

COMPLEX EXAM PROGRAM FOR THE MODULE

**Fundamentals of Medicine**

**ІІШКІ АУРАЛАР/ВНУТРЕННИЕ БОЛЕЗНИ/ INTERNAL MEDICINE**

**NERVOUS SYSTEM AND FUNDAMENTALS OF NEUROLOGY**

**ПЕДІАТРИЯ НЕГІЗДЕРІ /ОСНОВЫ ПЕДІАТРИИ/PEDIATRICS ESSENTIALS**

4- COURSE

GENERAL MEDICINE

**The purpose of the program is** to assess the complex of knowledge, skills and abilities acquired by the 4th year student in the process of studying the module.

The exam is complex and consists of 2 stages.

**1 stage** – complex testing. Its purpose is to check the level of theoretical training of students, mastering skills, readiness for professional activity, the degree of development of professional thinking.

**2 stage** – assessment of practical skills using the OSCE method with a standardized patient. Its purpose is to demonstrate practical and communication skills in accordance with the qualification requirements of the specialty.

**The exam score for each discipline consists of:**

Stage 1 assessment for a section of the test – 50%

Stage 2 evaluation for the respective stations of the practical stage – 50%

Each student gets through 4 stations:

1. Internal diseases
2. Medical Emergencies
3. Nervous diseases
4. Childhood diseases

## Exam Test Matrix

Sections	№	Topics	Total
		<b>Internal diseases</b>	<b>100</b>
<b>Pulmo nology</b>	1	Bronchitis. ARVI. Flu. Viral pneumonia and ARDS	6
	2	Community-acquired pneumonia. Complications of pneumonia. Suppurative lung diseases. Sepsis. DIC syndrome. Hospital pneumonia and pneumonia in immunocompromised individuals	6
	3	Bronchial asthma. Complications and emergencies in bronchial asthma. Anaphylaxis, anaphylactic shock.	7
	4	COPD	3
	5	Respiratory failure. Acute and chronic cor pulmonale	2
<b>Cardio logy</b>	6	Ischemic heart disease. Stable exertional angina. CHD treatment. Chronic heart failure	7
	7	Acute coronary syndrome (ACS). Myocardial infarction. Complications of myocardial infarction Acute heart failure	5
	8	Arterial hypertension. Arrhythmias	7
	9	Myocarditis. Cardiomyopathy. Pericarditis	2
	10	Heart defects (congenital and acquired)	5
	11	Infective endocarditis	2
<b>Rheum atology</b>	12	Acute rheumatic fever and chronic rheumatic heart disease	3
	13	Medical tactics for monoarticular and polyarticular lesions, for lesions of the neuromuscular system	2
	14	Rheumatoid arthritis.	5
	15	Seronegative spondyloarthropathies	3
	16	Systemic connective tissue diseases. Systemic vasculitis.	3
<b>Gastro enterol ogy</b>	17	Diseases of the esophagus. Chronic gastritis, duodenitis. Peptic ulcer of the stomach and duodenum. Anemia. IDA, B-12 - deficiency anemia.	5
	18	Cholesterosis, chronic cholecystitis, cholelithiasis. Chronic pancreatitis	3
	19	Nonspecific ulcerative colitis. Crohn's disease.	3
	20	Viral hepatitis.	4
	21	Diagnostics and clinical manifestations, antiviral therapy. Hypoplastic and hemolytic anemias. Thrombocytopenia	5
	22	Liver cirrhosis. Complications of liver cirrhosis. Gastrointestinal tumors	5
<b>Endocr inology</b>	23	Diabetes mellitus. Emergencies in diabetes mellitus. Obesity and metabolic syndrome.	5
	24	Diseases of the thyroid and parathyroid glands	3
	25	Diseases of the hypothalamic-pituitary system and adrenal glands	3
<b>Nephro logy</b>	26	Major syndromes in kidney disease, urinary tract infection	6
	27	Glomerular diseases	4
	28	Acute kidney injury	2
	29	Chronic kidney disease	3
		<b>Nervous system and fundamentals of neurology</b>	<b>100</b>
semi otics	1	Higher brain (mental) functions: gnosis, praxis, speech, reading, writing, counting, memory, attention, intelligence and their disorders	5
Fund amen tals of	2	Neurogenic bladder, urinary retention and incontinence, urge to urinate.	2
	3	Peripheral autonomic failure, Raynaud's syndrome	2
	4	Transient ischemic attack.	3
	5	Ischemic stroke	10
	6	Hemorrhagic stroke	4

