the sternum

26. Which murmur and at what point of auscultation is heard in case of aortic regurgitation?

- A. Diastolic murmur at the apex of the heart
- B. Systolic murmur at the base of the xiphoid process
- C. Systolic murmur in the II intercostal space to the right of the sternum
- D. Diastolic murmur in the II intercostal space to the right of the sternum
- E. Systolic-diastolic murmur in the II intercostal space to the right of the sternum

27. Which murmur and at what point of auscultation is heard in case of tricuspid regurgitation?

- A. Systolic murmur at the apex of the heart
- B. Systolic murmur at the base of the xiphoid process
- C. Systolic murmur in the II intercostal space to the right of the sternum
- D. Diastolic murmur in the II intercostal space to the right of the sternum
- E. Diastolic murmur in the II intercostal space to the left of the sternum

28. Which murmur and at what point of auscultation is heard in case of pulmonary stenosis?

- A. Systolic murmur at the apex of the heart
- B. Systolic murmur at the base of the xiphoid process
- C. Systolic murmur in the II intercostal space to the left of the sternum
- D. Diastolic murmur in the II intercostal space to the left of the sternum

E. Systolic-diastolic murmur in the II intercostal space to the left of the sternum

29. Organic murmurs after exercise:

- A. Become louder
- B. Become weaker
- C. Disappear
- D. Do not change
- E. The place and nature of the murmur change

30. In case of Mitral regurgitation, the murmur is heard:

- A. Systolic
- B. Presystolic
- C. Protodiastolic
- D. Diastolic
- E. Mesodiastolic

31. The best listening point for aortic stenosis:

- A. Apex of the heart
- B. In the II intercostal space to the right of the sternum
- C. In the II intercostal space to the left of the sternum
- D. Botkin-Erb's point
- E. Base of the xiphoid process

32. The best listening point for the mitral regurgitation:

- A. Zone of absolute dullness of the heart
- B. In the II intercostal space to the left of the sternum
- C. Apex of the heart
- D. Xiphoid process

E. In the III intercostal space to the right of the sternum

33. At what heart defect is a diastolic murmur heard at the apex of the heart?

A. Mitral regurgitation

B. Mitral stenosis

C. Aortic regurgitation

D. Tricuspid stenosis

E. Aortic stenosis

34. The best listening point for the pericardial friction rub:

A. Zone of absolute cardiac dullness

B. In the II intercostal space to the left of the sternum

C. Apex of the heart

D. Xiphoid process

E. In the III intercostal space to the right of the sternum

35. Which functional murmur is heard over pulmonary artery in case of several mitral stenosis?

A. Pleural rub

B. Graham-Steell murmur

C. Midsystolic click

D. Duroziez's sign

E. Pericardial friction rub

***Subsection 4. Instrumental Methods of Examination of Cardiovascular System.***

*Topic 10. Methods of the registration and detailed study of ECG. ECG signs of atrial and ventricular hypertrophy.*

1. In which part of the left ventricle does lead V3 register changes?

A. Septal area

- B. Apex of the heart
- C. Side wall
- D. Back wall
- E. Front wall

2. The typical ECG signs of right atrial hypertrophy:

- A. The duration of the P wave is not more than 0.1 s
- B. The duration of the P wave is more than 0.1 s
- C. The P wave in lead III is high-amplitude (more than 2.5 mm)
- D. P wave in leads I, aVL, V5 "double humped"
- E. P wave in lead V1 a deep negative phase

3. The ST segment normally can be:

- A. Raised above the isoline
- B. Isoelectric
- C. Depressed
- D. There are various options for the location of the ST segment, associated with its slight displacement
- E. All answers are correct

4. The duration of the QT interval normally depends on:

- A. Age
- B. Heart rate
- C. Gender
- D. Height
- E. Correct A, B, C

5. Normal sinus rhythm is characterized by:

- A. The presence of positive P waves in leads I, II, aVL, aVF, V1-V6



- B. Constant distance PP
- C. The presence of a PQ interval of constant duration
- D. The presence of Q waves in lead I
- E. Correct A and B

6. The normal position of the electrical axis of the heart is characterized by:

- A.  $R_{II} > R_I > R_{III}$
- B.  $R_I > R_{II} > R_{III}$
- C.  $R_I = R_{II} = R_{III}$
- D.  $R_{III} > R_{II} > R_I$
- E. All answers are correct

7. The typical ECG signs of left atrial hypertrophy:

- A. The duration of the P wave is not more than 0.1 s
- B. The duration of the P wave is more than 0.12 s
- C. The wave P in lead III is high-amplitude
- D. P wave in leads I, aVL is positive
- E. P wave in leads III, aVF is positive

8. Signs of severe right ventricle hypertrophy:

- A. High amplitude R wave, ST segment depression and T wave inversions in leads V1 to V2
- B. High amplitude R wave, ST segment depression and T wave inversions in leads V5 to V6
- C. Left electric axis of type  $R_I - S_{III}$
- D. All of the above signs are characteristic of right ventricular hypertrophy
- E. Deep S wave in the leads V1-V2

9. The duration of the PQ interval is normal:

- A. 0.11-0.18 s
- B. 0.18-0.21 s
- C. 0.11-0.24 s
- D. 0.07-0.11 s
- E. 0.14-0.22 s

10. The normal automatism of the sinus node is:

- A. 40-50 impulses per minute;
- B. 50-60 impulses per minute;
- C. 60-80 impulses per minute;
- D. 80-100 pulses per minute;
- E. More than 100 impulses per minute

11. The normal automatism of the atrioventricular node is:

- A. 40-60 impulses per minute;
- B. 50-60 impulses per minute;
- C. 60-80 impulses per minute;
- D. 80-100 pulses per minute;
- E. More than 100 impulses per minute.

12. Normal automatism of the bundle branch of His is:

- A. 40-60 impulses per minute;
- B. 50-60 impulses per minute;
- C. 30-40 impulses per minute;
- D. 80-100 pulses per minute;
- E. More than 100 impulses per minute.

