

Federal State Budgetary Educational Institution of Higher Education
"Privolzhsky Research Medical University"
Ministry of Health of the Russian Federation

BANK OF ASSESSMENT TOOLS FOR DISCIPLINE/PRACTICE

OPHTHALMOLOGY

Training program (specialty): **31.05.03 DENTISTRY**

code, name

Department: EYE DISEASES

Mode of study **FULL-TIME**

Nizhniy Novgorod
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1. Bank of assessment tools for the current monitoring of academic performance, mid-term assessment of students in the discipline / practice

This Bank of Assessment Tools (BAT) for the discipline "Name of discipline / practice" is an integral appendix to the working program of the discipline "Name of discipline/ practice". All the details of the approval submitted in the WPD for this discipline apply to this BAT.

(Banks of assessment tools allow us to evaluate the achievement of the planned results stated in the educational program.

Assessment tools are a bank of control tasks, as well as a description of forms and procedures designed to determine the quality of mastering study material by students.)

2. List of assessment tools

The following assessment tools are used to determine the quality of mastering the academic material by students in the discipline/ practice:

No.	Assessment tool	Brief description of the assessment tool	Presentation of the assessment tool in the BAT
1	Tests	A system of standardized tasks that allows you to automate the procedure of measuring the level of knowledge and skills of a student	Bank of test tasks
2	Case - task	A problem task in which the student is offered to comprehend a real professionally-oriented situation necessary to solve this problem.	Tasks for solving cases
3	Individual survey	A control tool that allows you to assess the degree of comprehension of the material	List of questions
	Essay	A tool that allows you to evaluate the student's ability to state the essence of the problem in writing, independently analyze this problem using concepts and analytical tools of the relevant discipline, and draw conclusions summarizing the author's position on the problem.	The subject of the essay

3. A list of competencies indicating the stages of their formation in the process of mastering the educational program and the types of evaluation tools

Code and formulation of competence*	Stage of competence formation	Controlled sections of the discipline	Assessment tools
UC-1, GPC-5	Current monitoring	Clinical anatomy, physiology of the visual organ	Test tasks Individual survey
UC-1, GPC-5, GPC -7	Current monitoring	Methods of examination of the visual organ and its accessory apparatus	Test tasks Individual survey (control questions)
GPC-5,7, PC-6	Current monitoring	Diseases of the eyelids, orbit, lacrimal apparatus.	Test tasks Clinical cases

GPC-5, GPC -7, PC-6	Current monitoring	Conjunctival and corneal diseases	Test tasks Clinical cases
GPC-5, GPC -7, PC-6	Current monitoring	Pathology of the uveal tract. Pathology of the lens.	Test tasks Clinical cases
GPC-5, GPC -7, PC-6	Current monitoring	Glaucoma	Test tasks Individual survey (control questions)
GPC-5, GPC -7, PC-6	Current monitoring	Mechanical and chemical injuries of the visual organ	Test tasks Clinical cases

4. The content of the assessment tools of entry, current control

Entry /current control is carried out by the discipline teacher when conducting classes in the form of: Test tasks, Clinical cases, Individual survey, Essay.

Assessment tools for current control.

4.1 Test tasks for the assessment of competencies: UC-1, GPC-5 Variant 1

Choose the best option (A,B,C,D,). More than one answer is correct.

1. The superior orbital fissure transmits:

- a. The trochlear nerve
- b. The oculomotor nerve
- c. The optic nerve
- d. The ophthalmic nerve

2. Choose the muscles, which contraction produces adduction of the eye:

- a. The medial rectus
- b. The inferior oblique
- c. The superior rectus
- d. The inferior rectus

3. The inferior orbital fissure transmits:

- a. The infratrochlear nerve
- b. The inferior ophthalmic vein
- c. The infraorbital nerve and artery
- d. The zygomatic nerve

4. Choose the muscles, which contraction produces abduction of the eye:

- a. The inferior oblique
- b. The superior rectus
- c. The lateral rectus
- d. The superior oblique

