

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): **31.05.01 GENERAL MEDICINE**
code, name

Department: EYE DISEASES

Mode of study **FULL-TIME**

Nizhniy Novgorod
2023

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
UK-1,GPC- 4, PC-4, PC-5, PC-6	Current monitoring	Clinical anatomy, physiology, methods of examination of the visual organ and its accessory apparatus	Test tasks Individual survey

GPC- 4, PC-1, PC-2, PC-3, PC- 4, PC-5, PC-6, PC-7, PC-22	Current monitoring	Diseases of the eyelids, pathology of the conjunctiva, lacrimal tract.	Test tasks Clinical cases
GPC- 4, PC-1, PC-2, PC-3, PC- 4, PC-5, PC-6, PC-7, PC-22	Current monitoring	Diseases of the cornea.	Test tasks Clinical cases
GPC- 4, PC-1, PC-2, PC-3, PC- 4, PC-5, PC-6, PC-7, PC-22	Current monitoring	Pathology of the uveal tract	Test tasks Clinical cases
GPC- 4, PC-5, PC-6, PC-7, PC- 22	Current monitoring	Pathology of the lens	Test tasks
GPC- 4, PC-1, PC-2, PC-3, PC- 4, PC-5, PC-6, PC-7, PC-22	Current monitoring	Glaucoma	Test tasks Clinical cases
GPC- 4, PC-1, PC-2, PC-3, PC- 4, PC-5, PC-6, PC-7, PC-22	Current monitoring	Eye injuries	Test tasks Clinical cases
GPC- 4, PC-1, PC-2, PC-3, PC- 4, PC-5, PC-6, PC-7, PC-22	Current monitoring	Pathology of the retina	Test tasks Essay

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: UK-1, GPC- 4, PC-4, PC-5, PC-6

1. ANATOMY OF THE EYE. variant 1

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

1. What is the orbit's volume?
 - a. 40 ml
 - b. 25 ml
 - c. 50 ml
 - d. 30 ml
2. The superior orbital fissure transmits:
 - a. The trochlear nerve
 - b. The oculomotor nerve
 - c. The optic nerve
 - d. The ophthalmic vein
3. What parts of the conjunctiva can we distinguish?
 - a. Tarsal
 - b. Palpebral
 - c. Bulbar
 - d. Forniceal
4. Which type of photoreceptors is responsible for light perception?
 - a. Cones
 - b. Rods
 - c. Both

5. What bones make up the orbit:
 - a. lacrimal
 - b. maxilla
 - c. sphenoid
 - d. frontal
 - e. orbit
 - f. palatine
 - g. ethmoid
6. 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
7. 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
8. The iris derives its sensory nerve supply from:
 - a. The ophthalmic nerve
 - b. The maxillary nerve
 - c. The oculomotor nerve
 - d. The zygomatic nerve
9. What are the main parts of the optic nerve?
 - a. Extrabulbar
 - b. Intrabulbar
 - c. Intracanalicular
 - d. Orbital
 - e. Intracranial
 - f. Extraorbital

4.1 Test tasks for the assessment of competencies: GPC- 4, PC-1, PC-2, PC-3, PC-4, PC-5, PC-6, PC-7, PC-22

Cataract. Glaucoma. variant I.

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

1. Choose the main components of the eye drainage system:
 - a. Venous sinus of the sclera
 - b. Choroid
 - c. Trabecular meshwork
 - d. Intrascleral collector channels
 - e. Lamina cribrosa
2. What pathogenic mechanisms take part in the optic nerve atrophy development?
 - A. Ischemic
 - B. Toxic
 - C. Mechanical
 - D. Metabolic
 - E. Infectious
3. How does the typical atrophy of the optic nerve look like ophthalmoscopically?
 - A. The optic disk is white with marginal excavation
 - B. The optic disk is hyperemic with unclear borders
 - C. The optic disk is gray with marginal excavation
 - D. The optic disk is gray, prominent
4. What visual field changes are detected in the early stage of glaucoma?
 - A. Bjerrum scotoma
 - B. Nasal narrowing less than 10 degrees
 - C. Enlargement of the blind spot and paracentral scotomas
 - D. Concentric narrowing