13. The deviation of the electrical axis to the left is characterized by:

- A. RI-SIII

- B. RI-S II
- C. RII> RIII
- D. All answers are wrong
- E. RII=SII

14. The deviation of the electric axis to the right is characterized by:

- A. RI-SIII
- B. RIII-SI
- C. RII> RIII
- D. All answers are wrong
- E. RII=SII

15. With leads is recorded a negative T wave at the left ventricular hypertrophy:

- A. I, II, III
- B. V1-V3
- C. aVR
- D. I, II, AVL, V5, V6
- E. aVL, aVF

16. The ECG represents...

- A. The structure of the heart
- B. Movement of electrical impulses through the heart
- C. Movement of blood through the heart
- D. The state of the coronary arteries
- E. Condition of the valves

17. Electrical conduction of the heart's cells is also known as...

- A. Polarisation
- B. Repolarisation

- C. Depolarisation
- D. Defibrillation
- E. Flutter

18. ECG paper speed should be...

- A. 25 cm/s
- B. 2.5 cm/s
- C. 2.5 mm/s
- D. 25 mm/s
- E. 5 mm/s

19. 1 millivolt is represented as...

- A. 10 mm on the vertical axis
- B. 2 cm on the horizontal axis
- C. 1 large square on the horizontal axis
- D. 2 cm on the vertical axis
- E. 5 mm on the vertical axis

20. One small square on the horizontal axis at tape recording speed 25 mm/s of the ECG is...

- A. 0.4 seconds
- B. 0.04 seconds
- C. 1 second
- D. 0.2seconds
- E. 0.02 seconds

21. One large square (5 mm) on the horizontal axis at tape recording speed 25 mm/s of the ECG is...

- A. 0.04 seconds

- B. 1 second
- C. 0.2 seconds
- D. 0.02 seconds
- E. 0.1 seconds

22. Localization of the electrode V4 for recording ECG:

- A. In the fourth intercostal space on the right sternal border
- B. In the fourth intercostal space on the left sternal border
- C. In the fifth intercostal space on the midaxillary line
- D. In the fifth intercostal space on the midclavicular line
- E. In the fifth intercostal space on the parasternal line

23. The width of the QRS should be...

- A. < 0.1 second
- B. 0.12 seconds
- C. 0.12–2.0 seconds
- D. >2 seconds
- E. >0.12 seconds

24. An ECG is 'Sinus rhythm' if ...

- A. It has a QRS complex
- B. It has a P wave
- C. It has a T wave
- D. The ventricular rate is regular
- E. It has a U wave

25. Normal Q wave if its depth does not exceed:

- A. 1 mm
- B. 10 mm

- C.  $1/2 R$
- D. 5 mm
- E. No more than  $1/4 R$

26. PQ interval is measured:

- A. From end P to end Q
- B. From end P to start Q
- C. From start P to end Q
- D. From start P to start Q
- E. All of the above options are correct

27. Which part of the left ventricle is changes in leads V5-V6 recorded?

- A. Septal area
- B. Apex of the heart
- C. Lateral wall of the left ventricle
- D. Posterior wall of the left ventricle
- E. Anterior wall of the left ventricle

28. ECG sign of left ventricular hypertrophy:

- A. QRS complex  $<0.1c$
- B. QRS complex  $0.2c$
- C.  $RV6 > RV5$  and  $RV4$
- D.  $RV1-2 > SV1-2$
- E. Deep  $SV5-6$

29. ECG signs of right ventricular hypertrophy are:

- A. QRS complex  $> 0.12$  seconds;
- B. Low voltage ECG
- C.  $RV1-2 > SV1-2$

D.  $RV_6 > RV_4$

E. High  $RV_1-6$

30. What is represent QRS complex?

A. Atrial excitation

B. Repolarization of the atria

C. Passage of a pulse through the AV connection

D. Depolarization of the ventricular myocardium

E. Repolarization of the ventricular myocardium

31. Lead II shows electrical activity from:

A. Right arm to left leg

B. Right arm to right leg

C. Left arm to left leg

D. Left arm to right leg

E. Right arm to left arm

32. Which wave is represented ventricular repolarization?

A. P

B. R

C. Q

D. T

E. U

33. What is represent P wave?

A. Atrial depolarization

B. Ventricular depolarization

C. Ventricular repolarization

D. Junctional repolarization

## E. Atrial and ventricular depolarization

34. One small square on the horizontal axis at tape recording speed 50 mm/s of the ECG is...

- A. 0.4 seconds
- B. 0.04 seconds
- C. 1 second
- D. 0.2seconds
- E. 0.02 seconds

35. One large square (5 mm) on the horizontal axis at tape recording speed 50 mm/s of the ECG is...

- A. 0.04 seconds
- B. 1 second
- C. 0.2 seconds
- D. 0.02 seconds
- E. 0.1 seconds

*Topic 11. Electrocardiographically examination of the patients with disorders of automaticity and excitability.*

1. In what part of the conduction system does an excitation impulse normally occur?

- A. Sinus node
- B. AV connections
- C. Left pedicle of the bundle of His
- D. Right pedicle of the bundle of His
- E. Purkinje fibers.

2. What ECG interval is used to determine the rhythm of cardiac activity?

- A. P – Q.



- B. QRS
- C. QRST
- D. R – R
- E. P – P

3. What type of arrhythmia indicates a violation of automatism?

- A. Extrasystole
- B. Atrial fibrillation
- C. Paroxysmal tachycardia
- D. Sinus tachycardia
- E. Atrial flutter

4. ECG sign of a normal sinus rhythm:

- A. Heart rate 90-100 per minute
- B. Heart rate 60–80 per minute, regular
- C. Heart rate 80-100 per minute, regular
- D. Heart rate 60–80 per minute, irregular
- E. Heart rate 40-60 per minute, regular

5. What ECG sign is characterized sinus arrhythmia?

- A. Increase in heart rate during physical activity
- B. Reduction of heart rate at rest
- C. Dependence of heart rate on the state of the myocardium
- D. Increase heart rate during exhalation
- E. The rate increases with inspiration, decreases with expiration

6. What are the ECG signs of sinus tachycardia?

- A. Heart rate 90-160 per minute, regular
- B. Heart rate 59–40 per minute
- C. Heart rate 140-220 per minute, regular

- D. Heart rate 140-220 per minute, irregular
- E. Heart rate 60-90 per minute, regular

7. The main ECG sign of premature atrial contractions:

- A. Absence of a regular connection between the P wave and the QRS complex.
- B. Premature excitement normal QRS complex
- C. A wide ( $> 0.12$  s) and distorted QRS
- D. Shortening the interval P – P
- E. Full compensatory pause