5. Which orbital walls don't communicate with any paranasal sinuses?

- A. Superior
- B. Inferior
- C. Medial
- D. Lateral

6. What components do the orbital fasciae consist of?

- A. Bulbar fascia
- B. Conjunctiva
- C. Retrobulbar fat
- D. Zonula ciliaris
- E. Periorbit

7. Choose the main parts of the muscle orbicularis oculi.

- A. Lacrimal
- B. Tarsal
- C. Orbital
- D. Tarsoorbital

- E. Palpebral
- 8. Mark the main parts of the conjunctiva.**
- a. Tarsal
 - b. Bulbar
 - c. Palpebral
 - d. Forniceal
 - e. Corneal
- 9. What are the components of collecting portion of the lacrimal system?**
- a. Lacrimal puncta
 - b. Lacrimal sac
 - c. Lacrimal gland
 - d. Lacrimal duct
 - e. Nasolacrimal duct
- 10. Mark the main sources of the cornea nourishment:**
- a. The anterior ciliary arteries
 - b. Aqueous humor of the anterior chamber
 - c. The posterior ciliary arteries
 - d. Lacrimal film
- 11. Which layers is the cornea composed of?**
- a. Corneal endothelium
 - b. Anterior and posterior limiting laminae
 - c. Vascular layer
 - d. Corneal epithelium
- 12. The iris derives its sensory nerve supply from:**
- a. The ophthalmic nerve
 - b. The maxillary nerve
 - c. The oculomotor nerve
 - d. The zygomatic nerve
- 13. The histological layers of the iris are:**
- a. Stroma
 - b. Pigment epithelium
 - c. Anterior border layer
 - d. Endothelium
 - e. Dilator pupillae muscle
- 14. What conditions are accompanied by myosis?**
- a. Darkness
 - b. Emotional stress
 - c. Convergence
 - d. Normal sleeping
 - e. After cyclomed instillation
- 15. Choose the main layers of the ciliary body:**
- a. Vascular
 - b. Ciliary endothelium
 - c. Ciliary epithelium
 - d. Lamina basalis
 - e. Muscular
 - f. Internal limiting membrane
- 16. What are the main retinal neurons?**
- a. Rods and cones
 - b. Internal nuclear layer
 - c. External nuclear layer
 - d. Pigment epithelium
 - e. Internal limiting membrane
 - f. Ganglion cells
- 17. What structures bound the anterior chamber?**
- a. Anterior lens capsule
 - b. Ciliary body
 - c. Vitreous body
 - d. Posterior surface of the cornea

- e. Posterior iris surface
 - f. Anterior iris surface
- 18. What are the main parts of the optic nerve?**
- a. Extrabulbar
 - b. Intrabulbar
 - c. Intracanalicular
 - d. Orbital
 - e. Intracranial
 - f. Extraorbital
- 19. Mark the main branches of the ophthalmic artery in the orbit:**
- a. Lacrimal
 - b. Anterior cerebral
 - c. Long posterior ciliary arteries
 - d. Muscular
 - e. Central retinal artery
 - f. Communicative
 - g. Maxillary
- 20. The limbal nervous plexus is formed by:**
- a. Maxillary nerve
 - b. Long posterior ciliary nerves
 - c. Infratrochlear nerve
 - d. Frontal nerve
 - e. Short posterior ciliary nerves

4.1 Test tasks for the assessment of competencies: GPC-5, GPC -7, PC-6

Choose the best option (A,B,C,D,). More than one answer is correct.

