

AL-FARABI KAZAKH NATIONAL UNIVERSITY

Faculty of Medicine and Public Health

APPROVED

Academic Committee on the
Quality of Education and
Teaching of the Faculty of
Medicine and Public Health
Minutes No. 1
«26»_September _2024

EXAMINATION PROGRAMME

FOR THE DISCIPLINE

Nervous system and basics of neurology

4 YEAR

6B10 HEALTH AND SOCIAL CARE

IN THE DIRECTION OF TRAINING 6B101 HEALTH CARE (MEDICINE)

EDUCATIONAL PROGRAM

6B10103 GENERAL MEDICINE

2024

The purpose of the program is to evaluate the complex of knowledge, skills and abilities acquired by a 4th-year student in the course of studying in the discipline.

The exam is complex and consists of 2 stages.

Stage 1-comprehensive testing. Its purpose is to check the level of theoretical training of students, mastery of skills, readiness for professional activity, and the degree of development of professional thinking.

Stage 2 - assessment of practical skills using the OSCE method with a standardized patient/simulator. Its purpose is to demonstrate practical and communicative skills in accordance with the qualification requirements of the specialty.

The exam grade for each discipline consists of:

Stage 1 assessment for the test section – 40%

2nd stage of assessment for the relevant stations of the practical stage – 60%

The assessment for the discipline “NERVOUS SYSTEM AND FUNDAMENTALS OF NEUROLOGY” consists of the overall assessment for the comprehensive test and the average overall assessment for the stations “Emergency Care and Neurology” at the 2nd practical stage.

Stage 1

Matrix of examination test tasks

| Sections of discipline content Topics | Propae deutics | Pathop hysiolo gy | clinical biochemi stry - lab diagnosti cs | visual diagnostics , functional diagnostics | Patho morph ology | Pharm acolog y | Total numbe r by topic | Total number by discipline |
|--|-------------------|-------------------------|---|--|-------------------------|----------------------|---------------------------------|-------------------------------------|
| Nervous system and basics of neurology | | | | | | | | |
| Higher brain (mental) functions: gnosis, praxis, speech, reading, writing, counting, memory, attention, intelligence and their disorders | 2 | 2 | 1 | | | | 5 | 100 |

| | | | | | | | | |
|---|---|---|---|---|---|---|-----------|--|
| Neurogenic bladder, urinary retention and incontinence, imperative urge to urinate. | 1 | 1 | | | | | 2 | |
| Peripheral autonomic failure, Raynaud's syndrome | 1 | 1 | | | | | 2 | |
| Transient ischemic attack. | | 1 | | 1 | | 1 | 3 | |
| Ischemic stroke | | 2 | 2 | 2 | | 4 | 10 | |
| Hemorrhagic stroke | | | 1 | 2 | | 1 | 4 | |
| Subarachnoid hemorrhage | | | 1 | 1 | | 1 | 3 | |
| Febrile seizures | | | 2 | 1 | 1 | 1 | 5 | |
| Generalized idiopathic epilepsy | | 1 | 3 | 3 | | 3 | 10 | |
| Status epilepticus | | | | 1 | | 1 | 2 | |
| Absences | | | | 1 | | 2 | 3 | |

| | | | | | | | | | |
|--|---|---|---|---|---|---|---|-----------|--|
| | Concussion | | | 1 | 1 | | 2 | 4 | |
| | Brain contusion | | | 1 | 1 | | 2 | 4 | |
| | Spinal cord injury | | | 1 | 2 | | 1 | 4 | |
| | Meningitis | | 2 | 2 | 2 | 2 | 2 | 10 | |
| | Encephalitis | | | 1 | | | 2 | 3 | |
| | Brain abscess | | | | 1 | | 1 | 2 | |
| | Rheumatic lesions of the nervous system | 1 | | | 1 | | 1 | 3 | |
| | Myelitis | | | 1 | 1 | | 1 | 3 | |
| | Alzheimer's disease | | | | 1 | | 1 | 2 | |
| | Parkinson's disease | | 1 | | | | 2 | 3 | |
| | Multiple sclerosis | | | | 1 | | 2 | 3 | |
| | Amyotrophic lateral sclerosis | 1 | | | 1 | | 1 | 3 | |
| | Myopathies | | | | 1 | | 1 | 2 | |
| | Myasthenia | | | 1 | | | 2 | 3 | |
| | Myotonia | | | | 1 | | 1 | 2 | |

2 – STAGE

| | Stations | Contents – clinical cases |
|--|---|---|
| NERVOUS SYSTEM AND BASICS OF NEUROLOGY | 1. General neurology | 1. Facial neuropathy 2. Dorsopathy 3. Viral meningitis |
| | 2. Emergency care for neurological conditions | 1. Ischemic stroke 2. Subarachnoid hemorrhage 3. Status epilepticus |

Procedure for passing exams

Stage 1 – testing on MCQ tests in ProProfs.

Each student will be asked to answer 100 test questions. The time for each question is 1.5 minutes.

Testing will be carried out in 1 round of 100 tests according to the schedule.

Stage 2 - OSCE (objective structured clinical examination) in the simulation center - 4 stations

Each student must complete 2 stations, each station taking 15-20 minutes.

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

Station 1 – General Neurology – the student must demonstrate the skills of collecting anamnesis and interpreting the obtained data, identifying the leading syndrome; skills of neurological examination (examination, skills of determining the patient's neurological status) for a certain pathology (according to the list of clinical cases) on a standardized patient (examination, assessment of consciousness, functions of the cranial nerves, motor and sensory, cognitive spheres) and the ability to identify and interpret findings; skills of interpreting the results of laboratory and instrumental examinations (blood test, lipid profile, coagulogram, CSF analysis, bacteriological analysis of CSF, X-ray of the skull, CT and MRI of the brain and spinal cord, EEG, etc.) – at the station he will be offered a set of examination results, which he must comment on and formulate a diagnosis and draw up a treatment plan.

Station 2 – Emergency care for neurological conditions – the student must demonstrate the skills of quickly assessing the patient’s condition, diagnosing the condition requiring immediate intervention based on the criteria and providing assistance based on the algorithm, commenting on their actions if necessary; demonstrate knowledge of assessing the effectiveness of emergency care, possible complications and consequences. Behavior and self-control during emergency care, attention to the patient’s condition and safety are also assessed.