8. What is paroxysmal tachycardia?

- A. Disappearance of the P wave
- B. Appearance of f-waves with a frequency of 250-400 per minute
- C. Regular sinus rhythm.
- D. Sudden starting and end
- E. Lack of differentiation of all waves

9. The main ECG signs of atrial flutter:

- A. The appearance of a saw-toothed F - waves with a frequency of 250-400 per minute
- B. No definite P waves, the ventricular rate is irregular
- C. Regular sinus rhythm
- D. Sudden start and end
- E. Lack of differentiation of all waves

10. The main ECG signs of premature ventricular contractions:

- A. Absence of a regular connection between the P wave and the QRS complex.
- B. Premature excitement normal QRS complex
- C. A wide ( $> 0.12$  s) and distorted QRS

- D. Shortening the interval P – P
- E. Incomplete compensatory pause

11. The main ECG signs of bigeminy:

- A. Repeating pattern of two beats, with PVCs and normal beats alternating
- B. The appearance of two unifocal PVCs
- C. The appearance of two paired PVCs
- D. Alternation of different PVCs
- E. The regularity of the appearance of PVCs

12. The main ECG signs of atrial fibrillation:

- A. The appearance of a saw-toothed F - waves with a frequency of 250-400 per minute
- B. No definite P waves, the ventricular rate is irregular
- C. Regular sinus rhythm
- D. Sudden start and end
- E. Lack of differentiation of all waves

13. The main ECG signs of multifocal PVCs:

- A. Different amplitude of QRS complexes
- B. Those that originate from different sites of ventricles and have different shapes
- C. Absence of a natural connection between the P wave and the QRS complex
- D. Tachycardia-bradycardia syndrome
- E. Changing the polarity of the P wave

14. The main ECG sign of ventricular fibrillation:

- A. Tachycardia-bradycardia syndrome
- B. Alternation of different shapes, amplitudes and polarities of the P wave.
- C. Absence of a natural connection between the P wave and the QRS complex.
- D. Disappearance of the P wave.
- E. Complete distortion and irregularity of the complexes

15. The main ECG sign of ventricular flutter:

- A. Tachycardia-bradycardia syndrome.
- B. Alternation of different shapes, amplitudes and polarities of the P wave.
- C. Absence of a natural connection between the P wave and the QRS complex.
- D. Disappearance of the P wave.
- E. The ECG looks like a sinusoid.

16. PVCs is characterized by the following signs on the ECG, EXCEPT:

- A. Absence of P wave
- B. Full compensatory pause
- C. Discordance of the T wave and the main wave of the QRS complex
- D. Broadening of the QRS complex more than 0.12 sec.
- E. Normal QRS complex

17. Full compensatory pause is most typical for:

- A. PVCs
- B. PACs
- C. JPCs
- D. Atrial flutter
- E. Supraventricular extrasystoles

18. Sinus tachycardia can be caused by:

- A. Increased tone of the sympathetic nervous system
- B. Decreased vagus nerve tone
- C. IHD
- D. None of these factors
- E. All of the above factors

19. The normal physiological pacemaker:

- A. Bundle of His
- B. AV node
- C. SA node
- D. Purkinje fibers
- E. Coronary sinus

20. PVCs is characterized by:

- A. The absence of the P wave, the QRS complex is not changed, the compensatory pause is incomplete
- B. The P wave is negative in front of the widened deformed QRS complex
- C. Full compensatory pause
- D. Concordance of the T wave and the main wave of the QRS complex
- E. The absence of the T wave

21. For junctional premature contraction from the upper part of AV node, the following is characteristic:

- A. P wave positive before the QRS complex
- B. P wave positive, deformed in front of the QRS complex
- C. P wave negative before the QRS complex
- D. P wave negative after QRS complex
- E. P wave absence

22. Repeating pattern of two beats, with PVCs and normal beats alternating:

- A. Ventricular bigeminy
- B. Premature ventricular contractions in trigeminy
- C. Premature ventricular contractions in pairs
- D. Re-entry ventricular arrhythmia
- E. Ventricular fibrillation

23. Registration on an ECG of frequent (200-500 per minute) irregular, differing from each other in amplitude and waveform in the absence of clearly differentiated ventricular complexes is typical for:

- A. Atrial fibrillation;
- B. Atrial flutter;
- C. Ventricular fibrillation;
- D. Ventricular flutter
- E. Supraventricular tachycardia

24. ECG sign of sinus rhythm:

- A. Maintaining the correct rhythm and a positive P wave
- B. Saving the T wave
- C. Absent regular connection between the P wave and the QRS complex.
- D. Tachycardia-bradycardia syndrome
- E. Change in positivity and polarity of the P wave.

25. On the ECG are no P waves, instead of them f waves of different amplitudes and durations better seen in leads II, III, avF, V1-V2. What rhythm disturbance is most likely in the patient?

- A. Ventricular premature beats
- B. Atrial premature beats
- C. Atrial fibrillation
- D. Sinus rhythm
- E. Ventricular paroxysmal tachycardia

26. Everything is typical for premature atrial contraction, EXCEPT:

- A. Unchanged cardiac complex with a preceding P wave;
- B. Incomplete compensatory pause after premature contraction
- C. Deformed and wide QRS complex
- D. Normal QRS complex

E. The presence of P wave followed by a normal QRS complex

27. Sinus arrhythmia does NOT correspond to the symptom:

A. The presence of a positive P wave before each QRS complex

B. P wave shape is constant in one lead

C. The shape of the P wave is different; PQ intervals are not the same

D. R-R and T-P distance are different (the difference is greater than 0.15 seconds)

E. P-Q intervals are the same

28. It is NOT typical for a PVC:

A. The presence of a premature P wave with normal QRS complex

B. The absence of a P wave

C. Wide ( $> 0.12$  sec) and deformed ventricular complex

D. Discordant displacement of the ST segment and the T wave inversion

E. Usually a complete compensatory pause

29. An abrupt episode of tachycardia with the heart rate usually between 140 and 250 beats per minute; the P wave may be abnormally shaped, or not seen because it is buried in the preceding T wave. The QRS is normal. What is it?

