⑫

FEDERAL STATE BUDGET EDUCATIONAL INSTITUTION OF HIGHER EDUCATION "ROSTOV STATE MEDICAL UNIVERSITY" OF THE MINISTRY OF HEALTH OF THE RUSSIAN FEDERATION

FACULTY OF TREATMENT AND PREVENTION

Evaluation materials

in the discipline NEUROLOGY, MEDICAL GENETICS, NEUROSURGERY

Specialty: General Medicine

1. Scroll competencies, formed discipline (fully or partially)*

universal (UK)/general cultural (OK)

Code and name of universal/general cultural competence	Indicator(s) of achieving universal/general cultural competence
1	1

general professional (OPK):

Code and name	Achievement indicator(s)
general professional competence	general professional competence

professional (PC)

F - 6 - 6 - 6 - 6 - 6 - 6 - 6 - 6 - 6 -	
Code and name of professional	Indicator(s) of achievement of professional
competence	competence
PK-8	Ability to determine tactics for managing patients with various nosological conditions forms

2. Kinds estimated materials V compliance With formed competencies

	Name of competency	Types of assessment materials	number of tasks for 1 competency
ľ	PC-	Closed tasks	25 with sample answers
		Open type tasks:	75 with sample answers

Closed type tasks:

Task 1. Instructions: Choose one correct answer.

The intersection of conductors of temperature and pain sensitivity is located in:

- A) anterior gray commissure
- B) in the dorsal horn of the spinal cord
- C) at the border of the medulla oblongata and spinal cord
- D) in the thalamus
- E) in the inner capsule

Response standard: A) anterior gray commissure

Task 2. Sensitivity disorder of the cortical type is characterized by:

A) loss of all types of sensitivity according to the monotype, more in the distal parts

limbs on the opposite side;

- B) loss of all types of sensitivity according to the hemitype on the side of the lesion;
- C) loss of all types of sensitivity according to the monotype on the side of the lesion;
- D) loss of only superficial types of sensitivity on the side of the lesion;
- E) loss of only deep types of sensitivity on the opposite side.

Response standard. A loss of all types of sensitivity according to the monotype, more in the distal parts of the limbs on the opposite side

Task 3. The pyramidal tract in the spinal cord after the decussation passes into:

- A) lateral columns of the spinal cord
- B) anterior columns of the spinal cord
- C) posterior columns of the spinal cord
- D) anterior horns of the spinal cord
- E) dorsal horns of the spinal cord

Response standard: A) lateral columns of the spinal cord

Task 4. The segments of the cervical thickening include:

- A) WITH₁-WITH₄
- B) WITH5-Th2
- $^{C)}$ L₁-S₂
- $^{\mathrm{D})}$ Th₂– Th₁₀
- E) WITH₂— Th₂

Response standard:B) C5-Th2

Task 5. Synonyms of parkinsonism syndrome include all except: A)

hypokinetic-hypertensive

- B) hyperkinetic-hypotonic
- C) akinetic-rigid
- D) amyostatic

Response standard: B) hyperkinetic-hypotonic Task 6. Dopamine

synthesis is concentrated in

- A) red kernels
- B) substantia nigra

C) reticular formation D) pale ball E) striatum Response standard: B) substantia nigra Task 7.Indicate what symptoms occur when the cerebellum is damaged. A) ataxia, intention tremor B) nystagmus, adiadochokinesis C) scanned speech muscle atonia, D)asynergia, dysmetria E)all of the above Response standard: E)all of the above Task 8. What pathways pass through the superior cerebellar peduncle? A) dento-rubral tract, Gowers fascicle B) flexig bundle C) bunch of burdakh D) bun E) corticobulbar tracts Response standard: A) dento-rubral tract, Gowers fascicle Task 9. Indicate which cranial nerves are damaged when diplopia occurs? A) facial nerve B) oculomotor nerve C) optic nerve D) nervus vagus E) accessory nerve Response standard: IN) oculomotor nerve Task 10. Select the symptoms characteristic of Weber's alternating syndrome? A) mydriasis, limited inward movement of the eyeball, diplopia, ptosis, hemiparesis B) convergent strabismus, limited outward movement of the eyeball, lagophthalmos, Bell's sign C)ptosis, miosis, enophthalmos D) dysphonia, dysphagia, dysarthria, contralateral hemiparesis E) convergent strabismus, diplopia, lagophthalmos, Bell's sign, hemiparesis, restriction of outward movement of the eyeball