neurology	7	Subarachnoid hemorrhage	3
	8	Febrile seizures	5
	9	Generalized idiopathic epilepsy	10
	10	Status epilepticus	2
	11	Absances	3
	12	Brain concussion	4
	13	Brain contusion	4
	14	Spinal cord injury	4
	15	Meningitis	10
	16	Encephalitis	3
	17	Brain abscess	2
	18	Rheumatic lesions of the nervous system	3
	19	Myelitis	3
	20	Alzheimer's disease	2
	21	Parkinson's disease	3
	22	Multiple sclerosis	3
	23	Amyotrophic lateral sclerosis	3
	24	Myopathies	2
	25	Myasthenia gravis	3
	26	Myotonia	2
<b>Childhood diseases</b>			<b>100</b>
Early childhood	1	The neonatal period. Pathology of newborns.	5
	2	Nutrition for infants. Immunoprophylaxis.	7
	3	Dispensary observation of children with background pathology (rickets, acute and chronic eating disorders, constitutional anomalies).	8
	4	Immunodeficiency states	4
	5	Hereditary metabolic diseases.	1
	6	ARI (influenza, parainfluenza, adenovirus infection, coronavirus infection) at the PHC level.	5
	7	Acute conditions in children.	4
	8	Bronchial asthma in children. Allergies.	1
Diseases of the respiratory system, CVS, rheumatic, gastroenterological	9	Hereditary respiratory diseases	1
	10	VLF of the respiratory system	1
	11	Heart and vascular defects	5
	12	Non-rheumatic carditis. Congenital carditis. Cardiomyopathy.	5
	13	Arterial hypertension and hypotension in children.	1
	14	Violation of rhythm and conduction	2
	15	Rheumatism. Acute rheumatic fever. Chronic rheumatic heart disease.	2
	16	Juvenile rheumatoid arthritis	2
	17	Diffuse connective tissue diseases. Systemic vasculitis in children.	3
	18	Pathology of the upper gastrointestinal tract	7
	19	Bowel pathology	
Diseases of the kidneys, blood and endocrine system	20	Acute post-streptococcal glomerulonephritis. Urinary system infectious diseases	6
	21	Hemolytic uremic syndrome	3
	22	Coagulopathy	3
	23	Acute leukemia	6
	24	Type I diabetes mellitus	5
	25	Congenital hypothyroidism. Endemic goiter	7
	26	Short stature of various genesis. Premature puberty.	6

## 2 – STAGE

<b>Subject Sections</b>	<b>Script (scenario)</b>
<b>Internal diseases</b>	
Pulmonology	1. Community-acquired pneumonia 2. COPD
Cardiology	3. Arterial hypertension of the 2nd degree, risk 4. IHD 4. CRHD, mitral stenosis
Gastroenterology	5. GERD 6. Chronic hepatitis C
Hematology	7. B-12 deficiency anemia
Nephrology	8. Chronic renal failure
Endocrinology	9. Thyrotoxicosis
Rheumatology	10. Rheumatoid arthritis 11. Ankylosing spondylitis
<b>Medical emergencies</b>	1. Bronchial asthma - an attack of bronchial asthma
	2. IHD, ACS
	3. Paroxysmal tachycardia
	4. Diabetes mellitus type 2 - diabetic coma
<b>Nervous system and fundamentals of neurology</b>	
Cerebrovascular disease	1. Ischemic stroke 2. Subarachnoid hemorrhage
	3. Viral meningitis
Infectious diseases of the central nervous system	
Seizures	4. Epilepsy with generalized tonic-clonic seizures
<b>Pediatrics</b>	
Pulmonology	1. Chlamydia pneumonia
Cardiology	2. CHD, Fallot's tetralogy
Gastroenterology	3. Dyskinesia of the biliary tract 4. Gastroduodenitis
Hematology	5. Acute leukemia 6. IDA + Rickets
Endocrinology	7. SD type 1
Nephrology	8. Glomerulonephritis

