

## DEPARTMENT OF PROPAEDEUTICS OF INTERNAL DISEASES

### **EXAM QUESTIONS AND LIST OF PRACTICAL SKILLS in the academic discipline «Propaedeutics of internal diseases» for the specialty 7-07-0911-01 «General medicine»**

1. The main objectives of the academic discipline “Propaedeutics of Internal Diseases”  
Medical ethics and deontology: relationships in the system “doctor-doctor”, “doctor-patient”, medical and ethical features of professional communication between doctor and patient.
2. Basic concepts of clinical medicine: symptom, syndrome, disease, etiology, pathogenesis, normal findings, pathology, diagnosis. Types of diagnosis.
3. General plan of patient’s examination. Diagnostic value of clinical examination methods for patients with internal diseases. Factors influencing the results of a patient’s clinical examination. Structure of the hospital patient’s medical file. Scheme of educational case history.
4. Communication skills. Rules of patient’s interview. Features of communication with patients in various clinical situations (cultural and language features, altered state of consciousness, aggressive behavior, etc.).
5. Subjective examination method (interview): rules for recognizing complaints in case of internal diseases, sections of present history and past history.
6. Inspection, its types. Rules and methods of general and local inspection. Assessment of vital signs. Patient position. Examination of the skin and mucous membranes. Comparing the biological age to the passport age. Face expression. Assessment of nutritional state. Anthropometry. Results of a general inspection of a healthy patient.
7. Inspection of the head, neck, oral cavity. Inspection of hair, eyes, ears, nose. Results of inspection of a healthy patient.
8. Static and dynamic inspection of the chest. Chest shapes. Results of chest inspection of a healthy patient.
9. Inspection of the abdomen in a vertical and horizontal patient’s position. Inspection of the extremities. Results of inspection of a healthy patient.
10. Palpation. Rules, techniques and types of palpation. Factors influencing the palpation results.
11. Superficial palpation of abdomen. Deep palpation of abdominal organs. Palpation technique, diagnostic value. Results of superficial palpation of the abdomen and deep palpation of abdominal organs in a healthy patient.
12. Percussion. Rules, techniques and types of percussion. Types of percussion sounds. Factors influencing the percussion results.
13. Auscultation. General rules, techniques and types of auscultation. Rules for auscultation of the lungs. Characteristics of the main respiratory sounds. Results of lung auscultation in a healthy patient.
14. Rules for auscultation of the heart. Characteristics of heart sounds. Results of heart auscultation in a healthy patient.
15. Auscultation of blood vessels. Auscultation of the abdomen. Results of auscultation of vessels and abdomen in a healthy patient. Factors influencing the auscultation results.
16. Electrocardiography. Method of recording an 12-lead electrocardiogram. Algorithm for interpretation a normal ECG.