Response standard: A) mydriasis, restriction of inward movement of the eyeball, diplopia, ptosis, hemiparesis Task 11. What layers does the dura mater consist of? A) external, internal B) external, middle and internal C) vascular D) fibrous E) connective tissue Response standard: A) external, internal Task 12. The most common cause of vegetative crises is A) anxiety neurotic disorders B) traumatic brain injury C) hypothalamic lesions D) mitral valve prolapse E) collagenoses F) neuroinfection Response standard: A) anxiety neurotic disorders Task 13.To relieve sympathoadrenal crisis, the first-line drugs of choice are A) beta-blockers (anaprilin) B) seduxen C) aminazine D) amitriptyline Response standard: A)beta-blockers (anaprilin) and B) seduxen

Task 14 What symptoms occur when the left frontal lobe of the brain is damaged?

B) autotopognosia, visual agnosia, anosmia
C) sensory aphasia, social behavior and personality disorders, dysphagia
D) astereognosia, visual agnosia, apraxia
E) motor aphasia, sensory aphasia, apraxia
Response standard: A)motor aphasia, social behavior and personality disorders, ataxia
Task 15. Speech disorders that occur when the left hemisphere of the brain is damaged are:
A) anarthria, astereognosis, anosmia
B) motor aphasia, sensory aphasia, semantic aphasia
C) sensory aphasia, frontal psyche, visual agnosia
D) dysphonia, dysphagia, dysarthria
E) mutism, stupor, negativism
Response standard: B)motor aphasia, sensory aphasia, semantic aphasia
Task 16. The cortex and subcortical white matter of most of the outer surface of the cerebral
hemispheres supplies blood
A) anterior superior cerebellar artery
B) anterior cerebral artery
C) posterior cerebral artery
D) basilar artery
E) middle cerebral artery
Response standard: E) middle cerebral artery
Task 17. Epilepsy is caused by the occurrence of hypersynchronous neuronal discharges:
A) in the cerebral cortex;
B) in the cerebellum;
C) in the brain stem;

A) motor aphasia, social behavior and personality disorders, ataxia

D) in the cervical thickening of the spinalbrain;
E) in the inner capsule.
Response standard: A) in the cerebral cortex;
Task 18.In which meningitis is there a significant decrease in the level of glucose in the cerebrospinal fluid:
A) meningococcal
B) pneumococcal
C) tuberculous
D) staphylococcal
E) enteroviral
Response standard: C) tuberculous
Task 19.Meningeal syndrome includes all of the following symptoms, except: A) stiff
neck
B) Kernig's sign
C) Brudzinski's symptoms
D) Lasègue's symptom
E) zygomatic ankylosing spondylitis reflex
Response standard:D) Lasegue's symptom
Task 20.Encephalitic syndrome includes all of the following symptoms except:
A) cerebral symptoms
B) focal neurological symptoms
C) fever
D) inflammatory changes in the cerebrospinal fluid

E) meningeal symptoms
Response standard: E) meningeal symptoms
Task 21. The clinical forms of spring-summer tick-borne encephalitis do not include: A)
poliomyelitis
B) polioencephalomyelitis
C) encephalitic
D) leukoencephalitic
E) serous meningitis
Response standard: E) serous meningitis
Task 22. What type of seizures are Jacksonian seizures?
A) focal (partial) convulsive;
B) focal (partial) non-convulsive;
C) generalized convulsive;
D) absence seizures.
Response standard: A) focal (partial) convulsive;
Task 23.In the pathogenesis of multiple sclerosis, it primarily affects
A) central motor neuron
B) basal ganglia
C) anterior horn cells of the spinal cord
D) cerebellum
E) white matter of the brain and spinal cord
Response standard: E) white matter of the brain and spinal cord
Task 24. The following type of course is not typical for multiple sclerosis
A) primary progressive

