CALENDAR-THEMATIC PLAN OF PRACTICAL CLASSES ON NEUROLOGY FOR STUDENTS OF MEDICAL FACULTY IV COURSE FOR 2016-2017 ACADEMIC YEAR ON THE DEPARTMENT OF PSYCHIATRY, NARCOLOGY, NEUROLOGY AND MEDICAL PSYCHOLOGY

№	Practice theme	Questions, that should be studied	Hours
1.	Vascular diseases of the brain and spinal cord.	Classification. Acute stroke: stroke and transient ischemic attacks (transient ischemic attacks and cerebral hypertensive crises). Chronic ischemic attacks: early and late forms. Vascular dementia. Etiological factors and pathogenesis of stroke. Hemorrhagic and ischemic (embolic and non-embolic) stroke, subarachnoid hemorrhage. Symptoms of injury anterior, middle, posterior cerebral arteries. Syndromes of occlusion and stenosis of the main vessels of the brain. Focal cerebral syndromes. Quantitative and qualitative types of disorders of consciousness (productive and unproductive symptoms). The differential diagnosis of various types of acute stroke. Modern methods of undifferentiated and differentiated treatment of acute disorders of cerebral circulation. "Therapeutic window" period. Indications and contraindications for surgical treatment of cerebrovascular events. Bleeding in the spinal cord and its membranes. Ischemic spinal strokes. Etiology and pathogenesis. Symptomatology. Diagnostics. Intensive therapy in the acute period. Treatment of patients in the period of residual effects after spinal and cerebral strokes. Rehabilitation and examination of able-bodied patients. Prevention of vascular brain and spinal cord diseases.	5
2.	Epilepsy and non-epileptic paroxysmal statuses.	Epilepsy. Epileptogenesis. The value of endogenous and exogenous factors involved in the formation of this center. Classification of epileptic seizures: generalized, partial and partial-generalized. Principles of treatment. Status epilepticus (diagnostics, emergency care). Non-epileptic paroxysmal states. The states with cramps: tetany, febrile convulsions, toxic convulsions, hysterical paroxysms. Events without seizures: vegetative paroxysms, migraine, syncope. Differential diagnosis of epilepsy and non-epileptic paroxysmal events. Treatment of seizures and treatment in between attacks.	5
3.	The headache. Sleep disturbances. Headache in the syndrome of the intracranial hypertension and intracranial hypotension.	Nosological forms of headache: migraine, muscle tension pain, cluster headache. Differential diagnosis, principles of treatment. Migraine - etiology, modern mechanisms of pathogenesis. Clinical forms (simple migraine - without aura, associated), diagnosis, differential diagnosis, principles of treatment (during the attack and attack-free period). Headache syndrome of intracranial hypotension syndrome and intracranial hypertension (etiopathogenetic factors, subjective data, clinical and instrumental data).	5
4.	Professional and everyday neurointoxications. Lesions of the central nervous system under the influence of physical factors. Neurological aspects of the cranio-cerebral injury. Spinal injury.	Poisoning neurotropic industrial poisons (such as lead, mercury, manganese, tetraethyl lead, arsenic, carbon monoxide, methyl alcohol, carbon disulfide, phosphorus compounds). The clinic, neurological syndromes, treatment, prevention. Food poisoning, botulism. Korsakov's syndrome and other neurological manifestations of alcoholism. Clinic of acute poisoning by barbiturates. Urgent care. Vibration disease, radiation damage, electrical accident nervous system, the effect of fixed and variable fields, damage to the nervous system in thermal and heat stroke. Symptoms, neurological syndromes, treatment, prevention. Modern aspects of classification of traumatic brain injury. Mild traumatic brain injury. Differential diagnosis of the brain contusion and brain compression. Intracranial hemorrhage. Complications of traumatic brain injury: traumatic encephalopathy, posttraumatic arachnoiditis, post-traumatic convulsive disorder, post-traumatic asthenic syndrome. Chronic shell hematoma (epi- and subdural). Emergency aid for traumatic brain injury. Spinal cord injury. Clinic, diagnostics, treatment. Injury of peripheral nerves.	5
