SENSORY SYSTEMS

1.A patient has a heamorrhage into the posterior central gyrus. What type of sensitivity on the opposite side will be disturbed?

A.Olfactory
B.Auditory
C.Visual
D.Auditory and visual
E. *Skin and proprioceptive

2. A patient got a trauma that caused dysfunction of motor centres regulating activity of head muscles. In what parts of cerebral cortex is the respective centre normally localizaed?

A. *Inferior part of precentral gyrus
B. Angular gyrus
C. Superior parietal lobule
D. Superior part of precentral gyrus
E. Supramarginal gyrus

3. After craniocerebral injury a patient is unable to recognize objects by touch. What part of brain has been damaged?

A. Occipital lobe
B. Temporal lobe
C. Cerebellum
D. *Postcentral gyrus
E. Precentral gyrus

4. As a result of a craniocerebral injury, a patient has decreased skin sensitivity. What area of the cerebral cortex is likely to be damaged?

A. Occipital region
B.* Posterior central gyrus
C. Anterior central gyrus
D. Frontal cortex
E. Cingulate gyrus

5. Examination of the patient with the traumatic brain injury revealed that he has lost the ability to discern the movement of an object on the skin. What part of cerebral cortex is damaged?

A. Anterior central gyrus
B. Occipital lobe
C. Posterior central gyrus
D. Frontal lobe
E. *Parietal lobe

6. A man having a hearing loss after a head trauma was delivered to the neurosurgery department. The cause of the hearing loss might be the damage of the following lobe of the cerebral cortex:

A. Frontal
B. Occipital
C. Posterior gyrus
D. Parietal
E. *Temporal

7. In a course of an experiment thalamocortical tracts were cut. What type of sensory perception remained intact?

A. Visual
B. *Olfactory
C. Auditory
D. Exteroceptive
E. Nociceptive

8. A man has normal sensitivity of his finger skin, however he doesn't sense his wedding ring around his finger. What process induced by wearing of the ring has caused this phenomenon?

A. Abnormality of the epidermis structure
B. Abnormality of the receptor structure
C. *Receptors adaptation
D. Development of the fibrous tissue
E. Impaired circulation

9. A patient consulted a doctor about loss of taste sensitivity on the tongue root. The doctor revealed that it is caused by nerve affection. Which nerve is it?

A. *Glossopharyngeal
B. Superlaryngeal nerve
C. Vagus nerve
D. Trigeminal nerve
E. Facial nerve

10. After traumatic tooth extraction a patient is complaining of acute, dull, poorly localized pain in gingiva, body temperature rise up to 37,50C. The patient has been diagnosed with alveolitis. Specify the kind of pain in the patient:

A. Epicritic
B. Visceral
C. Heterotopic
D. Phantom
E. *Protopathic

11. A patient complaining of pain in the left shoulder-blade region has been diagnosed with myocardial infarction. What kind of pain does the patient have?

A. Protopathic
B. Phantom
C. Epicritic
D.* Radiating
E. Visceral

12. A patient consulted a doctor about a sensation of imbalance which appeared after a trauma. Which nerve is damaged?

A. Facial nerve
B. Intermediate nerve
C. *Vestibulocochlear nerve
D. Vagus nerve
E. Trigeminal nerve

13. A patient complains of dizziness and hearing loss. What nerve is damaged?

A. Trochlear

B. Trigeminus
C. Sublingual
D. *Vestibulocochlear
E. Vagus

14. A man who is riding the carousel presents with increased heart rate, sweating, nausea. This condition is caused primarily by the stimulation of the following receptors:
A. *Vestibular ampullar
B. Auditory
C. Visual
D. Vestibular otholitic
E. Proprioceptors

15. A man who went for a ride on a roundabout had amplification of heart rate, sweating and nausea. What receptors stimulation us it primarily connected with?
A.Visual
B.*Vestibular
C.Auditory
D.Tactors
E.Proprioceptors

16. Surface with an intact toad on it was inclined to the right. Tone of extensor muscles became reflectory higher due to the activation of the following receptors:
A. Proprioreceptors
B. Photoreceptors of retina
C. Vestibuloreceptors of semilunar ducts
D. Mechanoreceptors of foot skin
E. *Vestibuloreceptors of utricle and saccle

17. During the air and bone conduction tests it was revealed that in the left ear the tones were louder by bone conduction. This might be associated with the disease of:
A.*Left middle ear
B. Left inner ear
C. Right inner ear
D. Right external ear
E. Right middle ear

18. A soldier with explosion-caused trauma was delivered to a hospital. Examination revealed his tympanic membrane to be intact. What defense reflex prevented the tympanic membrane from rupturing?
A. Relaxation of *m.tensor tympani*
B. Contraction of *m.auricularis arterior*
C. Relaxation of *m.auricularis arterior*
D. ***Contraction of *m.tensor tympani***
E. Relaxation of *m.stapedius*

19.A 60 y.o. patient has a reduced perception of high-frequency sounds. What structures' disorder of auditory analizer caused these changes ?
A. Tympanic memrane
B.Eustachian tube
C.*Main membrane of cochlea near the oval window
D.Muscles of middle ear

E.Main membrane of cochlea near helicotrema
Sensory

20.According to audiometry data a patient has a disturbed perception of medium-frequency sounds. It might have been caused by a damage of:
A.Spiral ganglion
B.Cochlear nuclei
C.*Middle part of helix
D.Quadritubercular structure
E.Lateral geniculate bodies

21. A 60 year old patient has impaired perception of high-frequency sounds. These changes were caused by damage of the following auditory analyzer structures:
1. Eustachian tube
2. Main cochlea membrane near the helicotrema
3. Tympanic membrane
A. *Main cochlea membrane near the oval window
4. Middle ear muscles

22. Middle part of cochlear of internal ear was destroyed in animal while experiment. It will cause abnormalities of the sound perception of the following frequencies:
A. *Middle
B. Low
C. High
D. Hight and low
E. No abnormalities

23. A 64 year old woman has impairment of twilight vision (hemeralopy). What vitamin should be recommended in the first place?
A. Vitamin E
B. *Vitamin A
C. Vitamin C
D. Vitamin B_6
E. Vitamin B_2

24.Vitamin A deficit results in the impairment of twilight vision. Name the cells that have the above-mentioned photoreceptor function:
A.Cone receptor cells
B.*Rod receptor cells
C.Ganglion neurocytes
D.Bipolar neurons
E.Horizontal neurocytes

25. While shifting the gaze to the closely stimulated object the refracting power of eye's optical mediums will increase by 10 dioptries. It results from changing of such eye structure:
A. *Lens
B. Cornea
C. Vitreous body
D. Liquid of the anterior chamber of eye
E. Muscle that dilates pupil

26. A 75-year-old-female patient with complains of visual impairment has been delivered to the ophthalmologic department. Objective examination revealed a brain tumor in area of the left optic tract. The patient has a visual field defect in the following area:
A. Left and right halves of the left eye retina
B. Left and right halves of the right eye retina
C. Left and right halves of both eyes retina
D. *Left halves of both eyes retina
E. Right halves of both eyes retina

27. In the experiment on the animal part of the cerebral cortex hemispheres was removed. It caused elimination of previously formed conditioned reflex to the light irritation. What part of the cortex was removed?
A. *Occipital cortex
B. Precentral convolution
C. Postcentral convolution
D. Limbic cortex
E. Temporal lobe