B) recurrent
C) secondary progressive with exacerbations
D) secondary progressive without exacerbations
E) retrogressive
Response standard: E) regressing
Task 25.Does not apply to the peculiarities of blood supply to the brain
A) multiple anastomoses
B) absence of large diameter arteries
C) lack of collateral blood supply
D) Between the vascular wall and brain tissue there are intracerebral perivascular spaces
E) the most extensive network of capillaries is located in the hypothalamus
Response standard: C) lack of collateral blood supply
Open type tasks:
Exercise 1.
Analyzers are called conductive pathsfromTo;terminal
devices of dendrites that perceive stimulation, in which various types of energies are
transformed into an impulse.
Sample answer: conducting the spinal cord pathways from the receptor to the cerebral cortex;
terminal devices of dendrites that perceive irritations in which various types of energies are
transformed.
Task 2.
When the posterior horn of the spinal cord is damaged, the following occurs:

Response standard: dissociated sensitivity disorder - loss of superficial sensitivity in the corresponding segmental zone on the side of the same name while maintaining deep sensitivity; Task 3. The conduction type of sensory disorders is: Sample answer: loss of sensitivity below the lesion of the white matter conductors of the spinal cord
Task 4.
When the spinal cord is damaged in the area of the lateral cord, a disorder is observed
sensitivity bytype on the side opposite to the lesion,
below the site of the lesion, with the upper limit of sensory impairment at 2 - 3 segments below
the site of the lesion;
Response standard: superficial sensitivity (pain and temperature) by conduction type
Task 5.
Damage to the anterior spinal roots is characterized by
Sample answer: peripheral paralysis of the muscles innervated by this root, fascicular muscle twitching Task 6. Damage to the diameter of the spinal cord at the level of the cervical
enlargement is characterized by
Sample answer: peripheral paralysis of the arms, central legs Task 7.
Half of the spinal cord is characterized by paralysis
downward from the level of the lesion on the side of the lesion, disorder_feelings on the
side of the hearth, frustrationsensitivity on the opposite
side Samula analysis dayyayyand from the level of the legion on the side of the legion
Sample answer: central paralysis downward from the level of the lesion on the side of the lesion, disorder of joint-muscular sensation on the side of the lesion, disorder of superficial sensitivity
on the opposite side
Task 8.
When the diameter of the spinal cord is damaged at the Th7-Th10 level, the following occurs:
paralysislimbs
Sample answer: spastic paralysis of the lower limbs

Task 9.
The extrapyramidal system is a system of brain nuclei and motor extrapyramidal
pathways that carries out
Sample answer: involuntary, automatic regulation and coordination of complex motor acts, regulation
of muscle tone, maintaining posture, organization of motor manifestations of emotions;
Task 10.
The pathogenesis of Parkinson's disease is based on
Sample answer: decreasing the amount of dopamine in the substantia nigra Task
11.
The pathogenesis of hyperkinetic-hypotonic syndrome lies activity of
the adrenergic system,activity of the cholinergic system
Sample answer: increased activity of the adrenergic system, decreased activity of the cholinergic
system
Task 12.
Hyperkinesis, manifesting disorderly involuntary
movements, occurring in various parts of the body with a decrease in muscle
tone is called
Sample answer: choreiform Task 13.
Sample with the field of the fi
List the symptoms that may occur with damage to the cerebellum:
Sample answer: ataxy, jaskandant speech, nystagmus, hypotonia, intention tremor, trembling
Task 14.
The law of reciprocal innervation is that whenflexors,is
happeningextensors
Sample answer: when the flexors are excited, the extensors are inhibited

What pathways pass through the superior cerebellar peduncle?
Sample answer: dento-rubral tract, Gowers fascicle Task 16.
What pathways do impulses take from the spinal cord to the cerebellum? Sample answer: flexiga, goversa Task
17.
What are the symptoms of bulbar palsy?
Sample answer: pharyngeal reflex absent, peripheral hypoglossal nerve paresis, dysphagia, dysarthria, dysphonia
Task 18.
What are the symptoms of pseudobulbar palsy?
Sample answer: dysarthria, increased pharyngeal reflex, proboscis reflex, palmomental reflex Marinescu-Radovici
Task 19.
Damage to the first branch of the trigeminal nerve is characterized byin area,facial pain
Sample answer: hypoesthesia in the forehead and anterior scalp, paroxysmal pain in the face
Task 20.
What olfactory disorders are important in neurological diagnosis?
Sample answer: unilateral anosmia or hyposmia, olfactory hallucinations Task 21.
Indicate at what level the puncture is performed during a spinal puncture Sample answer:L3-L4

Task 15.