5.	Meningitis. Arachnoiditis. Encephalitis.	Classification of meningitis: primary and secondary, purulent and serous. Purulent meningitis. Primary meningococcal meningitis, clinical features, diagnosis, characteristics of the course, atypical forms. Secondary meningitis: pneumococcal, staphylococcal. Clinic, diagnostics, cerebrospinal fluid indicators, treatment, prevention. Serous meningitis. Primary viral: lymphocytic choriomeningitis, enterovirus meningitis (ECHO, Coxsackie), mumps and others. Secondary: tuberculous meningitis and meningitis in other infections. Clinic, diagnostics, the value of cerebrospinal fluid studies in the differential diagnosis, treatment, prevention. Arachnoiditis. Etiology, pathogenesis. Pathomorphology: adhesive, cystic. Classification on localization: arachnoiditis posterior cranial fossa, basal, convexital. Clinic, diagnostics. Differential diagnosis. Treatment and prevention. Encephalitis. Classification. Primary encephalitis: epidemic, herpetic. Secondary encephalitis: rheumatic (chorea), post-vaccination, varicella, measles, rubella. The clinic, course, form of the disease, diagnostics. The defeat of the nervous system with influenza (flu-like hemorrhagic encephalitis, encephalopathy). Infectious encephalopathy - circulatory - degenerative changes in the brain without the expressed focal lesions with a predominance in the clinical manifestations of asthenia, vegetative dystonia, intracranial hypertension. Diagnosis, differential diagnosis, treatment, prevention.	5

6	Poliomyelitis. Acute myelitis. Amyotrophic lateral sclerosis. Neurosyphilis. Neurological manifestations of polymyositis. The lesion of the nervous system in case of HIV-infection. Tuberculosis of nervous system.	Poliomyelitis. Etiology, pathogenesis, epidemiology, transmission path. Morphology. Clinical classification: asymptomatic (abortive, subclinical) and paralytic form and the stem form. Diagnosis, differential diagnosis. The value of virological and serological tests in the diagnosis of disease. Treatment during the acute and recovery period. Effects. Prevention. Disease in children, caused by the viruses Coxsackie and ECHO, mumps, herpes simplex, adenoviruses. Clinical forms, course, prognosis, diagnosis, treatment, prevention. Acute myelitis. Etiology (in primary myelitis - tuberculosis, syphilis, in the secondary - as a complication of infectious diseases - measles, scarlet fever, typhoid, pneumonia, influenza). Pathogenesis. Pathomorphology. Clinic and clinical forms (symptom-lesion of the spinal cord in the lumbar, thoracic, cervical intumescence, level of supracervical part). Lumbar puncture. Differential diagnosis. Treatment. Amyotrophic lateral sclerosis. Etiology (excitotoxicity of peripheral neurons and the central motor neurons as a result of increased function of glutamate receptors). Pathogenesis. Pathomorphology. Clinic and clinical forms (bulbar, cervical, thoracic, lumbar, sacral). Differential diagnosis. Treatment. Neurosyphilis. Early neurosyphilis (mesodermal): generalized syphilitic meningitis, meningovascular syphilis, gummas brain and spinal cord, latent asymptomatic meningitis. Late neurosyphilis (parenchymal): tabes dorsales and progressive paralysis. Diagnostics, methods of treatment. Neuro AIDS. Etiology, pathogenesis, clinical manifestations: dementia, acute meningoencephalitis and atypical aseptic meningitis, myelopathy, disorders of the peripheral nervous system. The defeat of the nervous system associated with infections, developing on the background of immunodeficiency caused by toxoplasmosis, herpes simplex virus, cytomegalovirus infection, papovaviruses, fungi (cryptococcal, candidiasis). Tumors of the central nervous system in AIDS: primary lymphoma, Kaposi's sarcoma. Violations of cerebral circulation in patients with AIDS. Diagnosis of neurological manifestations of AIDS. Treatment. Prognosis. Prevention.	5
7	Demyelinating diseases of the nervous system. Multiply sclerosis, acute multiply encephalomyelitis.	Acute disseminated encephalomyelitis. Multiple sclerosis. The modern theory of pathogenesis (an autoimmune disease, genetic predisposition). Pathomorphology (multiple foci of demyelination in the brain and spinal cord). Early symptoms. The main clinical forms (cerebral: stem, cerebellum, optical, hyperkinetic, spinal, cerebrospinal). Charcot's triad. Pentad Mamburg`s. The forms of the disease. Differential diagnosis. Treatment (during acute relapse - exchange plasmapheresis, pulse therapy with corticosteroids, cytotoxic agents, desensibilisation therapy, antihistamines, anti-oxidants, in remission - interferons - drugs that improve the trophism of the nervous system, vascular drugs. Subacute sclerosing panencephalitis. Leucodistrophy. Diagnostic.	5