A. Paroxysmal supraventricular tachycardia (PSVT)

B. Paroxysmal Ventricular tachycardia

C. Extrasystolic arrhythmia

D. Atrial fibrillation

E. Atrial flutter

30. Atrial fibrillation is characterized by:

A. Regular heart rate

B. Gradual lengthening of the PQ interval

C. A very fast atrial rate arising from many ectopic foci

D. Shortening the PQ interval

E. Ventricular excitation precedes atrial excitation

31. What refers to the disorders of excitability?

- A. Premature contractions
- B. Paroxysmal tachycardia
- C. Atrial fibrillation
- D. Atrial flutter
- E. All the above

32. What is called a beat initiated by an ectopic focus that appears early in the cycle?

- A. Premature contraction
- B. Atrial fibrillation
- C. Paroxysmal tachycardia
- D. The migration of a pacemaker
- E. Ventricular fibrillation

33. Disorder of the SA-node automaticity DOES NOT include:

- A. Sinus tachycardia
- B. Sinus bradycardia
- C. Premature contractions
- D. Sinus arrhythmia
- E. Sick sinus syndrome

34. Disorder of the automaticity DOES NOT include:

- A. Sinus tachycardia
- B. Sinus bradycardia
- C. Atrial fibrillation
- D. Sinus arrhythmia



E. Sick sinus syndrome

35. The P of premature contractions will be inverted before or after the QRS, or it may be completely hidden in the QRS. What type is the premature contraction?

- A. Ventricular premature beats
- B. Atrial premature beats
- C. Junctional premature contraction
- D. Sinus rhythm
- E. Ventricular paroxysmal tachycardia

*Topic 12. ECG examination of the patients with infringement of conductive function. Basis of realization of electroimpulse therapy.*

1. What kind of block is characterized by an increase in duration of the PQ interval?

- A. Interatrial
- B. Sinoauricular
- C. Atrioventricular block I degree
- D. Left bundle branch block
- E. Right bundle branch block

2. What is the main ECG sign of a bundle branch block?

- A. Increase duration of the P – Q interval.
- B. Increase duration of the QRS complex ( $> 0.12$  sec) with deformation
- C. Increase duration of the QRS complex without deformation.
- D. Decrease duration of the P – Q segment.
- E. Displacement of the ST segment

3. The main ECG sign of First degree AV block:

- A. The PQ interval is over 0.20 second

- B. Periodic increase duration of the PQ interval.
- C. Periodic loss of the QRS complex
- D. Periodic loss of the PQRST complex
- E. Continuous increase in QRS duration

4. What block is accompanied by an increase duration of the P wave?

- A. Interatrial
- B. Sinus
- C. Incomplete atrioventricular
- D. Left bundle branch of His
- E. Right bundle branch of His

5. Name the main ECG sign of intraventricular block:

- A. Increase in the duration of the P – Q interval.
- B. An increase in the duration of the QRS complex with deformation.
- C. An increase in the duration of the QRS complex without deformation.
- D. Decrease in the duration of the P – Q segment.
- E. Displacement of the ST segment.

6. On the ECG, the rhythm is regular, the EHA is deflected to the left, the QRS complex is deformed, more than 0.12 s, the ST segment is displaced downward. Your conclusion:

- A. Interatrial block
- B. Left ventricular hypertrophy
- C. Incomplete AV block
- D. Block of the right bundle branch
- E. Block of the left bundle branch

7. On the ECG, the rhythm is regular, the duration of the PQ interval is 0.28 s, the QRS complex is normal. What pathology should you think about?

- A. Interatrial block
- B. Sinus block
- C. First degree AV block
- D. II degree AV block
- E. Block of the right bundle branch

8. On the ECG, the rhythm is irregular, a progressive lengthening of the PR interval until a beat is blocked. What pathology should you think about?

- A. Complete AV block
- B. AV block of 1 degree
- C. AV block of the II degree (Mobitz 1)
- D. AV block of the II degree (Mobitz II)
- E. Sinus block

9. On the ECG, the rhythm is regular, the duration of the P wave is 0.14 s. What pathology should you think about?

- A. Sinus block
- B. Interatrial block
- C. Incomplete AV block of II degree
- D. Interventricular block
- E. AV block of the I degree

10. On the ECG, the rhythm is regular, the frequency of the P waves is 72 per minute, the QRS complex is 42 per minute. What pathology should you think about?

- A. Sinoauricular block
- B. Incomplete AV block of the II degree
- C. AV block II degree type 2: 1
- D. Complete AV blockade of the III degree
- E. Interventricular block

11. On the ECG, the rhythm is irregular, for every three P waves - 1 complex QRS. Pattern shows a specific ratio of blocked beats such as 3:1. What pathology should you think about?

- A. Sinoauricular block
- B. AV blockade with Wenckebach-Samoilov periods
- C. Second degree AV block Mobitz type II
- D. Complete AV block of the III degree
- E. Second degree AV block Mobitz type I

12. On the ECG the rhythm is regular, the electrical left axis deviation (LAD), the duration of the QRS complex is 0.14 s. Your conclusion:

- A. Interatrial block
- B. Left ventricular hypertrophy
- C. Block of the right bundle branch
- D. Block of LBBH
- E. Complete AV block

13. The duration of the P-Q interval is more than 0.2 s typical for:

- A. Complete atrioventricular block
- B. Atrioventricular block I degree
- C. Bundle branch block
- D. Sinoatrial block
- E. Atrioventricular block II degree

14. Morgagni-Edemsa-Stokes syndrome may occur in?

- A. Atrial fibrillation
- B. Complete atrioventricular block
- C. Ventricular extrasystole
- D. Interatrial block
- E. Atrioventricular block II degree

15. The main electrocardiographic sign of interatrial block is:

- A. Increase of PQ interval
- B. The duration of the P wave more than 0.11 seconds
- C. Decrease of the duration of the P wave
- D. Negative P wave in lead III
- E. Shortening the duration of the PQ interval

16. The electrocardiographic sign of right bundle branch block is:

- A. In V1-2, III, aVF extended ventricular M-shaped complexes
- B. In V1-2, III, aVF extended, deformed ventricular complexes such as QS
- C. In V5-6, I, aVL extended, deformed ventricular complexes of the RsR`
- E. Extended, deformed ventricular complexes in V3-4