- 1. The clinical picture of acute dacryoadenitis includes follow symptoms and signs:**
 - a. Lymphadenopathy (submandibular)
 - b. Ocular motility restriction
 - c. Eyeball displacement inferiorly and medially
 - d. Exophthalmos
 - e. S-shaped superior eyelid
- 2. The main reason for developing chronic dacryocystitis is...**
 - a. Lacrymal sac trauma
 - b. Canalicular obstruction
 - c. Nasolacrymal duct obstruction
 - d. Punctual occlusion
- 3. What are possible complications of chronic dacryocystitis?**
 - a. Phlegmon of the lacrymal sac
 - b. Keratitis
 - c. Uveitis
 - d. Intranasal fistula
 - e. Lacrymal sac hydrops
- 4. Mark the main diagnostic criteria of chronic inflammation of the lacrymal sac:**
 - a. Epiphora
 - b. Mucopurulent discharge from the lacrymal puncta
 - c. Fever
 - d. Negative color nasolacrymal test
 - e. Edema of the lower lid
- 5. The radical treatment of chronic dacryocystitis is...**
 - a. Extirpation of the lacrymal sac
 - b. Dacryocystorhinostomy
 - c. Massage of the lacrymal sac
 - d. Lacrymal ducts washing
- 6. What does chalazion mean?**
 - a. Acute inflammation of a tarsal gland
 - b. Tumor of the eyelids
 - c. Chronic proliferative inflammation of a tarsal (meibomian) gland
 - d. Inflammation of the lid margin

7. **What are the clinical forms of blepharitis?**
 - a. Squamous
 - b. Acute
 - c. Ulcerative
 - d. Nongranulomatous
 - e. Simple
8. **Give an account of possible causes of blepharitis:**
 - a. Lacrymal system infection
 - b. Diabetes mellitus
 - c. Allergy
 - d. Absence of ametropic correction
 - e. Uveitis
9. **Ulcerative blepharitis may have follow complications:**
 - a. Madarosis
 - b. Poliosis
 - c. Chalazion
 - d. Stye
 - e. Trichiasis
10. **What are the objective signs of blepharitis, caused by Demodex folliculorum?**
 - a. Thickening and vasodilatation of the lid margins
 - b. Broken eyelashes
 - c. Pungent sticky yellow discharge in the mornings
 - d. Fibrinous scales on the lid margins
 - e. 'Sleeves' at the eyelashes base
11. **Choose the definition of stye:**
 - a. An abscess of a meibomian gland
 - b. Phlegmon of a tarsal gland
 - c. An abscess of a gland of Zeiss
12. **Ectropion is...**
 - a. abnormally low position of the upper lid
 - b. when the lid margin is turned away from the eye globe
 - c. when the lid margin is turned toward the eyeball
13. **The treatment of chalazion consists of:**
 - a. Warm compresses
 - b. Injections of the lesion with corticosteroids
 - c. Cryotherapy
 - d. Incision and curettage the nodules through the conjunctiva or skin
14. **What is acute bacterial conjunctivitis characterized by?**
 - a. Conjunctival injection
 - b. Purulent discharge
 - c. Narrowing of the visual fields
 - d. Foreign body sensation
15. **Acute bacterial conjunctivitis is usually...**
 - a. Bilateral
 - b. Monolateral
16. **The main clinical forms of adenoviral conjunctivitis are...**
 - a. Pharyngeal conjunctival fever
 - b. Chronic conjunctivitis
 - c. Epidemic keratoconjunctivitis
 - d. Hyperacute conjunctivitis
17. **The objective signs of adenoviral conjunctivitis are...**
 - a. Follicles in the inferior palpebral conjunctiva
 - b. Ipsilateral preauricular lymphadenopathy
 - c. Marginal corneal ulceration
 - d. Fibrinous membranes on the lid's conjunctiva
 - e. Intraepithelial microcysts in the cornea
 - f. Corneal ulcer
18. **The treatment of adenoviral keratoconjunctivitis consists of...**
 - a. Nonsteroid anti-inflammatory drugs

- b. Interferon instillations
- c. Acyclovir ointment
- d. Corticosteroids topically
- e. Mydriatics
- f. Lubricating drops in keratitis

19. The main complication of gonococcal conjunctivitis is...

- a. Trichiasis
- b. Corneal ulceration
- c. Entropion
- d. Madarosis
- e. Ectropion

4.2 Clinical cases for the assessment of competencies: GPC-5, GPC -7, PC-

1. Clinical case.

A young man came to the emergency room of the hospital with complaints of severe photophobia, lacrimation, and decreased vision in both eyes. According to the patient, a few minutes ago, two teenagers passing by splashed something in his face. On examination, hyperemia of the conjunctiva, superficial gentle opacity of the cornea of the right eye; in the optical part of the cornea of the left eye, a small erosion.