17. The main complaints of patients with respiratory diseases. Rules for complaints identification, mechanism of their formation.
18. General patient's inspection and inspection of the chest in case of respiratory diseases (patient's position in bed, skin color, chest shape, type of breathing). Objective signs of inhaling and exhaling disorders.
19. Percussion of the lungs: comparative and topographical percussion. Rules for comparative and topographic percussion. The nature of percussion sound in symmetrical areas of the chest in normal and pathological conditions. Clinical significance of percussion in case of respiratory diseases.
20. Vesicular breath sounds: mechanism of formation, characteristics. Changes in vesicular breathing in case of respiratory diseases.
21. Bronchial breath sounds: mechanism of formation, characteristics. Types of bronchial breathing. Changes in bronchial breathing in case of respiratory diseases.
22. Dry rales (wheezing, rhonchi). Types, mechanism of formation, diagnostic value.
23. Wet rales (crackles). Types, mechanism of formation, diagnostic value.
24. Crepitation (crepitus). Mechanism of formation. Diagnostic value. Difference between crepitus and wet rales.
25. Pleural friction rub sound. Mechanism of formation. Diagnostic value. Difference between pleural friction rub and wheezing, crepitus, pericardial friction rub.
26. Laboratory and instrumental investigations in case of respiratory diseases, their diagnostic value. Difference between exudate and transudate.
27. Syndrome of bronchial obstruction. Causes, mechanism of formation, symptoms. Clinical example.
28. Syndrome of emphysema. Causes, mechanism of formation, symptoms. Clinical example.
29. Pulmonary consolidation syndrome. Causes, mechanism of formation, symptoms. Clinical example.
30. Lung cavity syndrome. Causes, mechanism of formation, symptoms. Clinical example.
31. Atelectasis syndrome (obturation and compression). Causes, mechanism of formation, symptoms. Clinical example.
32. Syndrome of fluid accumulation in pleural cavity. Causes, mechanism of formation, symptoms. Clinical example.
33. Syndrome of accumulation of air in the pleural cavity (pneumothorax). Causes, mechanism of formation, symptoms. Clinical example.
34. Respiratory failure syndrome (acute and chronic). Causes, mechanism of formation, symptoms. Clinical example.
35. The main complaints of patients with cardiovascular diseases. Rules for their identification. Details of the main complaints. Mechanism of their formation.
36. The mechanism of dyspnea in case of cardiovascular diseases and respiratory diseases. Differences between dyspnea of pulmonary and cardiac origin.
37. Inspection of patients with cardiovascular diseases (patient position, skin color, inspection of the heart area, swelling). Characteristics of edema in case of cardiovascular diseases.
38. 1st heart sound (S1). Mechanism of formation. Amplification, reduction, splitting, bifurcation of S1, mechanism of these changes.

39. 2nd heart sound (S2). Mechanism of formation. Amplification, reduction, splitting, bifurcation of S1, mechanism of these changes.
40. 3d (S3) and 4th (S4) heart sounds, mechanism of formation, characteristics.
41. Changes in heart sounds in case of cardiovascular diseases. «Quail» rhythm. Rhythm of the «gallop». Pendulum-like rhythm. Mechanism of formation, diagnostic value.
42. Heart murmurs: mechanism of formation, classification. Places of best auscultation of murmurs, mechanism of radiation.
43. Pericardial friction rub sound. Diagnostic value of heart murmurs. Differences between functional and organic murmurs.
44. Arterial hypertension syndrome. Causes, mechanism of formation, symptoms. Clinical example.
45. Syndrome of peripheral circulatory disorders (arterial insufficiency, venous insufficiency, lymphedema). Causes, mechanism of formation, symptoms. Clinical example.
46. Acute coronary insufficiency syndrome. Causes, mechanism of formation, symptoms. Clinical example.
47. Acute left ventricular failure syndrome. Causes, mechanism of formation, symptoms. Clinical example.
48. Chronic heart failure syndrome. Causes, mechanism of formation, symptoms. Clinical example.
49. Acute vascular insufficiency syndrome (fainting, collapse, shock). Causes, mechanism of formation, symptoms. Clinical example.
50. Electrocardiographic and clinical signs of extrasystole (supraventricular, atrioventricular, ventricular extrasystole).
51. Electrocardiographic and clinical signs of atrial and ventricular hypertrophy.
52. Electrocardiographic and clinical signs of ectopic rhythms (paroxysmal supraventricular and ventricular tachycardia). Atrial fibrillation, atrial flutter, ventricular fibrillation.
53. Clinical and electrocardiographic signs of atrial fibrillation and atrial flutter, ventricular fibrillation.
54. Clinical and electrocardiographic signs of cardiac conduction disorders. Atrioventricular block.
55. Clinical and electrocardiographic signs of cardiac conduction disorders. Bundle branch block.
56. The main complaints of patients with diseases of the esophagus, stomach, intestines. Rules for their identification. Details of the main complaints. Mechanism of their formation.
57. The main complaints of patients with diseases of the liver, gallbladder, pancreas. Rules for their identification. Details of the main complaints. Mechanism of their formation.
58. Inspection of patients with digestive diseases. Clinical significance of changes in the patient's position, skin color, skin condition, subcutaneous fat, mucous membranes, abdomen shape, venous collaterals.
59. Dyspeptic syndrome. Causes, mechanism of formation, symptoms. Clinical example.
60. Maldigestion and malabsorption syndrome Causes, mechanism of formation, symptoms. Clinical example.