Task 22.
An increase in the number of blood cells in the cerebrospinal fluid is called
Sample answer: pleocytosis Task 23.
A fibrinous film on the surface of the cerebrospinal fluid is formed whenprocesses inor
Sample answer: infectious and inflammatory processes in the spinal cord or brain Task 24.
Normal reaction of the cerebrospinal fluid environment Sample answer: slightly alkaline Task
25.
Liquor colored red is called Sample answer: erythrochromic Task
26.
The most common cause of Horner's syndrome is a lesionthoracic root
Sample answer: lesion of the first thoracic root Task 27.
Damage to the peripheral (segmental) autonomic nervous system is manifested
by the following syndromes
Sample answer: peripheral autonomic failure, angiotrophalgic syndromes

When bilateral ptosis is combined with a decrease in pain sensitivity and reflexes in the hands,

first of all it should be excluded _____cervical tumor

Sample answer:intramedullary tumor of the cervical spine

Task 28.

Task 29.

Sample answer: Isolation of Mycobacterium tuberculosis DNA in the cerebrospinal fluid using
the PCR method Task 36.
The main difference between meningitis and meningism is
Sample answer: presence of inflammatory changes in the cerebrospinal
fluid Task 37.
Name the causative agent of Armstrong's choriomeningitis
Sample answer: filterable virus Task 38.
List the symptoms characteristic of the acute period of lethargic encephalitis:
Sample answer: sleep formula disorder, oculomotor disorders, catarrhal syndrome, hyperkinesis
Task 39.
In the polymyelitic form of tick-borne encephalitis, the main target isthickening of the spinal cord
Sample answer: cervical motor neurons
Task 40.
A reliable method for diagnosing herpetic encephalitis is to detect the virus in the cerebrospinal fluid using the
Sample answer: PCR Task 41.
Name a typical chronic complication of spring-summer tick-borne encephalitis
Sample answer: Kozhevnikovsky epilepsy Task
42.
Multiple sclerosis refers todiseases
Sample answer: autoimmune

_	1	40	
10	CZ	/1 4	
10	ısĸ	7.)	

The type of course of multiple sclerosis, characterized by the appearance and steady
progression of clinical symptoms with possible periods of relative stabilization of the
increase in neurological deficit, is called
Sample answer: primary progressive Task 44.
Type of course of multiple sclerosis, characterized by an increase in neurological deficit for 6 months
or more, without the onset of remissions in full or incomplete, both with and without the presence of
clearly defined exacerbations
called
Sample answer: secondary progressive Task 45.
Modern criteria for diagnosing multiple sclerosis are based on
VAndanalysis for oligoclonal IgG in cerebrospinal fluid
Sample answer: dissemination in space and a positive test for oligoclonal IgG in
the cerebrospinal fluid
Task 46.
The Circle of Willis consists of the right and leftarteries, right and left
arteries, right and leftarteries,connectingartery, right and left
communicating arteries
Sample answer: right and left anterior cerebral arteries, right and left middle cerebral arteries,
right and left posterior cerebral arteries, anterior communicating artery, right and left posterior
communicating arteries
Task 47.
Paresis of the arm, face and tongue, accompanied by dysarthria, occurs due to thrombosis
in the artery basin
Sample answer: arteries of Huebner

Cerebral infarction in the basin of the middle cerebral artery of the dominant hemisphere is characterized by aphasia
Sample answer: motor aphasia Task
49.
Name the alternating syndrome that develops with occlusion of the posterior inferior cerebellar artery
Sample answer: Parinaud syndrome
Task 50.
Status epilepticus is characterizedconsecutive epileptic seizures, between which the patient
Sample answer: a series of epileptic seizures following each other, between which the patient does not regain consciousness
Task 51.
For frequent seizures of primary generalized epilepsy, at the beginning of treatment, you should prescribedose of the selected drug and increase it
Sample answer: the minimum dose of the selected drug and increase it gradually Task 52.
On the electroencephalogram in patients with absence seizures complexes are detectedWithfrequencyHz;
Sample answer: peak-wave complexes with a frequency of 3 Hz;
Task 53.
The first-line drug in the pharmacotherapy of status epilepticus at the site of an attack and during transportation is injection into a vein.
Sample answer: diazepam Task

54.