17. The duration of the QRS complex with complete intraventricular block is:

- A. 0.06-0.1 seconds;
- B. 0.1-0.11 seconds;
- C. More than 0.12 seconds
- D. 0.03-0.09 seconds
- E. 0.04-0.1 seconds

18. The duration of the PQ interval in 1-degree atrioventricular block is:

- A. Less than 0.12 seconds
- B. 0.12-0.2 seconds
- C. More than 0.2 seconds
- D. 0.06-0.09 seconds
- E. 0.1-0.15 seconds

19. Heart rate is 40 per minute, P-Q -0.18 s constant, there is one QRS complex for three P waves, the QRS complex is not changed. This picture is typical for:

- A. Atrioventricular block II degree, Mobitz II
- B. Atrioventricular block I degree
- C. Sinoauricular block
- D. Atrial fibrillation
- E. Atrioventricular block II degree, Mobitz I

20. On the ECG: P-P intervals are the same, rate 80 beats per minute. The ventricular rhythm is 40 per minute. There is no connection between P and QRS. What is the disorder of the rhythm?

- A. Atrial flutter
- B. Complete left bundle branch block
- C. Complete atrioventricular block
- D. Atrial fibrillation
- E. Complete right bundle branch block

21. Loss of the QRS and T complex without a gradual lengthening of the PQ interval is observed when:

- A. Atrioventricular block I degree
- B. Atrioventricular block II degree Mobitz 1
- C. Complete atrioventricular block
- D. Right bundle branch block
- E. Atrioventricular block II degree Mobitz 2

22. Note ECG signs of complete left bundle branch block:

- A. Duration of the QRS complex less than 0.12s
- B. Wide M-shaped QRS complex in leads V1, V2, III, aVF
- C. Wide, deformed and serrated R wave in leads V5, V6, I, aVL
- D. The ST segment is below the isoline, the T wave is negative in the right leads

E. Positive delta wave in V1- V4

23. A complete AV block is characterized by the following ECG signs, EXCEPT:

- A. P-P intervals are the same
- B. R-R intervals are the same
- C. The ventricles contract less frequently than the atria
- D. The presence of “f” waves on the ECG
- E. The ventricles and atria contract independently

24. Frederick's syndrome is a combination of:

- A. WPW syndrome and complete atrioventricular block
- B. Atrial fibrillation or atrial flutter and third degree AV
- C. AV block and left bundle branch block
- D. Atrial fibrillation and intraventricular block
- E. CLC syndrome and atrial flutter

25. Shape of QRS complex in leads V1 and V2 in right bundle branch block:

- A. rS or rs
- B. rsR' or rSR' (M-shaped)
- C. rS'
- D. QS
- E. qrS

26. On the ECG - wide QRS complex is  $> 0.12$  sec, in lead V1 as a double R-wave, a broad terminal S-wave in lead I, V5 and V6. Select the appropriate definition.

- A. Paroxysmal ventricular tachycardia
- B. Right bundle branch block
- C. Atrial fibrillation
- D. Left bundle branch block

E. Atrial flutter

27. What type of block is characterized by intermittent loss of the PQRST complex?

A. Sinoatrial block

B. Atrioventricular block

C. Block of LBB

D. Block of RBB

E. Interatrial block

28. Sinoatrial block is characterized by:

A. P wave lengthening

B. PQ interval lengthening

C. QRS complex  $> 0.12$  s

D. Periodic loss of PQRST complex

E. ST segment offset

29. The ECG shows a significant lengthening of the PQ interval. This means that the conduction of the impulse is slowed down in:

A. Atrioventricular node

B. Atria

C. Ventricles

D. Bundle of His

E. Purkinje fibers

30. The patient's ECG showed signs of complete LBB block. What is main ESG sign this block?

A. The duration of the QRS complex is more than 0.12 seconds

B. The duration of the QRS complex is less than 0.12 seconds

C. The duration of the QRS complex is 0.09-0.11 seconds



D. The duration of the QRS complex is up to 0.09 sec

E. Duration of the QRS complex 0.06-0.08 sec

31. On 2 degree atrioventricular block is the heart rate:

A. Regular

B. Irregular

C. Non-sinus

D. Ventricular

E. Ectopic

32. What heart function disorder is complete block LBBH?

A. Automatism

B. Excitability

C. Conductivity

D. Contractility

E. Extensibility

33. On the patient's ECG was diagnosed atrioventricular block. This block is characterized by:

A. Conducting an impulse from the sinus node to the atria

B. Conducting an impulse from the right atrium to the left

C. Conducting an impulse along the death pathways

D. Conducting an impulse from the right ventricle to the left

E. Conducting impulses from the atria to the ventricles

34. A PR interval 0.38 second is an indication of:

A. Atrioventricular block I degree

B. Atrioventricular block II degree Mobitz 1

C. Complete atrioventricular block

- D. Right bundle branch block
- E. Atrioventricular block II degree Mobitz 2

35. Both the P waves and QRS complexes occur regularly, but there is no relationship between them. The PR interval varies and some P waves may be partly obscured by QRS complexes. What is it?

- A. Sinoauricular block
- B. Incomplete AV block of the II degree
- C. AV block II degree type 2: 1
- D. Complete AV block
- E. Interventricular block

### ***Subsection 5. Main Methods of Examination of Digestive System***

*Topic 13. Questioning and inspection of the patients with the disorders of digestive system. Inspection and superficial palpation of the abdomen.*

1. Aversion to meat dishes is characteristic of the disease:
  - A. Chronic gastritis
  - B. Gastric ulcer
  - C. Peptic ulcer of the duodenum
  - D. Stomach cancer
  - E. Chronic colitis
  
2. Mark for which disease such a description of pain is characteristic: pain occurs 2 hours after meals, often in the night:
  - A. Peptic ulcer of duodenum
  - B. Ulcer of the antrum
  - C. Ulcer of the big curvature
  - D. Ulcer of cardiac part of stomach and small curvature
  - E. Ulcer of esophagus

3. Hemorrhagic syndrome includes all symptoms, EXCEPT:

- A. Bleeding gums
- B. Nose bleeds
- C. Skin hemorrhages
- D. Persistent itching
- E. Uterine bleeding

4. What does cholestasis syndrome include:

- A. Persistent itching
- B. Jaundice
- C. Skin pigmentation
- D. Xanthelasma
- E. All symptoms above