61. Syndrome of esophageal, gastric and intestinal bleeding. Causes, mechanism of formation, symptoms. Clinical example. Difference between gastric and pulmonary bleeding.
62. Jaundice syndrome. Causes, mechanism of formation, symptoms. Clinical example. Differential diagnosis of jaundice.
63. Cholestasis syndrome. Causes, mechanism of formation, symptoms. Clinical example.
64. Hypersplenism syndrome. Causes, mechanism of formation, symptoms. Clinical example.
65. Portal hypertension syndrome. Causes, mechanism of formation, symptoms. Clinical example.
66. Liver failure syndrome. Causes, mechanism of formation, symptoms. Clinical example.
67. Portosystemic encephalopathy syndrome. Causes, mechanism of formation, symptoms, stages.
68. Main complaints of patients with kidney and urinary tract diseases. Rules for their identification. Details of the main complaints. Mechanism of their formation.
69. General inspection of patients with kidney and urinary tract diseases (changes in skin color, condition of the skin, subcutaneous fat and mucous membranes, inspection of kidney and bladder area).
70. Mechanism of edema in case of kidney disease. Difference between renal and cardiac edema.
71. Urinary syndrome. Causes, mechanism of formation, symptoms. Clinical example.
72. Nephrotic syndrome. Causes, mechanism of formation, symptoms. Clinical example.
73. Nephritic syndrome. Causes, mechanism of occurrence, symptoms. Clinical example.
74. Renal failure syndrome (acute and chronic). Causes, mechanism of formation, symptoms. Clinical example.
75. Main complaints of patients with diseases of the blood system. General inspection of the patient with blood diseases. Laboratory and instrumental investigations in case of blood diseases.
76. Anemic syndrome. Causes, mechanism of formation, symptoms. Clinical example.
77. Hemorrhagic syndrome. Causes, mechanism of formation, symptoms. Clinical example.
78. Infectious syndrome in case of blood diseases. Causes, mechanism of formation, symptoms. Clinical example.
79. Lymphoproliferative syndrome. Causes, mechanism of formation, symptoms. Clinical example.
80. Main complaints of patients with thyroid diseases. General inspection of a patient with thyroid diseases. Laboratory and instrumental investigations for thyroid diseases.
81. Main complaints of patients with diabetes mellitus. General inspection of a patient with diabetes mellitus. Laboratory and instrumental investigations for diabetes mellitus.
82. Hyperthyroidism syndrome. Causes, mechanism of formation, symptoms.
83. Hypothyroidism syndrome. Causes, mechanism of formation, symptoms.
84. Hypoglycemia syndrome. Causes, mechanism of formation, symptoms.
85. Hyperglycemia syndrome. Causes, mechanism of formation, symptoms.