- E. No changes
5. What method of the eye examination is used for classifying glaucoma as open-angle and closed angle?
 - A. Biomicroscopy
 - B. Ophthalmoscopy
 - C. Gonioscopy
 - D. Ophthalmometry
 6. What is the principle pathogenic mechanism of congenital glaucoma?
 - A. Collapse of the trabecular spaces
 - B. Relative (functional) papillary block
 - C. Dysgenesis of the anterior chamber angle
 - D. 'Plateau' iris
 - E. Neovascularization of the iris
 7. Mark the main modern diagnostic methods for the early stages of glaucomatous disease detection:
 - A. Computer static perimetry
 - B. Electroretinography
 - C. Applanation tonometry
 - D. Autorefractometry
 - E. Optical coherence tomography
 - F. Ophthalmoscopy
 - G. Gonioscopy
 8. What objective signs are typical of the developed glaucoma?
 - A. Paracentral scotomas
 - B. Concentric narrowing of the visual field margins
 - C. Nasal narrowing of the visual fields more than 10 degrees
 - D. Nasal narrowing of the visual fields less than 10 degrees
 - E. Arcuate-shaped superior scotoma
 9. Give an account of the risk factors for primary open-angle glaucoma:
 - A. Asian
 - B. Heredity
 - C. Diabetes mellitus
 - D. Hyperopia
 - E. Black race
 - F. Astigmatism
 - G. Arterial hypotonia
 10. Choose the antiglaucomatous drugs which inhibit the aqueous humor production:
 - A. Myotics
 - B. Carbonic anhydrase inhibitors
 - C. Prostaglandins
 - D. Adrenergic inhibitors
 - E. Hyperosmotic agents
 11. What operation should be performed for the uncompensated absolute stage of glaucoma?
 - A. Deep nonpenetrating sclerectomy
 - B. Deep penetrating sclerectomy
 - C. Laser trabeculoplasty
 - D. Diode transscleral cyclocoagulation
 12. What symptoms and signs are included in the clinical picture of acute attack of angle-closed glaucoma?
 - A. Nausea and vomiting
 - B. Dull ocular pain
 - C. Foreign body sensation
 - D. Ocular pain with trigeminal distribution
 - E. Colored halos around a source of light
 - F. Tearing, photophobia
 - G. Blurred vision
 13. What ocular changes may be found during biomicroscopy in acute attack of angle-closed glaucoma?
 - A. Deepening of the anterior chamber
 - B. Keratic precipitates
 - C. Dilated pupil
 - D. Narrow pupil
 - E. Shallowing of the anterior chamber

- F. Edematous cornea
14. Choose the main components of the emergence treatment of angle-closed glaucoma attack:
- Myotics
 - Mydriatics
 - β – blockers
 - Prostaglandins
 - Hyperosmotic agents
 - Carbonic anhydrase inhibitors
15. Secondary glaucoma may be divided into...
- Neovascular
 - Dystrophic
 - Complicated
 - Simple
 - Steroidal
16. Secondary cataract arises from...
- Diabetes mellitus
 - Glaucoma
 - Operation for cataract
 - High degree of myopia
 - Retinal dystrophy
17. Immature stage of cortical cataract is characterized by follow symptoms:
- Visual acuity is more than 0.1
 - The lens is totally opaque
 - The pupillary zone is milky-white
 - Subtotal opacities in the lens cortex
 - The pupil is grayish-white
18. What are the main clinical features of nuclear acquired cataract?
- False myopia
 - It never becomes hypermature
 - Pigment deposition inside the lens
 - The lens is pearly-white in color
 - Transient hyperopia
19. Conservative treatment of cataract may be useful...
- only in immature stage of cataract
 - in incipient and immature stages of cataract
 - in all stages of cataract
 - only in initial stage of the lens opacification
20. Mark the advanced technologies of cataract surgery:
- Ultrasound phacoemulsification
 - Cataract extraction
 - Laser cataract surgery
 - Ultraviolet phacoemulsification
 - Reclination
21. The objective signs of aphakia are presented by...
- myopic refraction
 - iridodonesis
 - iridodialysis
 - deep anterior chamber
 - the absence of the red reflex from the fundus
 - hyperopic refraction
22. The forms of aphakia correction include:
- LASIK
 - Convex spectacles
 - Implantation of IOL
 - Concave contact lenses
 - Concave spectacles
 - Convex contact lenses

4.2 Clinical cases for the assessment of competencies: GPC- 4, PC-1, PC-2, PC-3, PC-4, PC-5, PC-6, PC-7, PC-22

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: UK-1, GPC- 4, PC-4, PC-5, PC-6

1. What are the eye refractive errors?
2. What are the reasons for myopia development
3. When does the main focus lie in myopic eye?
4. What are the main types of optical lenses
5. Where does the far point lie in hyperopia?
6. What are the main components of the eye optical system?
7. What are the main types of the eye clinical refraction?
8. Mark the possible complications of myopic disease:
9. What is the patient's visual acuity, if he can read the first line of Golovina chart at the distance of 3 meters?
10. The accommodation apparatus of eye consists of:
11. When does the main focus lie in the myopic eye?
12. What are the main types of the corrective lenses?
13. Amplitude of accommodation and Range of accommodation.
14. What is the main cause of presbyopia?