Assume a diagnosis

Assess the severity of the damage

What emergency measures should be provided in this case?

2. A 10-year-old girl complains on photophobia, lacrimation, blepharospasm of both eyes. Symptoms appeared on the background of acute respiratory disease. On examination, the eyelids of both eyes are swollen, pronounced hyperemia of the tarsal conjunctiva, conjunctival injection, and there are many small follicles in the lower conjunctival sac.

What is your patient's disease?

- 1. epidemic keratoconjunctivitis
- 2. pharyngoconjunctival fever
- 3. herpetic conjunctivitis
- 4. acute allergic conjunctivitis

What medical measures are necessary in this case?

3. A young man came to you, the district therapist, complaining of sharp pain, hyperemia and swelling of the upper eyelid area of the right eye, vision didn't change. When viewed from the lateral side of the upper eyelid, local edema and hyperemia of the skin are detected, touching causes sharp pain. At the margin of the eyelid, there is an infiltrate of several purulent heads.

Suggest a diagnosis

What medical measures are necessary in this case?

What are the complications are possible in this case?

4. You were contacted by patient G., a plumber. While replacing the pipe, something got into his left eye. The patient did not seek medical help, because his vision did not decrease, only the feeling of a foreign body behind the eyelids bothered him. However, a few days later, there were pain in the left eye, lacrimation, photophobia, and decreased vision. Examination of the patient's left eye revealed: pronounced mixed injection of the eyeball. The cornea is cloudy, paracentral-infiltrate of gray-yellow color with ulceration in the center, purulent exudate in the anterior chamber. The pupil is narrowed and does not respond to light. Palpation of the eyeball tone is not changed, but palpation is sharply painful.

1. What is the presumed diagnosis?

2. Specify first aid measures.

4.3. Questions for Individual survey for the assessment of competencies: GPC-5, GPC -7, PC-6

What are the eye refractive errors?

- 1. What method demonstrates the degree of the eye anterior projection from the orbit?
- 2. What method can help us to investigate the transparent structures of the eye?
- 3. What are the main components of the eye optical system?

4. What are the main types of the eye clinical refraction?
5. When does the main focus lie in myopic eye?
6. Where does the far point lie in hyperopia?
7. Mark the possible complications of myopic disease:
8. What is the patient's visual acuity, if he can read the first line of Golovina chart at the distance of 3 meters?
9. The accommodation apparatus of eye consists of:
10. What are the main types of the corrective lenses?
11. What is the main cause of presbyopia?
12. What is normal correlation between the diameter of the retinal arteries and veins?
13. Mark possible variants of ocular injection (hyperemia):
14. what are the possible degrees of color vision impairment
15. what are the methods for determining intraocular pressure?
16. What method investigates active drainage function of the eye lachrymal system?
17. What method may reveal intraorbital foreign bodies?
18. What objective signs are typical of the developed glaucoma?
19. Give an account of the risk factors for primary open-angle glaucoma.
20. List the main components of the emergence treatment of angle-closed glaucoma attack

4.4. Essay topics for the assessment of competencies: GPC-5, GPC -7, PC-6

- 1 Infectious lesions of the orbit.
- 2 Inflammation of the bone walls of the orbit, anterior and posterior periostitis.
- 3 Subperiosteal abscess of the orbit.
- 4 Tenonites.
- 5 Phlegmon of the orbit. Diagnostics. Urgent measures. Principles of treatment. Complications.
- 6 Odontogenic lesions of the orbit
- 7 Thermal, chemical and radiation damage to the organ of vision..