## **Procedure for passing exams**

### **Stage 1 - testing by MCQ tests in Startexam.**

Each student will be asked to answer 300 test questions. The time for each question is 1.5 minutes.

Testing will be carried out in 3 runs of 100 tests each according to the schedule for each group.

### **Stage 2 - OSCE (objective structured clinical examination) with a standardized patient in a simulation center - 4 stations**

Each student will be assigned an identification number that corresponds to a specific set of scenarios. Each student has to go through 4 stations, each station takes 30 minutes. Answers must be given orally and in writing.

The assignments at each station (according to the assignment matrix) are based on clinical cases.

Station 1 - "Internal diseases" - the student must demonstrate the skills of taking anamnesis, physical examination (examination, palpation, percussion and auscultation) with a certain pathology (according to the list of clinical cases) on a standardized patient (examination, palpation, percussion) and on a simulator (auscultation), the ability to identify and interpret findings and to identify the leading syndrome. Based on complaints, anamnesis, physical examination, the student should be able to make a preliminary diagnosis and draw up a survey plan. Upon request, the results of laboratory and instrumental examinations (blood test, biochemical analysis, acid base balance, immunological tests, pleural fluid analysis, R-gram, CT, MRI, spirometry, ECG, EchoCG, ultrasound, endoscopy, etc.) will be issued. Based on complex data, the student must formulate the final diagnosis, prescribe treatment.

Station 2 - Providing emergency care - the student must demonstrate the skills of a quick assessment of the patient's condition, according to the criteria, make a diagnosis of a condition requiring immediate intervention and provide assistance according to the algorithm, commenting on his actions if necessary; show knowledge on assessing the effectiveness of emergency care, possible complications and consequences. Behavior and self-control during the provision of emergency care, attention to the patient's condition and his safety are also assessed.

Station 3 - "The nervous system and the basics of neurology" - the student must demonstrate the skills of collecting anamnesis and interpreting the data obtained, identifying the leading syndrome; skills of neurological examination (examination, skills in determining the neurological status of a patient) in a certain pathology (according to the list of clinical cases) on a standardized patient (examination, assessment of consciousness, CN functions, motor and sensory, cognitive spheres) and the ability to identify and interpret findings; skills in interpreting the results of laboratory and instrumental examinations (blood test, lipid profile, coagulogram, CSF analysis, bacteriological analysis of CSF, R-gram of the skull, CT and MRI of the brain and spinal cord, EEG, etc.) - at the station he will be offered a set the results of the examination, which he must comment on and formulate a diagnosis and draw up a treatment plan.

Station 4 - "Childhood diseases" - the student must demonstrate the skills of taking anamnesis, physical examination (examination, palpation, percussion and auscultation) with a certain pediatric pathology (according to the list of clinical cases) on a standardized patient (examination, palpation, percussion) and on a simulator (auscultation), the ability to identify and interpret findings and to identify the leading syndrome. Based on complaints, anamnesis, physical examination, the student should be able to make a preliminary diagnosis and draw up a survey plan. Upon request, the results of laboratory and instrumental examinations (blood test, biochemical analysis, acid base balance, immunological tests, pleural fluid analysis, R-gram, CT, MRI, spirometry, ECG, EchoCG, ultrasound, endoscopy, etc.) will be issued. On the basis of complex data, the student must formulate the final diagnosis, prescribe treatment, and demonstrate measures for providing assistance in emergency conditions.

The set of tasks at each station is unique for each student and is not repeated.