Task 48.

In which form of neuroses are seizures most often observed?
Sample answer: hysteria Task
55.
Sleep disturbance is most common when
Sample answer: neurasthenia Task 56.
Damage to the nervous system in liver diseases is characterized by
starting withcourse of neurological symptoms.
Sample answer: gradual onset with a remitting course of neurological symptoms.
Task 57.
The appearance of meningeal symptoms in pancreatitis occurs only in combination with
Sample answer: subarachnoid hemorrhage. Task 58.
Patients with
depression
Sample answer: neurotic depression Task 59.
The fundamental difference between neurosis-like conditions in somatic
diseases from neurosis proper is that they arise in the absencepersonality changes;
Sample answer: in the absence of premorbid personality changes; Task 60.

Which functional method is used as the main one for diagnosing hereditary
neuromuscular diseases?
Sample answer: ENMG Task
61.
Name the disease that is characterized by the occurrence of retinal hamartoma ("mulberry")
Sample answer: tuberous sclerosis Task 62.
Tremors develop in Parkinson's disease, when performing
targeted movements
Sample answer: resting tremor, relieved by purposeful movements
Task 63.
Friedreich's ataxia is characterized by the formationataxia, suppression
of tendon reflexes, pathological foot signs, violationsensitivity;
Sample answer: cerebellar-posterior columnar ataxia, tendon depression
reflexes, pathological foot signs, violation of deep sensitivity; Task 64.
Surgical treatment for a herniated disc in the lumbar spine becomes urgent when the
function is impaired
Sample answer: dysfunction of the pelvic organs Task 65.
Wasserman's sign consists of raising the straight leg in ajointup
with the patient in position
Sample answer: raising the straightened leg at the hip joint upward with the patient in the prone position

Task 66.

Lasègue's sign consists of raising the straightened leg in a	_joint with
the patient in the positionuntil the onset of pain followed by	
in the knee joint;	
Sample answer: raising the straightened leg at the hip joint with the patient in the sup	ine position
until pain appears, followed by flexion	
knee joint Task	
67.	
The most common cause of compression-ischemic neuropathy	
median nerve is compression at the levelcanal of the transverse car	pal
ligament;	
Sample answer: compression at the level of the carpal tunnel by the transverse carpal	ligament Task
68.	

A 60-year-old patient was admitted with complaints of clear fluid discharge from the nose, which appeared two weeks after surgery for removal of a tumor of the cerebellopontine angle on the right. This complication is regarded as:

Sample answer: Nasal liquorrhea Task 69.

A 50-year-old patient was admitted with complaints of acute constant pain along the L2 root on the right. An MRI of the lumbar spine revealed an hourglass tumor. This picture is typical for:

Sample answer: Neuromas Task 70.

A 45-year-old female patient was admitted with complaints of blurred vision and menstrual cycle. Objectively, the patient was diagnosed with bitemporal hemianopsia, decreased visual acuity in both eyes. These symptoms are signs of development:

Sample answer: Pituitary adenomas

Task 71.

General cerebral syndrome with a brain tumor is characterized by headache, nausea and
vomitingrelief for the patient
Sample answer: not bringing relief Task 72.
The patient is 30 years old, injured as a result of a plane crash, upon admission to
hospital level of consciousness according to the Glasgow coma scale 14 - 15 points, tendon
reflexes S>D, according to SCT of the brain there are no signs of a skull fracture or dislocation
syndrome, there is an intracerebral hematoma with a volume of up to 10 ml in the frontal lobe on
the right. In this case, the correct tactic is:
Sample answer: conservative treatment; Task 73.
The patient is 40 years old, admitted after an accident in serious condition, the level of
consciousness at the time of injury, according to the Glasgow coma scale, is 8 points, according
to MRI of the brain there are no signs of intracerebral hemorrhage and areas of crushed tissue,
this picture is more typical for:
Sample answer: diffuse axonal damage; Task 74.
A patient was admitted with complaints of diffuse headache. A neurological examination
revealed Parinaud's sign. The most likely location of the tumor is:
Sample answer: pineal region Task 75.
Hypertensive headache as a general cerebral syndrome in a brain tumor is characterized by
nature of the painin horizontal
position;
Sample answer: diffuse arching nature of the pain, intensifying in a horizontal position;