5. Vomit with blood in it or a substance that looks like coffee grounds, melena are symptoms of:

- A. Acute gastrointestinal bleeding
- B. Acute pancreatitis
- C. Syndrome of gastric dyspepsia
- D. Syndrome of intestinal dyspepsia
- E. Chronic gastritis

6. Choose the correct definition of the term "Belching":

- A. The passage of black, tarry stools, which usually occurs as a result of upper gastrointestinal bleeding
- B. The vomiting of blood, which may be obviously red or have an appearance coffee grounds
- C. The act of expelling air from the stomach through the mouth

D. Rapid (more than 2 times per day) bowel movement with the release of liquid or soft excrements

E. Burning sensation of the patients behind a sternum

7. Choose the correct definition of the term " Hematemesis ":

A. The passage of black, tarry stools, which usually occurs as a result of upper gastrointestinal bleeding

B. The vomiting of blood, which may be obviously red or have an appearance similar to coffee grounds

C. The passage of fresh blood per anus, usually in or with stools

D. Rapid (more than 2 times per day) bowel movement with the release of liquid or soft excrements

E. Burning sensation of the patients behind a sternum

8. Choose the correct definition of the term "melena"

A. The passage of black, tarry stools, which usually occurs as a result of upper gastrointestinal bleeding

B. The vomiting of blood, which may be obviously red or have an appearance similar to coffee grounds

C. The passage of fresh blood per anus, usually in or with stools

D. Rapid (more than 2 times per day) bowel movement with the release of liquid or soft excrements

E. Burning sensation of the patients behind a sternum

9. Complaints related to liver disfunction, EXCEPT:

A. Jaundice

B. Skin itching

C. Meteorism

D. Pain in the right hypochondrium

E. All above

10. Syndrome of intestinal dyspepsia includes the following, EXCEPT:

- A. Disorders of stool – diarrhea or constipation
- B. Increased gas emission (meteorism)
- C. Bloating
- D. Rumbling
- E. Jaundice

11. Indigestion, also known as syndrome of gastric dyspepsia includes the following, EXCEPT:

- A. Abdominal enlargement
- B. Disorders of appetite
- C. Bad taste in the mouth
- D. Belching
- E. Heartburn

12. Dysphagia is:

- A. Difficulty breathing
- B. Difficulty swallowing
- C. Pain during urination
- D. Bloating
- E. Pain during the act of defecation

13. For what pathology is vomiting with food taken 1-2 days ago observed?

- A. Pyloric stenosis
- B. Bleeding from the stomach
- C. Chronic alcohol intoxication
- D. Severe splenomegaly
- E. Acute gastritis

14. For what pathology is melena observed?

- A. Stenosis
- B. Bleeding from the stomach, duodenum, or esophagus
- C. Chronic alcohol intoxication
- D. Intestinal obstruction
- E. Severe splenomegaly

15. For what disease is ascites typical?

- A. Colitis
- B. Cholecystitis
- C. Peptic ulcer
- D. Pancreatitis
- E. Liver cirrhosis

16. What disease can be complicated by gastrointestinal bleeding?

- A. Cholecystitis
- B. Gastritis
- C. Cholangitis
- D. Peptic ulcer
- E. Dyskinesia of the biliary tract

17. What pathology is the "Caput Medusae" characteristic during examination of the abdomen?

- A. Peptic ulcer
- B. Cirrhosis of the liver
- C. Chronic gastritis
- D. Chronic cholecystitis
- E. Chronic colitis

18. What complaint is not typical for patients with digestive system pathology?

- A. Nausea
- B. Vomiting
- C. Expiratory dyspnea
- D. Stomach pain
- E. Diarrhea

19. Superficial palpation of the abdomen should be started:

- A. From the most painful area
- B. From the most palpable area
- C. From the left hypochondrium
- D. From the epigastric region
- E. From the left inguinal area

20. Asymmetrical enlargement of the abdomen may be due to:

- A. Obese
- B. Flatulence
- C. Ascites
- D. Splenomegaly
- E. Pregnancy

21. Symmetrical abdominal enlargement may be due to:

- A. Hepatomegaly
- B. Prolapse of internal organs
- C. Ascites
- D. Splenomegaly
- E. Nephrosclerosis

22. Indicate the shape of the navel with ascites:

- A. Retracted
- B. Smoothed
- C. With overhanging top fold
- D. Bulging
- E. Unchanged

23. Facies Hippocratica (a deathly pale face with a bluish tinge, with sharply sharpened facial features, with deep sunken suffering eyes, with drops of cold sweat on the forehead) can be observed in:

- A. Severe diseases of the abdominal cavity (diffuse peritonitis, perforation of a stomach or duodenal ulcer, intestinal obstruction)
- B. Addison-Biermer anemia
- C. Leprosy
- D. Heart failure
- E. Tetanus

24. What changes detected during examination and percussion of the abdomen are most typical for flatulence?

- A. The abdomen is retracted (scaphoid), practically does not participate in breathing, pronounced tension of the muscles of the abdominal wall
- B. The abdomen is enlarged, dome-shaped, swollen, participates in breathing, percussion - loud tympanitis
- C. The abdomen is enlarged; in a horizontal position - flattened, in a vertical position - it looks saggy, the navel swells
- D. In an emaciated patient in the epigastrium, bulging and periodic waves of antiperistalsis are clearly visible
- E. When examining the abdomen by eye, an increased violent intestinal peristalsis is noticeable, the abdomen is swollen

25. The fluctuation symptom is typical for:

- A. Flatulence



- B. Ascites
- C. Obesity
- D. Pyloric stenosis
- E. Edema of the anterior abdominal wall

26. What is the percussion sound characteristic observing patients with ascites?

- A. Dull
- B. Dull tympanitis
- C. Tympanic
- D. Boxed
- E. Low tympanitis

27. What percussion sound is determined by percussion of the abdomen of a healthy person?

- A. Stupid
- B. Dull
- C. Metal
- D. Tympanic
- E. Boxed

28. The abdomen is frog-shaped in case of:

- A. Flatulence
- B. Pregnancy
- C. Ascites
- D. Peritonitis
- E. Obesity

29. What are the symptoms of the syndrome of increased secretory function of the stomach (hypersecretion)?

- A. Heartburn caused by throwing acidic contents into the esophagus; belching sour; often increased appetite; tendency to constipation