8.	Diseases of the peripheral nervous system. Neurological aspects of osteochondrosis.	Clinical classification of diseases of the peripheral nervous system. Vertebrogenic disorders of the peripheral nervous system. Cervical level reflex syndromes (vertebral artery syndrome, vegetative-vascular or neuro-degenerative manifestations). Syndromes (discogenic lesions roots - radiculopathy). Radicular and vascular syndromes. Thoracic level; reflex syndromes (torakago, torakalgia with musculo-tonic, vegetative - visceral or neurodystrophic manifestations). Radicular syndrome (discogenic lesions roots - radiculopathy). Lumbosacral level reflex syndromes (lumbago, lumbalgia, lumbar ischialgia with musculo - tonic, vegeto - vascular or neurodystrophic manifestations). Radicular and vascular syndromes (radiculoischemia). Lesions of the cranial nerves. Trigeminal and other cranial nerves. Neuropathy facial nerve, neuropathy other cranial nerves. Lesions of the individual spinal nerves. Traumatic injury. On the upper limbs: radial, ulnar, median, musculocutaneous, and other nerves. On the lower limbs: the femoral, sciatic, peroneal, tibial and others. Plexopathy. Plexus injuries: cervical, upper shoulder (Erb's Palsy), the lower shoulder (Dejerine-Klyumpke paralysis), shoulder (total), lumbosacral (partial or total). Compression-ischemic mononeuropathy (mostly tunnel syndrome). On the upper extremities: carpal tunnel syndrome (median nerve). Guyons tunnel syndrome (ulnar nerve). At the bottom: tarsal tunnel syndrome (peroneal nerve), Bernhardt Roth syndrome (infringement under occlusive disease of lateral femoral cutaneous nerve). Multiple lesions nerve roots. Infectious polyneuropathy, infectious-allergic polyneuropathy (Guillain-Barré syndrome). Polyneuropathy. Toxic: chronic household or industrial intoxications (alcohol and others); with poisoning (diphtheria, botulism), allergic (medications and others); dysmetabolic: hypo- or avitaminosis, with endocrine diseases - diabetes, liver disease, kidneys. Dyscirculatory syndrome: with periarteritis nodosa, rheumatic and other vasculitis, idiopathic and hereditary forms. Treatment of diseases of the peripheral nervous system: medical, orthopedic, surgical, orthopaedic. Treatment of exercise. Prevention and expertise.	5

9	.Somatoneurological syndromes.	Somatoneurological syndromes resulting from metabolic disorders of the nervous system, hypoxia, abnormal reflex pulses in human somatic diseases. Somatoneurological syndromes common: asthenia, vegetative dystonia, polyneuropathy, neuromuscular disorders. Somatoneurological syndromes in diseases of the heart, blood system, digestive tract, liver, kidneys, endocrine system. Paraneoplastic syndrome. Treatment. Prevention.	5
10	Hereditary degenerative diseases of the nervous system. Congenital defects of the spine and spinal cord. Syringomyelia.	Modern principles of classification. Neuromuscular diseases. Progressive muscular dystrophy. Myopathy: Duchenne muscular dystrophy, juvenile Erb's –Rota dystrophy, facio – scapula - humeral muscular dystrophy; spinal muscular atrophy: Verdniga - Hoffmann, Kugelberg - Welander disease, Charcot – Marie - Tooth disease. Myotonia. Congenital myotonia. Dystrophic myotonia. Myasthenia gravis. Myasthenic syndromes. Periodic paralysis. The syndrome of periodic paralysis. Extrapyramidal degeneration. Wilson's disease: pathogenesis, clinical syndromes, diagnosis, treatment. Huntington's disease (pathogenesis, major clinical syndromes, diagnosis, treatment). Modern biochemical aspects of Parkinson's disease and treatment. The muscle dystonia (hereditary primary, secondary, due to organic brain disease), etiology, treatment principles. Spinocerebellar ataxia. Friedreich's ataxia. Hereditary spinocerebellar ataxia. Pyramidal degeneration. Hereditary spastic paraplegia (Strümpell disease). The principles of treatment.	5
	Final module control		
	Altogether:		50