86. Complaints of patients with diseases of the musculoskeletal system, mechanism of their formation. Inspection of patients with musculoskeletal diseases. Laboratory and instrumental investigations for diseases of the musculoskeletal system.
87. Bronchial asthma: definition, etiology, pathogenesis, risk factors, classification, clinical signs, complications. Interpretation of the results of laboratory and instrumental investigations. Principles of treatment and prevention.
88. Chronic obstructive pulmonary disease: definition, etiology, pathogenesis, risk factors, classification, clinical signs, complications. Interpretation of the results of laboratory and instrumental investigations. Principles of treatment and prevention.
89. Pneumonia: definition, etiology, pathogenesis, risk factors, classification, clinical signs, complications. Interpretation of the results of laboratory and instrumental investigations. Principles of treatment and prevention.
90. Pleurisy: definition, etiology, pathogenesis, risk factors, classification, clinical signs, complications. Interpretation of the results of laboratory and instrumental investigations. Principles of treatment and prevention.
91. Acute rheumatic fever: definition, etiology, pathogenesis, risk factors, classification, clinical signs, complications, principles of treatment and prevention. Interpretation of the results of laboratory and instrumental investigations.
92. Infective endocarditis: definition, etiology, pathogenesis, risk factors, classification, clinical signs, complications, principles of treatment and prevention. Interpretation of the results of laboratory and instrumental investigations.
93. Acquired mitral valve defects (mitral insufficiency, mitral stenosis): etiology, pathogenesis and intracardiac hemodynamics, clinical signs, principles of treatment and prevention.
94. Acquired aortic valve defects (aortic insufficiency, aortic stenosis): etiology, pathogenesis and intracardiac hemodynamics, clinical signs, instrumental diagnosis, principles of treatment and prevention.
95. Primary arterial hypertension: definition, etiology, pathogenesis, risk factors, classification, clinical signs, complications, principles of treatment and prevention. Diagnosis of target organ damage; identification of risk factors to determine the risk level. Interpretation of the results of laboratory and instrumental investigations.
96. Secondary arterial hypertension: definition, classification. Principles of treatment and prevention.
97. Hypertensive crisis: definition, classification, clinical signs. Complications of hypertensive crisis.
98. Atherosclerosis: definition, classification, risk factors. Clinical signs of atherosclerosis. Lipid metabolism parameters (normal range and target level). Principles of treatment and prevention of atherosclerosis.
99. Coronary (ischemic) heart disease: definition, etiology and pathogenesis, classification (WHO). Angina pectoris: definition, etiology and pathogenesis, classification. Clinical, laboratory and instrumental diagnostics, principles of treatment and prevention of angina pectoris.
100. Myocardial infarction: definition, etiology and pathogenesis, classification. Clinical, laboratory and instrumental diagnostics, principles of treatment and prevention of myocardial infarction. Complications of myocardial infarction.
101. Acute heart failure, definition, etiology and pathogenesis, classification. Clinical signs, principles of treatment and prevention of acute left ventricular failure.

102. Chronic heart failure: definition, etiology and pathogenesis, classification (stages and functional classes). Clinical signs, principles of treatment and prevention of chronic heart failure.
103. Acute and chronic gastritis: definition, etiology, pathogenesis, risk factors, classification, clinical signs, principles of treatment and prevention.
104. Acute and chronic gastroduodenal ulcer: definition, etiology, pathogenesis, risk factors, classification, clinical signs, complications, principles of treatment and prevention.
105. Chronic hepatitis: definition, etiology, pathogenesis, risk factors, classification, clinical signs, principles of treatment and prevention.
106. Liver cirrhosis: definition, etiology, pathogenesis, classification, clinical signs, principles of treatment and prevention.
107. Acute and chronic glomerulonephritis: definition, etiology, pathogenesis, clinical signs, classification, complications, principles of treatment and prevention. Interpretation of the results of laboratory and instrumental investigations.
108. Acute and chronic pyelonephritis: definition, etiology, pathogenesis, classification, clinical signs, complications, principles of treatment and prevention.
109. Acute kidney injury: definition, etiology, pathogenesis, classification, clinical signs. Interpretation of the results of laboratory and instrumental investigations.
110. Chronic kidney disease: definition, etiology, pathogenesis, classification, clinical classification. Interpretation of the results of laboratory and instrumental investigations.
111. Anemia: definition, etiology, pathogenesis, classification, clinical signs, complications, principles of treatment and prevention.
112. Iron deficiency anemia: etiology, clinical and laboratory signs, principles of treatment and prevention.
113. B-12 deficiency anemia: etiology, clinical and laboratory signs, principles of treatment and prevention.
114. Leukemia (hemoblastosis): definition, etiology, pathogenesis, classification, clinical signs, complications, principles of treatment and prevention. Interpretation of the results of laboratory and instrumental investigations.
115. Diseases of the thyroid gland. Etiology, pathogenesis, risk factors, clinical signs, principles of treatment and prevention. Interpretation of the results of laboratory and instrumental investigations.
116. Diabetes mellitus: definition, etiology, pathogenesis, risk factors, classification, clinical signs, complications, principles of treatment and prevention. Interpretation of the results of laboratory and instrumental investigations.
117. Rheumatoid arthritis: definition, etiology, pathogenesis, classification, clinical signs, complications, principles of treatment and prevention. Interpretation of the results of laboratory and instrumental investigations.
118. Infectious arthritis: definition, etiology, pathogenesis, classification, clinical signs, complications, principles of treatment and prevention. Interpretation of the results of laboratory and instrumental investigations.
119. Osteoarthritis: definition, etiology, pathogenesis, classification, clinical signs, complications, principles of treatment and prevention. Interpretation of the results of laboratory and instrumental investigations.

