



MEDICAL UNIVERSITY - PLEVEN  
**PROPAEDEUTICS OF INTERNAL DISEASES**

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DISTANCE LEARNING CENTRE

DEPARTMENT OF **PROPAEDEUTICS OF INTERNAL  
DISEASES**

**PRACTICAL EXERCISES – THESES**

FOR E- LEARNING IN  
**PROPAEDEUTICS OF INTERNAL DISEASES**

ENGLISH MEDIUM COURSE OF TRAINING

**SPECIALTY OF MEDICINE**

ACADEMIC DEGREE: MASTER

PROFESSIONAL QUALIFICATION: DOCTOR OF MEDICINE

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**PRACTICAL EXERSICES – THESES**

PLEVEN, 2020

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**(30 classes x 3 h)**

- 1. History taking – presenting complaint, present illness.** Communication-the art of history taking. Communicating with the patient. Presenting complaint and history of present illness. Analysis of pain and symptom analysis. **(3h)**
- 2. History taking – previous illness, menstrual and occupational history.** Obtaining information about previous illness, menstrual and obstetric history, treatment and family history. Social and occupational history. Negative data. Review of the systems**(3h)**
- 3. History taking – writing out the history.** Summarising the information obtained by history taking, interpretation of these data, writing out the history according the headings. **(3h)**
- 4. General considerations.** General approach .The mental and emotional state .Physical attitude, gait, physique, face, skin, hands, feet, breasts, axillae, temperature, pulse, respiration- odours. **(3h)**
- 5. Examination of head and neck** Shape of the head, hair, secondary sexual hair, face, eyes, nose, ears. Examination of the neck- lymphatic and salivary glands, thyroid gland, pulsations. Examination of the lymph nodes. **(3h)**
- 6. Inspection and palpation of the chest.** General assessment- physique, voice, breathlessness, clubbing, cyanosis, intercostal recession, use of accessory respiratory muscles, venous pulses, lymph nodes. Shape of the chest, movement of the chest. Palpation-swelling, pain and tenderness, tracheal position, cardiac impulse, asymmetry and tactile vocal fremitus. **(3h)**
- 7. Percussion of the chest – technique and normal findings.** Percussion - techniques. Resonance, dullness, pain and tenderness. Comparing the sound on the equivalent sides. Finding lower border of the lungs. Normal position of the lower border. Expansion of the lungs. **(3h)**
- 8. Percussion of the chest - pathological changes.** Percussion of the chest in case of emphysema, COPD, asthma, pneumonia, pleural effusion, consolidation of the lung.**(3h)**
- 9. Auscultation of the lungs – technique and normal findings.** Vesicular breath sounds, bronchial breath sounds. Vocal fremitus and resonance- bronchophony, whispering pectoriloquy, aegophony. Added sounds- pleura rub, wheezes, crackles. **(3h)**
- 10. Auscultation of the lungs – pathological changes.** Auscultatory findings in case of emphysema, COPD, asthma, pneumonia, pleural effusion, consolidation of the lung. **(3h)**
- 11. Chronic bronchitis and emphysema.** Definition, aethiology and natural history, pathology, clinical features, investigations , imaging, diagnosis differential diagnosis. Examination of patients with chronic bronchitis, COPD and emphysema. **(3h)**
- 12. Bronchial asthma.** Definition, aethiology and natural history, pathology, pathophysiology, clinical features, investigations , imaging, lung function test, blood gas analysis, diagnosis differential diagnosis. Classification. Examination of patients with asthma. **(3h)**
- 13. Pneumonias.** Definition, aethiology and natural history, pathology, clinical features, investigations , imaging, diagnosis differential diagnosis. Microbiological investigations. Community-acquired pneumonia, suppurative and aspirational pneumonia, pneumonia in immunocompromised patient Examination of patients with pneumonia. **(3h)**
- 14. Pleurisy.Pleural effusion.** Pleurisy .Pleural effusion- causes, pathophysiology, clinical features, investigations , imaging, diagnosis differential diagnosis. Pleural aspiration and pleural biopsy. Examination of the pleural fluid. Examination of patients with pleural effusion. **(3h)**