15. Astigmatism, classification
16. What does Amblyopia mean
17. Refractive state, 2 ways of concept
18. Classification of myopia
19. What is normal correlation between the diameter of the retinal arteries and veins?
20. What method demonstrates the degree of the eye anterior projection from the orbit?
21. Mark possible variants of ocular injection (hyperemia):
22. What method can help us to investigate the transparent structures of the eye?
23. what are the possible degrees of color vision impairment
24. what are the methods for determining intraocular pressure?

4.4. Essay topics for the assessment of competencies: GPC- 4, PC-1, PC-2, PC-3, PC-4, PC-5, PC-6, PC-7, PC-22

1. Retinal changes in hypertensive disease
2. Diabetic retinopathy
3. Central retinal vein occlusion
4. Acute circulatory disorders of retinal vessels
5. Changes in retinal vessels in atherosclerosis
6. Acute obstruction of the central retinal vein and its branches
7. basic principles and methods of treatment of diabetic retinopathy
8. Methods of retinal examination
9. Mechanisms of development of DR

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.)

<https://sdo.pimunn.net/course/view.php?id=1349>

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. 	UK-1,GPC- 4, PC-4, PC-5, PC-6
<ol style="list-style-type: none"> 17. The optical system of the eye and its components. 18. The kinds of the clinical refraction of the eye and their characteristics. 19. Myopia. Clinical picture. Complications. Forms of correction and treatment. 20. Hyperopia. Symptoms. Forms of correction and treatment. 	UK-1,GPC- 4, PC-4, PC-5, PC-6

<p>21. Types of corrective lenses. Correction of myopia and hyperopia 22. Correction of Ametropias. 23. Presbyopia and its correction. 24. Accommodation of the eye. Far and near visual point. 25. Accommodation of the eye and its disturbances. 26. Astigmatism, its classification and correction.</p>	
<p>27. Methods of the eye investigation. 28. Physiology of the aqueous humor circulation. Intraocular pressure and the methods of its measurement. 29. Investigation of the central vision: visual acuity, visual angle. 30. Color vision and its disturbances. Color vision testing. 31. Visual fields, their disturbances. Visual field testing.</p>	UK-1, GPC- 4, PC-4, PC-5, PC-6
<p>32. Blepharitis. Etiology. Symptoms. Treatment. 33. Inflammatory diseases of the eyelids. 34. Acute dacryoadenitis: etiology, clinical course, and treatment. 35. Chronic dacryocystitis. Symptoms. Treatment. 36. Acute bacterial conjunctivitis. Symptoms. Treatment. 37. Gonorrheal conjunctivitis. Symptoms. Prophylaxis and treatment. 38. Viral Conjunctivitis. Clinical picture and treatment. 39. Bacterial corneal ulcer. Etiology. Symptoms. Treatment. 40. Bacterial keratitis. Pathogenesis. General symptoms. Treatment. 41. Herpes Simplex keratitis. Classification. Clinical forms and treatment. 42. Corneal pathology outcomes and their surgical treatment. 43. Acute anterior uveitis (iritidocyclitis). 44. Posterior uveitis (choroiditis).</p>	GPC- 4, PC-1, PC-2, PC-3, PC-4, PC-5, PC-6, PC-7, PC-22
<p>45. Cataract. Classification. Symptoms. Treatment. 46. Cataract surgery. 47. Aphakia and methods of its correction.</p>	GPC- 4, PC-5, PC-6, PC-7, PC-22
<p>48. Classification of glaucoma. Diagnostic tests. 49. Primary open-angle glaucoma: pathogenesis, clinical course, diagnostic tests. Medical treatment. 50. Primary Angle-closure glaucoma. Pathogenesis. Symptoms. Treatment 51. Acute attack of angle-closure glaucoma: symptoms, emergency treatment. 52. Secondary glaucoma, classification. 53. Differential diagnosis of iridocyclitis and acute attack of glaucoma.</p>	GPC- 4, PC-1, PC-2, PC-3, PC-4, PC-5, PC-6, PC-7, PC-22
<p>54. Penetrating injuries of the eye. Cornea Erosion. 55. Full-thickness lacerations of the eye. Signs. The first aid. 56. Intraocular foreign bodies: diagnostic tests, methods of their removal from the eye. 57. Sympathetic ophthalmia. 58. Chemical injuries. The first aid. 59. Blunt trauma.</p>	GPC- 4, PC-1, PC-2, PC-3, PC-4, PC-5, PC-6, PC-7, PC-22
<p>60. Intraocular tumors. 61. Retinal vascular diseases: central retinal vein and artery obstruction. 62. Retinal changes in hypertensive disease: classification. 63. Diabetic retinopathy: classification, methods of treatment.</p>	GPC- 4, PC-1, PC-2, PC-3, PC-4, PC-5, PC-6, PC-7, PC-22