120. Gout arthritis: definition, etiology, pathogenesis, classification, clinical signs, complications, principles of treatment and prevention. Interpretation of the results of laboratory and instrumental investigations.
121. Acute urticaria, angioedema: definition, etiology, pathogenesis, clinical signs, complications, principles of treatment and prevention.
122. Anaphylactic shock: definition, etiology, pathogenesis, classification, clinical signs, complications, principles of treatment and prevention
123. Emergency medical care in case of acute respiratory failure.
124. Emergency medical care in case of an asthma attack.
125. Emergency medical care in case of hemoptysis and pulmonary bleeding.
126. Emergency medical care in case of a hypertensive crisis.
127. Emergency medical care in case of an angina pectoris attack.
128. Emergency medical care in case of acute left ventricular failure.
129. Emergency care in case of myocardial infarction.
130. Emergency medical care in case of fainting, collapse.
131. Emergency medical care in case of anaphylactic shock.
132. Emergency medical care in case of gastrointestinal bleeding.
133. Emergency medical care in case of hyperglycemic coma.
134. Emergency medical care in case of hypoglycemic coma.
135. Emergency medical care in case of life-threatening heart rhythm disorders (ventricular fibrillation, asystole, paroxysmal tachycardia, 3rd degree atrioventricular block).
136. Cardiopulmonary resuscitation.

### **Practical skills**

1. Inspection of the skin and subcutaneous tissues.
2. Inspection and palpation of the lymph nodes of the head and neck.
3. Inspection and palpation of supra -, subclavian and axillary lymph nodes.
4. Inspection and palpation of inguinal and popliteal lymph nodes.
5. Inspection and palpation of the thyroid gland.
6. Chest shape estimation (inspection and palpation).
7. Palpation of the chest pain points.
8. Comparative percussion of the lung.
9. Assessment the inferior lung border.
10. Auscultation of the lungs.
11. Assessment the pulse on the radial, carotid arteries and dorsalis pedis artery.
12. Palpation of the apical impulse.
13. Assessment of the relative heart dullness borders.
14. Auscultation of the heart.
15. Superficial palpation of the abdomen.
16. Palpation of the sigmoid colon.
17. Palpation of the cecum.
18. Palpation of the transverse colon.
19. Assessment of the liver size according to M.G. Kurlov's method.
20. Palpation of the liver.
21. Palpation of the kidneys in the horizontal position.
22. Palpation of the kidneys in the vertical position.

23. Palpation of the ureteral points, assessment of the kidney tenderness, auscultation of the renal arteries.

24. Palpation of the spleen.

### **Laboratory and instrumental tests interpretation**

1. Complete blood count interpretation.
2. Biochemical blood analysis interpretation.
3. Sputum test interpretation.
4. Pleural fluid test interpretation.
5. Urinalysis interpretation.
6. Nechiporenko's urine test interpretation.
7. Zimnitsky's urine test interpretation.
8. ECG interpretation.
9. X-ray of the chest in frontal (lateral) projection interpretation.

It is approved at the department meeting 24.04.25, protocol #10.

Head of Department



E.A.Dotsenko