15. **Revision of the physical examination of the respiratory system. Ancillary investigations.** Revision of inspection, palpation, percussion and auscultation of the chest. Radiological examination, ultrasonography, lung function test, bronchoscopy, cytological, histological and microbiological investigations of samples obtained by biopsy. Examination of sputum. **(3h)**
16. **Inspection and palpation of the praecordium.** Inspection and palpation. Cardiac impulse-normal and changed position. Examination of other pulsations at the root of the neck, at the front of the chest and in the epigastrium. Thrills and palpable sounds. **(3h)**
17. **Percussion of the heart - technique and normal findings.** Percussion of the relative and absolute dullness of the heart. Technique and normal findings. **(3h)**
18. **Percussion of the heart - pathological changes.** Percussion of the heart in patients with enlargement of the heart, patients with pericardial effusion, patients with emphysema and pleural effusion. **(3h)**
19. **Auscultation of the heart - technique and normal findings.** Technique of auscultation. Auscultatory areas. Heart sounds. Practising auscultation of normal findings. **(3h)**
20. **Auscultation of the heart - pathological changes of the sounds.** Pathophysiological mechanisms of formation of the abnormal heart sounds. Alterations in intensity, splitting, appearance of third and fourth heart sounds. Additional sounds. **(3h)**
21. **Auscultation of the heart – murmurs and changes of the rhythm.** Pathophysiological mechanisms of formation of murmurs. Timing and duration. the behavior of the murmurs during respiration. Point of maximum intensity and direction of selective propagation. The character of a murmur. **(3h)**
22. **Examination of the arterial pulses, venous pulses, measurement of the blood pressure** Arterial pulses-rate, rhythm, character, volume, delay. Measurement of the blood pressure- Korotkoff sounds, the sphygmomanometer, normal and abnormal blood pressure. The venous pulse- the neck veins, examination of the jugular veins. Negative and positive venous pulse. **(3h).**
23. **Examination of patients with disorders of the mitral valve.** Mitral stenosis and mitral regurgitation-ethiology, pathophysiology and haemodynamics. Clinical picture. Auscultatory findings. Examination of patients with mitral stenosis and mitral regurgitation. **(3h)**
24. **Examination of patients with disorders of the aortic valve.** Aortic stenosis and aortic regurgitation-ethiology, pathophysiology and haemodynamics. Clinical picture. Auscultatory findings. Examination of patients with aortic stenosis and regurgitation.
25. **ECG and other ancillary investigations used in cardiology.** Normal ECG and pathological changes-disturbances of the rhythm, ischaemia, myocardial infarction. **(3h)**
26. **Other ancillary investigations used in cardiology.** Exercise test. Sonocardiography, radiographic examination. Cardiac catheterization. Indications, significance and findings. **(3h)**
27. **Coronary artery disease. Myocardial infarction.** Ethiology, risk factors, pathophysiology, clinical features, complications. ECG images, diagnosis, differential diagnosis. Examination of patients with myocardial infarction and unstable angina. **(3h)**
28. **Myocarditis.Pericarditis.** Ethiology, classification, pathophysiology, clinical picture, auscultatory findings, ECG changes, diagnosis and differential diagnosis. **(3h)**
29. **Revision of the examination of the cardio-vascular system. Presenting a case of a patient with cardio-vascular disease.** Revision of all methods for physical examination of the cardiovascular system. Examination of a patient with cardiovascular disease and making diagnosis. **(3h)**
30. **Revision of the physical examination of respiratory and cardio-vascular system** Revision of all methods for physical examination of the respiratory and cardiovascular system. Examination of a patient with cardiovascular disease and making diagnosis.**(3h)**

**Medical University - Pleven**  
**Department "Propaedeutics of internal medicine"**  
**Summer semester – 3rd year students**  
**Practical Exercises**

( 15x3 h &15x2 h )

