**Conspectus /Academic Year 2020/2021/**

**CONSPECTUS**

**FOR THE SEMESTRIAL EXAMINATION IN NEUROLOGY**

**PART 1. GENERAL NEUROLOGY**

1. Reflex activity. Exteroceptive and proprioceptive reflexes. Reflex abnormalities. Pathological reflexes - pyramidal tract signs. Spinal, brainstem and axial automatisms.
2. Anatomy and physiology of general sensation. Sensory examination. Pathophysiology of sensory disturbances.
3. Sensory syndromes with different sensory levels.
4. Anatomy and physiology of voluntary movement. Pyramidal system.
5. Syndromes of motor weakness. Syndromes of motor neuron (upper and lower) lesion.
6. Muscle tone and its regulation. Examination and abnormalities of muscle tone.
7. Coordination of voluntary movement. Anatomy, physiology, methods of examination, syndromes of discoordination.
8. Cerebellum. Anatomy, physiology, cerebellar syndromes.
9. Extrapyramidal motor system. Anatomy and physiology. Parkinsonian syndrome. Hyperkineses - choreoathetosis, ballism, dystonia, myoclonus, tremor, tics.
10. Syndromes of lesion of the cervical roots and the cervicobrachial plexus.
11. Syndromes of lesion of the lumbosacral roots and the lumbosacral plexus.
12. Syndromes of lesion of individual peripheral nerves - radial, median, ulnar, fibular, tibial. Syndrome of polyneuropathy.
13. Smell and taste: anatomy and physiology, olfactory and gustatory abnormalities.
14. Anatomy and physiology of vision. Visual pathways. Visual syndromes.
15. Oculomotor nerves (III, IV, VI). Anatomy and physiology of ocular motility and its disturbances.
16. Statoacoustic nerve. Anatomy and physiology of hearing and equilibrium. Syndromes of hearing loss and vestibular dysfunction.
17. The caudal group of cranial nerves (IX, X, XII), anatomy, physiology, syndromes of lesion. Bulbar and pseudobulbar palsy.
18. Syndrome of the internal capsule. Alternating brainstem syndromes.
19. Syndromes of lesion of the spinal cord.
20. Syndrome оf meningeal irritation.
21. Autonomous nervous system. Pupillary reflexes, vasomotor and sudomotor reflexes, bladder reflexes. Syndromes of disturbance.
22. Anatomy and physiology of the diencephalon. Diencephalic syndromes.
23. Consciousness: definition, anatomy and physiology, alterations of consciousness.Brain death.
24. Cortical syndromes: frontal and parietal.
25. Cortical syndromes: temporal and occipital.
26. Gnosis and praxis: methods of examination and syndromes of disturbance.
27. Language: methods of investigation and syndromes of disturbance. Aphasias.
28. Cerebrospinal fluid: anatomy and physiology, methods of investigation, CSF syndromes.
29. Neuroimaging, electrodiagnosis in neurology.

**PART 2. CLINICAL NEUROLOGY**

1. Viral meningitides. ECHO, Coxackie.
2. Bacterial meningitis.
3. Tuberculous meningitis. Neurosyphilis: acute, meningovascular, tabes dorsalis.
4. Encephalitis lethargica. Subacute sclerosing panencephalitis. Chorea minor.
5. Rabies. Tick-borne encephalitis. Herpes simplex encephalitis. Postinfectious and postvaccination perivenous encephalitis and encephalomyelitis.
6. Poliomyelitis acuta anterior. Myelitides - acute transverse myelitis, acute disseminated myelitis.
7. Multiple sclerosis.
8. Intervertebral disc prolapse. Plexitis and plexopathies. Radiculitis and radiculopathies.
9. Bell's palsy.
10. Trigeminal neuralgia.
11. Polyneuritis and polyneuropathies. GBS.
12. Intracerebral haemorrhage: etiology, pathogenesis, clinical findings, diagnosis, differential diagnosis, treatment.
13. Subarachnoid haemorrhage: etiology, pathogenesis, clinical findings, diagnosis, differential diagnosis, treatment.
14. Ischemic stroke: etiology, pathogenesis, clinical findings, diagnosis, differential diagnosis, treatment. TIA.
15. Amyotrophic lateral sclerosis.
16. Parkinsonism: etiology, pathogenesis, clinical findings, diagnosis, differential diagnosis, treatment.
17. Spinocerebellar ataxias: Friedreich's and Pierre-Marrie's diseases.
18. Hepatocerebral dystrophy (Wilson's disease).
19. Muscular dystrophies. Hereditary motor and sensory neuropathy. Syringomyely.
20. Myasthenia.
21. Brain tumors: syndromes of increased intracranial pressure and generalized brain dysfunction.
22. Supratentorial brain tumors: frontal and parietal, temporal and occipital.
23. Infratentorial brain tumors: cerebellar and pontocerebellar angle tumors.
24. Brain abscess.
25. Tumors of the spine and spinal cord.
26. Traumatic brain injury: concussion, contusion, skull base fractures.
27. Traumatic intracranial hematoma - epidural and subdural. Delayed sequelae of traumatic brain injury: cerebrasthenia, encephalopathy, arachnoiditis.
28. Spinal cord trauma.
29. Epilepsy: etiology, pathogenesis, clinical findings, diagnosis, differential diagnosis, treatment. Status epilepticus.
30. Dementia.
31. Migraine and other primary headaches. Neuroses.

**Head of the Department:**

**Assoc.Prof. Maya Danovska, MD, PhD**