CRITERIA for assessing competencies and rating scales

Grade "unsatisfactory"(not accepted) or absence competence development	Grade "satisfactorily"(passed) or satisfactory (threshold) level of competence development	Rating "good" (passed) or sufficient level mastering competence	"Excellent" (passed) or high level of mastery competencies
Inability of the learner to learn independently demonstrateknowledge when solving tasks, lack of independence in using skills. Absence confirmation of the presence of formation competencies indicates negative results of mastering the academic discipline	The student demonstrate sindependence in applying knowledge, skills and abilities to solve educational tasks in full accordance with sample given by the teacher for assignments, the solution of which was shown teacher, it should be considered that the competence formed on satisfactory level.	The student demonstrates independen tapplication of knowledge, skills and abilities in solving tasks similar to samples, which confirms the presence forme dcompetencies at a higher level. Availability such competence at a sufficient level indicates sustainable fixed practical skill	The student demonstratesability to complete independence in choosing a method non-standard solution sassignments within the discipline using knowledge, skills and abilities, received both during the development of this discipline and related disciplines should be considered competence formed at a high level.

Criteria for assessing test control:

percentage of correct answers	Marks
91-100	Great
81-90	Fine
70-80	satisfactorily
Less than 70	unsatisfactory

When grading tasks with multiple correct answers, one error is allowed.

Evaluation criteria for individual forms of control must be selected based on those prescribed in paragraph 2.

Interview assessment criteria:

Mark	Descriptors		
		the ability to explain (represent)	logic and response sequence

	strength of knowledge	the essence of phenomena, processes, do conclusions	
Great	strength of knowledge, knowledge of basic processes subject matter being studied areas, the answer differs in depth and completeness disclosure of the topic; possession terminological apparatus; logic and response sequence	high skill explain the essence of phenomena, processes, events, draw conclusions and generalizations, give reasonedanswers, give examples	high logic and consistency of the answer
Fine	solid knowledge of the basic processes of the studied subject area, is distinguished by the depth and completeness of the topic; possession terminologica lapparatus; free proficiency in monologue speech, but is allowed one or two inaccuracies in the answer	the ability to explain the essence, phenomena, processes, events, draw conclusions and generalizations, give reasoned answers, give examples; however one or two inaccuracies in the answer are allowed	logic and response sequence
satisfactory	satisfactoryprocess knowledge subject area being studied, the answer differs insufficient depth and completeness of the topic; knowledge of basic theoretical issues. There may be some errors in the content. answer	satisfactoryability to give reasonedanswers and give examples; satisfactorily formedanalysis skills phenomena, processes. There may be some errors in the content. answer	satisfactorylogic and response sequence
unsatisfactory	poor knowledge of the subject area being studied, shallow disclosure of the topic; poor knowledge basic theoretical issues, poor analysis skills phenomena, processes. There are serious errors in the content answer	inability to give reasoned answers	absencelogic and response sequences

Mark Descriptors

	understand ing the problem	analysis of the situation	solution skills situations	professional thinking
Great	complete understanding Problems. All requirements, required for task, completed	high ability analyze situation, draw conclusions	high ability choose method solutions Problems, confident solution skills	high level professional thinking
Fine	complete understanding Problems. All requirements, required for task, completed	ability analyze situation, draw conclusions	ability choose method solutions Problems confident solution skills situations	enough level professional thinking. One or two are allowed inaccuracies in the answer
satisfactory really	partial understanding Problems. Majority requirements, required for task, completed	satisfactory ability analyze situation, draw conclusions	satisfactory skills solutions situations, difficulties with choice of method problem solving	enough level professional thinking. More than two inaccuracies in answer or error in sequences solutions
will not satisfy really	misunderstanding Problems. Many requirements, required for task, not completed. No answer. Did not have attempts to solve task	low ability analyze situation	insufficient solution skills situations	absent