5.1.3. Clinical cases for the credit in the discipline Ophthalmology

Clinical case	Competence code (according to the WPD)
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<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. Assume a diagnosis. What first aid measures should be provided.</p>	<p>GPC- 4, PC-1, PC-2, PC-3, PC-4, PC-5, PC-6, PC-7, PC-22</p>
<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. Assume a diagnosis. What first aid measures should be provided.</p>	<p>GPC- 4, PC-1, PC-2, PC-3, PC-4, PC-5, PC-6, PC-7, PC-22</p>
<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. Corneal sensitivity is preserved. Suggest a diagnosis What medical measures are necessary in this case? What are the complications are possible in this case?</p>	<p>GPC- 4, PC-1, PC-2, PC-3, PC-4, PC-5, PC-6, PC-7, PC-22</p>
<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. Formulate a diagnosis. What first aid measures should be performed by You in this case. Plan tactics for further treatment.</p>	<p>GPC- 4, PC-1, PC-2, PC-3, PC-4, PC-5, PC-6, PC-7, PC-22</p>
<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. What is the presumed diagnosis? Specify first aid measures</p>	<p>GPC- 4, PC-1, PC-2, PC-3, PC-4, PC-5, PC-6, PC-7, PC-22</p>
<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 What is the presumed diagnosis? Specify first aid measures.</p>	<p>GPC- 4, PC-1, PC-2, PC-3, PC-4, PC-5, PC-6, PC-7, PC-22</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- 4, PC-1, PC-2, PC-3, PC-4, PC-5, PC-6, PC-7, PC-22</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- 4, PC-1, PC-2, PC-3, PC-4, PC-5, PC-6, PC-7, PC-22</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- 4, PC-1, PC-2, PC-3, PC-4, PC-5, PC-6, PC-7, PC-22</p>
<p>9. 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- 4, PC-1, PC-2, PC-3, PC-4, PC-5, PC-6, PC-7, PC-22</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- 4, PC-1, PC-2, PC-3, PC-4, PC-5, PC-6, PC-7, PC-22</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</p>	<p>GPC- 4, PC-1, PC-2, PC-3, PC-4, PC-5, PC-6, PC-7, PC-</p>

<p>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>	22
<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>	GPC- 4, PC-1, PC-2, PC-3, PC-4, PC-5, PC-6, PC-7, PC-22
<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>	GPC- 4, PC-1, PC-2, PC-3, PC-4, PC-5, PC-6, PC-7, PC-22
<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>	GPC- 4, PC-1, PC-2, PC-3, PC-4, PC-5, PC-6, PC-7, PC-22
<p>16. A 6-year-old boy was brought to an ophthalmologist with complaints of lacrimation, a feeling of a foreign body behind the eyelids, redness of the right eye. The symptoms appeared against the background of acute respiratory disease. On examination, the eyelids of the right eye are swollen, pronounced hyperemia of the palpebral conjunctiva, conjunctival injection, a</p>	GPC- 4, PC-1, PC-2, PC-3, PC-4, PC-5, PC-6, PC-7, PC-22

lot of small follicles and chiseled hemorrhages in the lower transitional fold. A small amount of mucosal discharge. 1.Suggest a diagnosis 2. What medical measures are necessary in this case?	
17. A patient came to you with complaints of redness, burning, copious purulent discharge from the left eye. The examination revealed pronounced hyperemia and swelling of the bulbar conjunctiva and conjunctiva of the eyelids, purulent discharge in the lower conjunctival arch. Make a diagnosis, prescribe treatment.	GPC- 4, PC-1, PC-2, PC-3, PC-4, PC-5, PC-6, PC-7, PC-22
18.A woman, 84 years old, who complains of pain in her left eye, was brought from a distant village. On examination, irritation phenomena of both eyes are noted: photophobia, lacrimation, blepharospasm, however, hyperemia is expressed only in the left eye. Redness is located around the limb, in the direction of the arches it decreases. Corneal sensitivity is preserved. Against the background of diffuse opacity of the entire surface of the cornea, an intense yellowish spot is noticeable in its optical center. What is the preliminary diagnosis of your patient? 1. keratoiridocyclitis 2. bacterial keratitis 3. viral keratitis 4. cornea nebula	GPC- 4, PC-1, PC-2, PC-3, PC-4, PC-5, PC-6, PC-7, PC-22
19. A thirty-two-year-old man suddenly discovered a sharp deterioration in the vision of his left eye a week ago, following a fall from a bicycle. before that, he was physically healthy, although he wore glasses to correct distant vision. What refraction was most likely in your patient at the time of the disease? What pathology can be assumed in this case: 1. separation of the optic nerve 2. vitreous hemorrhage (hemophthalmos) 3. retinal detachment 4. acute circulatory disorder in the retinal vessels	GPC- 4, PC-1, PC-2, PC-3, PC-4, PC-5, PC-6, PC-7, PC-22

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
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** - 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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Date "_____" _____ 202__