5. The content of the assessment tools of mid-term assessment

Mid-term assessment is carried out in the form of a credit.

The content of the assessment tool: questions, situational clinical tasks.)

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5.1 The list of control tasks and other materials necessary for the assessment of knowledge, skills and work experience.

5.1.2. Questions for the credit in the discipline *Ophthalmology*

Question	Competence code (according to the WPD)
<ol style="list-style-type: none"> 1. Anatomy of the orbit. 2. Blood supply of the eye and orbit. 3. Sensory nerve supply of the eye. 4. Lacrymal apparatus of the eye. 5. Extraocular muscles. 6. Anatomy and histology of the eyelids. 7. Anatomy and histology of the conjunctiva. 8. Anatomy of the eye fibrous capsule. 9. Anatomy and histology of the cornea. 10. Anatomy and histology of the iris. 11. Anatomy and histology of the ciliary body, its functions. 12. Anatomy and histology of the choroid. 13. Anatomy and histology of the retina, its functions. 14. Anatomy and histology of the crystalline lens. Age changes of the lens. 15. Anatomy of the eye chambers. 16. Anatomy of the optic nerve. 17. The optical system of the eye and its components. 	UC-1, GPC-5

<p>18. The kinds of the clinical refraction of the eye and their characteristics.</p> <p>19. Myopia. Clinical picture. Complications. Forms of correction and treatment.</p> <p>20. Hyperopia. Symptoms. Forms of correction and treatment.</p> <p>21. Types of corrective lenses. Correction of myopia and hyperopia</p> <p>22. Correction of Ametropias.</p> <p>23. Presbyopia and its correction.</p> <p>24. Accommodation of the eye. Far and near visual point.</p> <p>25. Accommodation of the eye and its disturbances.</p> <p>26. Astigmatism, its classification and correction.</p>	
<p>27. Methods of the eye investigation.</p> <p>28. Physiology of the aqueous humor circulation. Intraocular pressure and the methods of its measurement.</p> <p>29. Investigation of the central vision: visual acuity, visual angle.</p> <p>30. Color vision and its disturbances. Color vision testing.</p> <p>31. Visual fields, their disturbances. Visual field testing.</p> <p>32. Blepharitis. Etiology. Symptoms. Treatment.</p> <p>33. Inflammatory diseases of the eyelids.</p> <p>34. Acute dacryoadenitis: etiology, clinical course, and treatment.</p> <p>35. Chronic dacryocystitis. Symptoms. Treatment.</p> <p>36. Acute bacterial conjunctivitis. Symptoms. Treatment.</p> <p>37. Gonorrhoeal conjunctivitis. Symptoms. Prophylaxis and treatment.</p> <p>38. Viral Conjunctivitis. Clinical picture and treatment.</p> <p>39. Bacterial corneal ulcer. Etiology. Symptoms. Treatment.</p> <p>40. Bacterial keratitis. Pathogenesis. General symptoms. Treatment.</p> <p>41. Herpes Simplex keratitis. Classification. Clinical forms and treatment.</p> <p>42. Corneal pathology outcomes and their surgical treatment.</p> <p>43. Acute anterior uveitis (iridocyclitis).</p> <p>44. Posterior uveitis (choroiditis).</p> <p>45. Cataract. Classification. Symptoms. Treatment.</p> <p>46. Cataract surgery.</p> <p>47. Aphakia and methods of its correction.</p> <p>48. Classification of glaucoma. Diagnostic tests.</p> <p>49. Primary open-angle glaucoma: pathogenesis, clinical course, diagnostic tests. Medical treatment.</p> <p>50. Primary Angle-closure glaucoma. Pathogenesis. Symptoms. Treatment</p> <p>51. Acute attack of angle-closure glaucoma: symptoms, emergency treatment.</p> <p>52. Secondary glaucoma, classification.</p> <p>53. Differential diagnosis of iridocyclitis and acute attack of glaucoma.</p> <p>54. Penetrating injuries of the eye. Cornea Erosion.</p> <p>55. Full-thickness lacerations of the eye. Signs. The first aid.</p> <p>56. Intraocular foreign bodies: diagnostic tests, methods of their removal from the eye.</p> <p>57. Sympathetic ophthalmia.</p> <p>58. Chemical injuries. The first aid.</p> <p>59. Blunt trauma.</p>	<p>GPC-5, GPC -7, PC-6</p>