1. **Examination of the cardio-vascular system – revision.** Revision of all methods for physical examination of the cardiovascular system.. Ancillary investigations. Normal findings and pathological changes in patients with cardiovascular diseases. (3h)
2. **Examination of the cardio-vascular system – revision.** Examination of patients with Ischaemic heart disease, mitral and aortic valve disease, heart failure. Making diagnosis on the base of history taking and physical findings. Differential diagnosis. Presenting a case of cardiovascular disease. (2h)
3. **Examination of the abdomen – inspection, percussion, auscultation.** Inspection- abdominal regions, shape, the umbilicus, movement of the abdominal wall, skin and surface of the abdomen. Percussion-technique, normal and pathological findings. Auscultation-bowel sounds, succession splash, vascular bruits. (3h)
4. **Methods for palpation of the abdomen .** Technique. Palpation of the abdominal wall, palpation of the abdominal organs and tumors. What to do when an abdominal mass is palpable. Detection of ascites and its detection from ovarian cyst and intestinal obstruction. The acute abdomen- guarding, rigidity, rebound tenderness. (2h)
5. **Examination of the stomach and bowel.** Inspection, palpation, percussion and auscultation of the stomach and bowel. Technique, normal and pathological findings. Physical findings in case of pyloric stenosis and acute mechanical obstruction of the bowel. (3h)
6. **Gastritis,colitis,cancer of the stomach and colorectal cancer.** Epidemiology, aetiology, pathology, clinical features, diagnosis, differential diagnosis. Examination of patients with gastritis colitis and cancer of the stomach. Differences in the clinical picture of carcinoma of the stomach and stomach ulcer. Differences in the clinical picture of colitis and colorectal cancer. (2h)
7. **Peptic ulcer disease.** Peptic ulcer disease- epidemiology, aetiology, pathophysiological mechanisms, pathology, clinical features, diagnosis, differential diagnosis. Examination of patients with duodenal and stomach ulcer. Complications- acute and chronic. (3h)
8. **Examination of the liver – inspection, percussion, auscultation.** Inspection - pathological changes of the hepatic abdominal region. Changes in the general appearance of patients with chronic liver disease.Percussion of the liver- normal and pathological findings. Absolute and relative dullness. (2h)
9. **Palpation of the liver.** Methods for palpation of the liver. Technique. Normal and pathological findings. Examination of patients with different diseases, leading to enlargement of the liver. How to distinct the enlargement of the liver from the right kidney and enlargement of the left lobe of the liver from spleen enlargement. (3h)
10. **Special techniques in the examination of the liver. Examination of the gallbladder.** Physical examination of the gallbladder- methods, technique. Diseases leading to enlargement and pain of the gallbladder.Investigations of hepatobiliary disease- test of function, imaging techniques ( ultrasound, CT,MRI,ERCP, PTC ), special tests etc. (2h)
11. **Hepatitis.Cholelithiasis.** Acute and chronic hepatitis. Cholelithiasis- formation of bile stones. Aetiology, pathophysiology, pathology, classification, clinical features, complications, diagnosis differential diagnosis of the diseases. Investigations. Examination of patients with hepatitis and cholelithiasis. (3h)
12. **Cirrhosis of the liver.** Cirrhosis of the liver- aetiology, pathophysiology, pathology, classification, clinical features, complications, diagnosis differential diagnosis of the diseases. Investigations. Examination of patients with cirrhosis. Differential diagnosis of jaundice. (2h)
13. **Examination of the pancreas. Pancreatitis.** Methods for palpation of the pancreas. Ancillary investigations in case of pancreatic disease. Acute and chronic pancreatitis- aetiology, pathophysiological mechanisms,

classification, clinical features, complications, diagnosis differential diagnosis. Examination of patients with acute and chronic pancreatitis. (3h)

