Test task for intermediate certification in the discipline:

NEUROLOGY, NEUROSURGERY AND MEDICAL GENETICS

Code, direction of preparation	05.31.01 General Medicine
Directivity (profile)	General Medicine
Form of study	Full-time
Department-developer	Cardiology
Graduate department	Internal diseases

TYPICAL TASKS FOR CONTROL WORK
(7-8th semester)

List of abstract topics:

1. Aphasia
2. Alzheimer's disease
3. Pain
4. Rehabilitation therapy for patients after traumatic brain injuries and cranial surgeries
5. Generalized tonic seizures as a disease syndrome
6. Headache
7. Movement disorders during sleep
8. Degenerative-dystrophic lesions of the spine. Disc herniation. Discoradicular conflict. Surgery
9. Cerebral palsy
10. Diagnosis of intracranial hematomas
11. Brain disease – dementia
12. Neuroleptic malignant syndrome (epidemiology, risk factors, clinical picture, diagnosis, pathogenesis, therapy)
13. Intensive care of severe traumatic brain injury
14. Comas and pseudocomas in the clinic of acute brain pathology
15. Treatment of insomnia
16. Drug complications in patients with epilepsy

SAMPLE QUESTIONS FOR THE EXAM (8th semester)

1. Voluntary movements and their disorders. Symptoms of damage to the cortical-muscular tract at different levels. Central and peripheral paresis. Paraclinical research methods - electromyography, electroneuromyography, magnetic stimulation with determination of motor potentials, examination of the level of CPK in the blood serum, biopsy of muscles and nerves.

2. Extrapyramidal system, role in organizing movements. Neurophysiological and neurochemical mechanisms regulating the activity of the extrapyramidal system, the main neurotransmitters.
3. Semiotics of damage to the estrapyramidal system. Neuropathophysiology of extrapyramidal movement disorders, methods of pharmacological correction.
4. Cerebellum and vestibular system, anatomy and physiology. Semiotics of defeat.
5. Coordination of movements and its disorders, clinical research methods. Types of ataxia – vestibular, frontal, sensitive. Pharmacological methods of correction.
6. Sensitivity – types of sensitivity, conducting pathways. Types of sensitivity disorders, types of sensitivity disorders.
7. Semiotics of damage to spinal cord segments at various levels, anterior and posterior roots, plexuses, peripheral nerves. Brown-Séquard syndrome. Syringomyelitic syndrome.
8. 1 pair of cranial nerves and olfactory system. Semiotics of defeat.
9. 2nd pair of cranial nerves and the visual system. Semiotics of defeat at different levels. Neuro-ophthalmological and paraclinical methods for studying the visual system (fundus examination, visual evoked potentials).
10. 3,4,6 pairs of cranial nerves and the oculomotor system. Semiotics of defeat. Medial longitudinal fasciculus. Gaze regulation.
11. 5th pair of cranial nerves. Semiotics of defeat.
12. 7th pair of cranial nerves. Clinic of facial nerve lesions at various levels. Taste and its disorders.
13. 8th pair of cranial nerves, auditory and vestibular systems. Semiotics of defeat. Otoneurological methods for studying vestibular function.
14. 9,10 pairs of cranial nerves. Semiotics of defeat at various levels. Bulbar and pseudobulbar syndromes.
15. 11th pair of cranial nerves. Semiotics of defeat.
16. 12th pair of cranial nerves. Semiotics of defeat at various levels.
17.Structure and functions of the autonomic nervous system.
18. Suprasegmental apparatus of the autonomic nervous system. Semiotics of defeat.
19. Destructive and metabolic comas. Chronic vegetative state, brain death. Electrophysiological research methods - EEG, evoked potentials of the brain. Principles of management of patients in coma.
20. Segmental apparatus of the autonomic nervous system. Semiotics of defeat.
21. Meninges of the brain. Cerebrospinal fluid. Cerebrospinal fluid examination.
22. Hypertension syndrome. Dislocation syndrome. Hydrocephalus, congenital and acquired, open and occlusive, medical tactics.
23. Syndromes of damage to the frontal, parietal, temporal and occipital lobes of the brain.
24. Classification of vascular diseases of the brain. Etiology of vascular diseases of the brain.
25. Classification of vascular diseases of the brain. Acute cerebrovascular accidents.
26. Chronic cerebrovascular accidents. Neuroimaging research methods. Vascular dementia. Differential diagnosis with Alzheimer's disease.
27. Classification of diseases of the peripheral nervous system. Mononeuropathy and polyneuropathy. Etiology, pathogenesis, clinical picture, diagnosis, treatment.
28. Neuropathy of the median, ulnar, radial, peroneal, tibial nerves. Tunnel syndromes, conservative therapy and indications for surgical treatment.
29. Facial nerve neuropathy. Trigeminal neuralgia. Clinic, diagnosis, treatment.
30. Vertebrogenic lesions of the nervous system. Classification, etiology, pathogenesis, stages, clinical and pathogenetic forms of neurological manifestations in spinal osteochondrosis. Neuroimaging methods - spondylography, CT, MRI of the spine.
31. Reflex syndromes in vertebrogenic lesions of the nervous system. Pathogenesis, clinical picture, diagnosis, treatment.
32. Radicular syndromes with vertebrogenic lesions of the nervous system. Pathogenesis, clinical picture, diagnosis, treatment.
33. Vascular-radicular and vascular-spinal syndromes in vertebrogenic lesions of the nervous system. Pathogenesis, clinical picture, diagnosis, treatment.
34. Infectious diseases of the nervous system. Classification. Diagnostic algorithm.
35. Purulent meningitis – primary and secondary. Etiology, clinical picture, diagnosis, treatment.
36. Serous meningitis – primary and secondary. Etiology, clinical picture, diagnosis, treatment.
37. Encephalitis – primary and secondary. Etiology, clinical picture, diagnosis, treatment.
38. Polio. Features of the modern course of poliomyelitis. Poliomyelitis-like diseases.

39. Demyelinating diseases of the nervous system. Myelinopathies, myelinoclastics. Multiple sclerosis. Pathogenesis. Clinic. Diagnostics. Treatment.
40. Epilepsy. Classification of epilepsy and epileptic seizures. Clinic. Diagnostics. Treatment.
41. Status epilepticus. Etiology, clinical picture, diagnosis, treatment.
42. Neuroses. Etiology, pathogenesis, classification, clinical picture, diagnosis, treatment.
43. Vegetative dystonia. Etiology, pathogenesis, clinical picture, treatment.