5.1.3. Clinical cases for the credit in the discipline *Ophthalmology*

Clinical case	Competence code (according to the WPD)
<p>1. You, the emergency room doctor, were contacted by a worker who got something in his left eye while working with metal. On examination-vision is reduced slightly, hyperemia of the eyeball, its shape is preserved, blepharospasm, lacrimation, on the periphery of the cornea of the left eye, a wound with dark masses is visible.</p> <p>Assume a diagnosis.</p> <p>What first aid measures should be provided.</p>	GPC-5, GPC -7, PC-6
<p>2. Patient N., 34 years old, went to the outpatient care center. According to the patient, he injured the area of the right orbit with a metal box while repairing his house. The examination revealed the absence of vision in the right eye, eyelid hematoma, ruptures of the pupillary edge of the iris, hyphema 2 mm, hemophthalmos.</p> <p>Assume a diagnosis.</p> <p>What first aid measures should be provided.</p>	GPC-5, GPC -7, PC-6
<p>3. A village resident, 64 years old, complained of pain in her left eye and decreased vision. According to the patient, she worked in the garden the day before and injured her left eye with a branch. On examination, there are: photophobia, lacrimation, blepharospasm of both eyes. Hyperemia is expressed on the left eye, surrounding the limb, towards the conjunctival arches weakens. The cornea is diffusely cloudy, and a round optically dense yellowish infiltrate with clear borders is detected in its optical center.</p> <p>Corneal sensitivity is preserved.</p> <p>Suggest a diagnosis</p> <p>What medical measures are necessary in this case?</p> <p>What are the complications are possible in this case?</p>	GPC-5, GPC -7, PC-6
<p>4. A 32-year-old patient will contact You, a doctor of the polyclinic Department, with complaints of reduced vision in the right eye, lacrimation, and pain in the right eye that increases at night. His condition is associated with severe hypothermia the day before. Examination revealed hyperemia of the right eyeball, more pronounced around the limb and decreasing to the conjunctival arches, on the back surface of the lower corneal sections – small white dot objects, the pupil is narrowed. Palpation of the eyeball is sharply painful.</p> <p>Formulate a diagnosis.</p> <p>What first aid measures should be performed by You in this case.</p> <p>Plan tactics for further treatment.</p>	GPC-5, GPC -7, PC-6
<p>5. A young man came to the emergency room of the hospital with complaints of severe photophobia, lacrimation, and decreased vision in both eyes. According to the patient, a few minutes ago, two teenagers passing by splashed something in his face. On examination, hyperemia of the eye, superficial opacity of the cornea of the right eye, in the optical part of the cornea of the left eye, a small erosion.</p> <p>What is the presumed diagnosis?</p> <p>Specify first aid measures</p>	GPC-5, GPC -7, PC-6
<p>6. A 35-year-old patient has turned to you, the doctor on duty at the ophthalmological hospital, complaining of growing pain in the right orbit, lacrimation, double vision and decrease in the vision of the right eye, headache, weakness, an increase in body temperature up to 38.3 °C. The above complaints appeared against the background of exacerbation of chronic right-sided sinusitis, which developed after severe hypothermia 2 days ago. On examination - pronounced dense edema and hyperemia of the upper eyelid of the right eye from the lateral side, chemosis and hyperemia of the conjunctiva. Palpation causes severe eyelid pain</p>	GPC-5, GPC -7, PC-6