14. **Examination of the spleen.** Physical methods for examination of the spleen- inspection, palpation and percussion of the spleen. Normal findings and pathological changes. Examination of patients with enlargement of the spleen. Ancillary investigations in case of splenomegaly. Differential diagnosis of splenomegaly. (2h)
15. **Examination of the kidney and urinary system.** History taking- symptoms and clinical features of the diseases of the kidney. Examination of urine- pathological changes. Physical examination of the kidney and urinary bladder. Inspection of patients with chronic renal failure on haemodialysis. (3h)
16. **Glomerulonephritis and pyelonephritis.** Glomerulonephritis- aetiology, pathophysiological mechanisms, classification, clinical features, diagnosis differential diagnosis. Pyelonephritis- aetiology, microbiological investigations, classification, clinical features, diagnosis differential diagnosis. Examination of patients with glomerulonephritis and pyelonephritis. (2h)
17. **Nephrolithiasis. Tumours of the kidney and urinary system.** Urinary tract calculi –aetiology, pathology, clinical features, investigations. Complications of the disease. Differential diagnosis of renal colic. Tumors of the kidney and urinary tract-renal carcinoma and nephroblastoma-pathology, clinical features. Tumor syndromes. Examination of patients with nephrolithiasis and tumors of the kidney. (3h)
18. **Anaemias** Iron deficiency anaemia, megaloblastic anaemia, haemolytic anaemia- congenital and acquired: aetiology, pathophysiology, clinical features, investigations and diagnostic features Differential diagnosis of anaemias. Examination of patients with anaemia. Diagnostic approach.. (2h)
19. **Leukaemias and lymphomas.** Leukaemias and lymphomas : aetiology, clinical features, investigations and diagnostic features. Pathological classification and staging. Differential diagnosis of malignant haematological diseases. Examination of patients with leukaemias and lymphomas. Diagnostic approach.. (3h)
20. **Bleeding disorders.** Vessel wall abnormalities, platelet functional disorders, coagulation disorders- congenital. Acquired bleeding disorders. Aetiology, clinical features, investigations and diagnostic features Differential diagnosis of bleeding disorders Diagnostic approach..Examination of patients with bleeding disorders.. (2h)
21. **Examination of the endocrine glands. Diabetes insipidus. Acromegaly and gigantism.** Syndromes of pituitary and hypothalamic hormone deficiency. . Diabetes insipidus, acromegaly and gigantism- aetiology, pathophysiology, pathology, clinical features, diagnosis, differential diagnosis of the diseases. Investigations. Examination of patients with diseases of the. pituitary gland. (3h)
22. **Examination and diseases of the thyroid gland.** Hyperthyroidism-Graves` disease, toxic multinodular goitre, toxic adenoma. Hypothyroidism-primary, spontaneous atrophic, goitrous, subclinical, congenital, secondary. Aetiology, pathophysiology, pathology, clinical features, diagnosis, differential diagnosis of the diseases. Investigations. Examination of patients with diseases of the thyroid gland.. (2h)
23. **Examination of the endocrine glands. Diabetes mellitus.** IDDM and NIDDM- aetiology, pathophysiology, pathology, classification, clinical features, diagnosis differential diagnosis of the diseases. Complications- acute and long-term. Investigations. Examination of patients with both types of diabetes mellitus- IDDM and NIDDM. Examination of patients with acute and long-term complications. (3h)
24. **Examination and diseases of the suprarenal glands.** Addison's Disease, Cushing's Syndrome. Aetiology, pathophysiology, pathology, clinical features, diagnosis, differential diagnosis of the diseases. Investigations. Examination of patients with diseases of the thyroid gland. (2h)
25. **Examination of the joints.** General assessment: history. Features of mechanical and inflammatory joint disease. Soft tissue symptoms. Examination: general principles. Examination of the locomotor system- gait, posture, mobility, deformity, independence, muscle wasting, long bones. Fractures- joints, tendons, skin. Examination of individual joints. Investigations. (3h)

26. Rheumatoid arthritis. Osteoarthritis. Rheumatoid arthritis- epidemiology, aetiology, pathology, clinical features, progression, complications, extra-articular features, investigations. Osteoarthritis- epidemiology, aetiology, pathology, **clinical features, progression, investigations. Differential** diagnosis of rheumatic diseases. Examination of patients with RA and osteoarthritis. (2h)
27. Connective tissue diseases. Clinical features, diagnosis, **differential diagnosis, and complications of the most common connective tissue diseases. Examination of patients with SLE and progressive systemic sclerosis. (3h)**
28. **Routine examination of the patient – revision (gastrointestinal system).** Revision of methods for physical examination of abdominal organs and detection of ascites. Examination of patients with diseases of the gastrointestinal tract. Making diagnosis and differential diagnosis (2h)
29. **Routine examination of the patient – revision (kidneys and urinary system).** Physical examination of the cardiovascular system. Methods for physical examination of urinary system. Examination of patients with diseases and of the urinary tract. Making diagnosis and differential diagnosis. (3h)
30. **Routine examination of the patient – revision (endocrine system and joints).** Physical examination of the joints and endocrine organs. Examination of patients with endocrine, haematological and rheumatic diseases. Making diagnosis and differential diagnosis. (2h)