- B. Decreased appetite; rapid feeling of satiety after eating; feeling of heaviness in the epigastric region
- C. Belching rotten; smooth tongue with atrophied papillae
- D. Haematemesis
- E. Predisposition to diarrhea

30. What are the symptoms of the syndrome of reduced gastric secretory function?

- A. Heartburn caused by throwing acidic contents into the esophagus
- B. Belching sour; often increased appetite; tendency to constipation
- C. Spastic pain in the pyloroduodenal region
- D. Decreased appetite; feeling of heaviness in the epigastric region
- E. Tendency to constipation

31. Mark for which disease such a description of pain is characteristic: pain occurs after 15-20 min food intake:

- A. Ulcer of duodenum
- B. Ulcer of the antrum
- C. Ulcer of the big curvature
- D. Ulcer of cardiac part of stomach
- E. Ulcer of small intestine

32. Choose the correct definition of the term " Heartburn"(pyrosis):

- A. The passage of black, tarry stools, which usually occurs as a result of upper gastrointestinal bleeding
- B. The vomiting of blood, which may be obviously red or have an appearance similar to coffee grounds
- C. The passage of fresh blood per anus
- D. Rapid (more than 2 times per day) bowel movement with the release of liquid or soft excrements
- E. Burning sensation of the patients behind a sternum

33. All of the above terms refer to appetite disorders, EXCEPT:

- A. Anorexia
- B. Bulimia
- C. Citofobia
- D. Parorexia
- E. Nausea

34. Task of superficial tentative palpation, EXCEPT:

- A. The presence of tenderness of the whole abdominal wall or its separate portions
- B. The tone of the abdominal muscles
- C. Presence of large tumors and enlargement of the abdominal organs
- D. Study the topography of intestine
- E. Edema of the abdominal wall

35. Task of superficial tentative palpation:

- A. Determine the size of liver
- B. Study the topography of kidneys
- C. Study the topography of stomach
- D. Study the topography of intestine
- E. Edema of the abdominal wall

*Topic 14. Deep sliding methodical palpation of intestine, stomach, liver, spleen and kidneys.*

1. Where is the lower border of the liver along the right midclavicular line normally determined?

- A. At the level of the right costal arch
- B. 2 cm above the right costal arch

- C. 2 cm below the right costal arch
- D. At navel level
- E. 1 cm above the right costal arch

2. Normal liver size according to Kurlov`s method (in centimeters) is:

- A. 7 x 8 x 9
- B. 8 x 7 x 9
- C. 9 x 8 x 7
- D. 9 x 7 x 8
- E. 8 x 9 x 10

3. From what part of the large intestine does deep palpation according to Obraztsov-Strazhesko begin?

- A. Cecum
- B. Transverse colon
- C. Ascending colon
- D. Sigmoid colon
- E. Descending colon

4. What is a phrenicus symptom?

- A. Tenderness on pressure between the sternal head and clavicular head of sternocleidomastoid muscle in the supraclavicular area, in the projection of the phrenic nerve in the neck.
- B. The appearance of pain with light tapping in the lumbar region
- C. Appearance during palpation of the ascending and transverse colon a sound`s phenomen in the form of a rumbling
- D. Sensation hand vibrations transmitted due to fluid in the abdominal cavity
- E. The appearance of pain when lightly tapping along the ribs by the edge of the palm

5. The patient, 22 years, has arrived in surgical department with complaints of intensive pain in right side. Painful palpation of the abdomen in right iliac region, painful palpation of Mac-Burneus point. Your previous diagnosis?

- A. Acute cholecystitis
- B. Acute gastritis
- C. Acute appendicitis
- D. Stomach ulcer
- E. Enterocolitis

6. What does Courvoisier's sign mean?

- A. Tenderness in the point of projection of sigmoid colon
- B. Tenderness in pyloroduodenal region
- C. Tenderness in epigastric region
- D. Palpation increased and painful gall-bladder
- E. Palpation of pylorus of the stomach

7. A symptom of fluctuation characteristic for:

- A. Wind
- B. Ascites
- C. Adiposity
- D. Pylorostenosis
- E. A hypostasis of a forward belly wall

8. What does mean the splash noise in the epigastrium, detected 5-6 hours after eating?

- A. Flatulence
- B. There is a fluid in the abdomen
- C. Pyloric stenosis
- D. Symptom is normal

E. Accumulation of gases and liquids at enteritis

9. How do the data change during abdominal auscultation with diffuse peritonitis?

A. Normal intestinal peristalsis

B. Sharply increased intestinal peristalsis

C. Weakening of the intestinal peristalsis

D. Lack of intestinal peristalsis ("deathly silence")

E. Increased vascular murmur

10. What are the three main features of portal hypertension?

A. Ascites, jaundice

B. Ascites, enlarged spleen, venous collaterals

C. Ascites, liver enlargement, jaundice

D. Pain in the right hypochondrium, ascites, venous collaterals

E. Ascites, liver enlargement, "hepatic palms"

11. Palpation of ascending and descending colons are spent:

A. One right hand

B. One left hand

C. Bimanual palpation

D. Double hand

E. Slanting palpation

12. Deep, methodical, sliding palpation is spent in the following sequence:

A. Sigmoid colon, ceacum, descending, ascending, a stomach, transverse colon, a spleen, a liver, kidneys

B. Sigmoid colon, descending, ceacum, ascending, a stomach, transverse colon, a liver, a spleen, kidneys

C. Sigmoid colon, descending, ceacum, ascending, transverse colon, a stomach, a liver, a spleen, kidneys

D. Ceacum, sigmoid colon, ascending, descending, a stomach, transverse colon, a liver, a spleen, kidneys

E. Ceacum, ascending, sigmoid colon, descending, a stomach, transverse colon, a liver, a spleen, kidneys

13. What does a positive symptom of fluctuation mean?

A. Flatulence

B. Pyloric stenosis

C. Symptom is normal

D. There is a fluid in the abdomen

E. Accumulation of gases and liquids at enteritis

14. In which disease is symptom of Ortner-Grekov manifested?

A. Peptic ulcer

B. Peritonitis

C. Gastroduodenitis

D. Pancreatitis

E. Acute cholecystitis

15. For what pathology is Shofar's symptom typical for?

A. Acute cholecystitis

B. Acute pancreatitis

C. Colitis

D. Gastritis

E. Peritonitis

16. For what pathology is Mussey-Georgievsky (phrenicus-symptom) typical for?

A. Peptic ulcer

- B. Acute cholecystitis
- C. Acute pancreatitis
- D. Peritonitis
- E. Colitis

17. For what pathology is Murphy's symptom typical for?

- A. Pancreatitis
- B. Acute cholecystitis
- C. Gastroduodenitis
- D. Colitis
- E. Enteritis