<p>What is the presumed diagnosis? Specify first aid measures.</p>	
<p>7. You were contacted by patient G., a plumber. While replacing the pipe, something got into his left eye. The patient did not seek medical help, because his vision did not decrease, only the feeling of a foreign body behind the eyelids bothered him. However, a few days later, there were pain in the left eye, lacrimation, photophobia, and decreased vision. Examination of the patient's left eye revealed: pronounced mixed injection of the eyeball. The cornea is cloudy, paracentral-infiltrate of gray-yellow color with ulceration in the center, purulent exudate at the bottom of the anterior chamber. The pupil is narrowed and does not respond to light. Palpation of the eyeball tone is not changed, but palpation is sharply painful.</p> <p>What is the presumed diagnosis? Specify first aid measures.</p>	<p>GPC-5, GPC -7, PC-6</p>
<p>8. A 10-year-old girl complains on photophobia, lacrimation, blepharospasm of both eyes. Symptoms appeared on the background of acute respiratory disease. On examination, the eyelids of both eyes are swollen, pronounced hyperemia of the tarsal conjunctiva, conjunctival injection, and there are many small follicles in the lower conjunctival sac. What is your patient's disease?</p> <ol style="list-style-type: none"> 1. epidemic keratoconjunctivitis 2. pharyngoconjunctival fever 3. herpetic conjunctivitis 4. acute allergic conjunctivitis <p>What medical measures are necessary in this case?</p>	<p>GPC-5, GPC -7, PC-6</p>
<p>9. A young man came to you, the district therapist, complaining of sharp pain, hyperemia and swelling of the upper eyelid area of the right eye, vision didn't change. When viewed from the lateral side of the upper eyelid, local edema and hyperemia of the skin are detected, touching causes sharp pain. At the margin of the eyelid, there is an infiltrate of several purulent heads.</p> <p>Suggest a diagnosis What medical measures are necessary in this case? What are the complications are possible in this case?</p>	<p>GPC-5, GPC -7, PC-6</p>
<p>20. A ten-year-old child was taken to the emergency room of the district hospital with fresh burns to the skin of the face and eyes from the flames of gasoline. Eyelashes and eyebrows are burned, the skin of the face is hyperemic, with separate blisters and necrotic areas on the cheeks and eyelids. Examination of the eyeballs revealed: conjunctival edema, surface films on the conjunctiva, corneal opacity, extensive erosion in the optical zone.</p> <ol style="list-style-type: none"> 1. determine the severity of the burn 2. list first aid measures 	<p>GPC-5, GPC -7, PC-6</p>
<p>11. Patient K., 47 years old, turned to You, the duty therapist of the district polyclinic with complaints of intense aching pain in both eyes, radiating to the frontal area, the back of the head, once there was vomiting. According to the patient has low vision since childhood, uses "plus" glasses. In the days leading up to the deterioration of the condition, he noticed a decrease in visual acuity even when using glasses, as well as the appearance of rainbow circles when looking at a light source. On examination: moderate congestive injection of both eyeballs, cornea is opaque, the pupils dilated, Pupils nonreactive to light. On palpation, the eyeballs are of "stone" density.</p> <ol style="list-style-type: none"> 1. Suggest a diagnosis 2. What medical measures are necessary in this case? 	<p>GPC-5, GPC -7, PC-6</p>