18. Bimanual palpation is used during the processes:

- A. Liver, spleen, kidney
- B. Gall bladder, appendix
- C. Liver, gall bladder
- D. Sigmoid colon
- E. Cecum

19. Where does the lower border of the stomach in women normally pass?

- A. At navel level
- B. 2-3 cm below the navel
- C. 2-3 cm above the navel
- D. 4-5 cm below the navel
- E. 1-2 cm above the navel

20. In deep palpation physician should assess:

- A. Location and diameter of intestine
- B. Density of intestine



- C. Mobility and tenderness of intestine
- D. The condition of surface (smooth, tubercular) of intestine
- E. All above

21. Palpation of the sigmoid colon is performed in the following area of the abdomen:

- A. In the right iliac region
- B. In the left iliac region
- C. On both sides of the midline of the abdomen at the level of the navel
- D. In the right flank
- E. To the left of the midline of the abdomen at the level of the navel

22. How should physician make deep palpation (two-hand technique) of the spleen?

- A. The palm of the right hand presses the left costal arch, the left palm is flat on the upper portion of the left half of the abdomen below the left hypochondrium
- B. Deep motions in the epigastrium and umbilical regions
- C. One hand is placed posteriorly in the left flank, another hand at the umbilicus
- D. Right hand is placed posterolaterally over right lower ribs and left hand is placed below umbilicus toward right costal margin
- E. The palpating fingers are placed in the triangle formed by the lower border of the liver

23. What are the normal findings during deep palpation of the liver?

- A. The edge is soft, sharp, the surface is smooth
- B. Enlarged liver with a firm, nontender edge
- C. Enlarged liver with a smooth tender edge
- D. Enlarged liver that is firm or hard and has an irregular edge of surface
- E. The edge is rounded, thin, dull

24. The correct definition of the method of palpation of the ascending and descending colon is:

- A. Deep sliding bilateral
- B. Deep approximation
- C. Push-shaped
- D. Deep sliding systematic palpation
- E. Deep diaphragmatic-inspiratory

25. During deep palpation of the caecum, the skin fold is made towards...

- A. Iliac crest
- B. Navel
- C. Xiphoid process
- D. Right hypochondrium
- E. Left hypochondrium

26. At what complication of the ulcer is "splash noise" and increased peristalsis in the epigastrium revealed?

- A. Intestinal bleeding
- B. Penetration
- C. Perforation
- D. Pyloric stenosis
- E. Malignisation

27. Notice the properties of the colon during inflammation:

- A. Soft, wide, painful
- B. Dense, painless
- C. Dense, narrow, painful
- D. Soft, narrow, painless
- E. Dense, wide, painless

28. An inflammation of the peritoneum, the thin layer of tissue covering the inside of abdomen and most of its organs called:

- A. Peritonitis
- B. Ascites
- C. Flatulence
- D. Visceroptosis
- E. Ulcer

29. Severe generalized abdominal pain, tenderness all over and absent bowel sound are typical for:

- A. Peritonitis
- B. Ascites
- C. Flatulence
- D. Visceroptosis
- E. Cirrhosis

30. Auscultatory sign of intestinal obstruction:

- A. Normal intestinal peristalsis
- B. Sharply increased intestinal peristalsis
- C. Lack of intestinal peristalsis
- D. Weakened intestinal peristalsis
- E. Increased intestinal peristalsis

31. The greater curvature of the stomach is palpable:

- A. Left and top of the navel
- B. To the right and above the navel
- C. Above the navel
- D. To the left and below the navel

E. To the right and below the navel

32. A strengthening of a pain at pressure on the area of gall-bladder, especially on deep inhalation:

- A. Murphy's sign
- B. Kehr's sign
- C. Ortner's sign
- D. Shchetkin-Blumberg symptom
- E. Mussey-Georgievsky symptom

33. During physical examination physician found: signs of jaundice and palmar erythema. During deep palpation the nodularity, irregularity, firmness and hardness of the liver. Your previous diagnosis?

- A. Normal liver
- B. Cirrhosis
- C. Inflammation
- D. Malignancy
- E. Hepatitis

## RECOMMENDED LITERATURE

### *Basic*

1. Kovalyova O.M. Propedeutics to Internal Medicine. Part 1 : Diagnostics : textbook for students of higher medical schools with English as the language of instruction (IV level of accreditation) / O. N. Kovalova, T. V. Ashcheulova. – 5th ed. - Vinnytsya : Nova Knyha Publishers, 2020. - 424 p.
2. Kovalyova O.M. Propedeutics to Internal Medicine. Part 2 : Syndromes and diseases : textbook for students of higher medical schools with English as the language of instruction (IV level of accreditation) / O. M. Kovalyova, S. O. Shapovalova, O. O. Nizhegorodtseva. – 5th ed. - Vinnytsya : Nova Knyha Publishers, 2020. - 264 p.

### *Additionally*

3. Introduction to the course of internal diseases : Textbook for 2 and 3 year medical students. Book 1. Diagnosis / D. Semidotskaya, O.S. Bilchenco, I.A. Cherniakova, K.P. Zharko. - Kharkiv : KSMU, 2005. - 312 p.
4. Medical case history: Manual for the second and third-year students of the international faculty / Syvolap V.V.; Likhasenko I.V.- Zaporozhye, 2019.-71 p.
5. The basic of electrocardiography: Manual for III–year international faculty students' independent work / Syvolap V.V.; Likhasenko I.V., Oleynik A.I.; Avramenko N.F.- Zaporozhye, 2016. - 70 p.
6. Mark H., Beers M.D., Robert Berkow The Merck Manual of diagnosis and therapy / XVII edition.- Published by Merck research laboratories, 1999.- 2833p.
7. Harrison´s principles of internal medicine/ Loscalzo, Fauci, Kasper and al.- 21 edition. - Vol. 1 and 2. - International edition, 2022