<p>12. During night duty, a 65-year-old nurse felt a sharp pain in her left eye, radiating to the left side of her head, teeth, and ear. There was vomiting, slow pulse, blood PRESSURE 180/100 mm Hg. According to the patient, recently there were periodic attacks of blurred vision, a rainbow when looking at a light source, a feeling of heaviness in both eyes. External examination revealed a moderate narrowing of the left eye slit, redness of the left eyeball, a cloudy cornea and a dilated pupil on the left, which almost does not respond to light. The patient can only distinguish objects near the face with this eye.</p> <p>Identify the disease. list the medications that may be recommended in this case?</p> <p>What procedure should be performed on the other eye for preventive purposes?</p>	<p>GPC-5, GPC -7, PC-6</p>
<p>13. A young man, 18 years old, approached you about photophobia, lacrimation and blepharospasm, more pronounced on the left. These symptoms appeared shortly after he suffered an acute respiratory illness. Upon examination, the eyeball is hyperemic, a gray, disc-shaped infiltrate is detected in the cornea, located in its optical zone. On the surface of the infiltrate, the epithelium is eroded, the stroma is edematous, thickened. When stained with 1% fluorescein solution, the cornea does not stain.</p> <p>What kind of corneal sensitivity should be checked to confirm the diagnosis? what is the best way to do this? Identify the disease</p>	<p>GPC-5, GPC -7, PC-6</p>
<p>14. A patient came to the polyclinic complaining of lacrimation, severe pain in the right eyeball, right orbit and right temporal region, decreased vision of the right eye. According to the patient, a week ago there was a fever with chills and pronounced weakness. At the same time, small grouped bubbles with transparent contents appeared on the skin of the face on the right side. At the time of examination: hyperemia, yellowish-brown crusts on the skin of the scalp, forehead, eyelids on the right. Hyperemia of the eyeball, more pronounced around the limb zone, an infiltrate of grayish color in the form of a "tree branch" is visualized on the cornea. No corneal deepithelization sites were detected when 1% .fluorescein was stained with</p> <p>Suggest a diagnosis What are the risk factors that can trigger a relapse of the disease</p>	<p>GPC-5, GPC -7, PC-6</p>
<p>15. Patient V., 78 years old, turned to you, the hospital therapist on duty, complaining of sharply developed blindness of the left eye, a feeling of fog and floating shadows and flies in front of the right eye. The patient has been suffering from type II diabetes mellitus for 25 years, has been on insulin replacement therapy for the last 15 years. From the concomitant pathology – hypertension 3st, risk 4. Upon examination: the cornea is smooth, shiny, partial opacities in the lens, the reflex from the fundus of the right eye is weakened, the reflex from the fundus of the left eye is absent. The patient was examined by an ophthalmologist 2 weeks ago, who was diagnosed with diabetic proliferative retinopathy of both eyes. Complicated immature cataract of both eyes. In terms of treatment, laser coagulation of the retina was recommended.</p> <p>What, in your opinion, caused the sudden blindness in this case? List the stages of diabetic retinopathy (DR) according to the WHO classification. Determine the algorithm of ophthalmological management of patients with diabetes mellitus</p>	<p>GPC-5, GPC -7, PC-6</p>

6. Criteria for evaluating learning outcomes

Learning outcomes	Evaluation criteria	
	Not passed	Passed
Completeness of knowledge	The level of knowledge is below the minimum requirements. There were bad mistakes.	The level of knowledge in the volume corresponding to the training program. Minor mistakes may be made
Availability of skills	Basic skills are not demonstrated when solving standard tasks. There were bad mistakes.	Basic skills are demonstrated. Typical tasks have been solved, all tasks have been completed. Minor mistakes may be made.
Availability of skills (possession of experience)	Basic skills are not demonstrated when solving standard tasks. There were bad mistakes.	Basic skills in solving standard tasks are demonstrated. Minor mistakes may be made.
Motivation (personal attitude)	Educational activity and motivation are poorly expressed, there is no willingness to solve the tasks qualitatively	Educational activity and motivation are manifested, readiness to perform assigned tasks is demonstrated.
Characteristics of competence formation*	The competence is not fully formed. The available knowledge and skills are not enough to solve practical (professional) tasks. Repeated training is required	The competence developed meets the requirements. The available knowledge, skills and motivation are generally sufficient to solve practical (professional) tasks.
The level of competence formation*	Low	Medium/High

* - not provided for postgraduate programs

For testing:

Mark "5" (Excellent) - points (100-90%)

Mark "4" (Good) - points (89-80%)

Mark "3" (Satisfactory) - points (79-70%)

Less than 70% – Unsatisfactory – Mark "2"

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