

1. Layers of the eyeball. Structure, functions.
2. Apparatus of eye movement. Functions and innervation.
3. The fibrous coat of the eyeball. Function, structure and innervation.
4. The vascular layer of the eyeball. Structure, parts, function and blood supply.
5. Retina. Structure, blood supply and function.
6. Optic nerve, visual pathway and visual centres.
7. The transparent structures of the eyeball – the cornea, the lens and the vitreous body. Structure and function.
8. Blood supply of the eye.
9. The orbit. Structure. Fissures of the orbit, nerves and blood vessels.
10. Lacrimal organs and tracts.
11. Intraocular muscles. Function and innervation.
12. Chambers of the eyeball. Drainage system of the eye, structure of the iridocorneal angle.
13. Conjunctiva. Structure.
14. The lens-structure, topography and function.
15. The eyelids – structure, function, innervation and blood supply.
16. Visual acuity, its examination.
17. Color vision. Color vision testing.
18. Peripheral vision. Its outer aspects. Methods of examination. Pathology of visual fields.
19. Binocular vision. Methods of examination.
20. Accommodation. Its mechanism. Pathologic and physiologic alterations (spasm and palsy).
21. Refraction. Its clinical types. Subjective and objective methods of examination of refraction. Myopia - Its development, types, degrees, clinic, correction and complications. Hyperopia - Diagnostics, degrees and correction.
22. Astigmatism. Types and correction.
23. Anisometropia. Their correction.
24. Red eye syndrome. (Lid margin diseases-blepharitis, hordeolum, parasitic; Conjunctivitis, subconjunctival hemorrhage, pterygium, dry eye syndrome, keratitis, diseases of the sclera, acute glaucoma attack, iridocyclitis). Differential diagnosis, clinic, treatment and prevention.
25. Dacryocystitis (acute, chronic and infants) Phlegmona of the lacrimal sac.
26. Keratoconus. Diagnosis, clinic and treatment.
27. Cataract. Clinic, types and diagnosis.
28. Diseases of the vitreous body (floaters, hemorrhages, cysticercus) clinic and treatment.
29. Age-related cataract, stages clinic and treatment.
30. Congenital cataracts. Clinic and treatment.
31. Acquired cataracts. Clinic and treatment.

32. Complicated cataracts (glaucomatic, diabetic, heterochromic). Clinic and treatment.
33. Circulation of intraocular fluid. Intraocular pressure. The angle of anterior chamber, method of examination. Hypertension and hypotension.
34. Glaucoma. Types of glaucoma, diagnosis and treatment.
35. Congenital glaucoma. The cardinal signs. Treatment.
36. Dynamic classification of primary glaucoma.
37. Secondary glaucoma. Diagnosis and treatment.
38. Diseases of the retina. Ophthalmic picture alterations associated with hypertension.
39. Ophthalmic picture alterations associated with common diseases.
40. Destroy of retinal blood circulation (emboli of central retinal artery, spasm).
41. Thrombosis of central vein. Clinic and treatment.
42. Diabetic retinopathy. Clinic, stages and treatment.
43. Chronic visual loss. Causes, differential diagnosis and tactics.
44. Acute visual loss. Causes, clinic, diagnosis and treatment.
45. Retinal dystrophy (senile, retinitis pigmentosa). Ophthalmoscopic picture and treatment.
46. Retinal detachment, causes, ophthalmoscopic picture and treatment.
47. Retinal tumors (retinoblastoma). Ophthalmoscopic picture, treatment and prognosis.
48. Retinopathy of prematurity. Diagnosis and treatment.
49. Inflammatory diseases of the optic nerve (neuritis, retrobulbar neuritis) diagnosis and treatment.
50. Edematous optic nerve. Diagnosis and treatment. Atrophy of the optic nerve.
51. Strabismus, primary and secondary deviation. Examination of the deviation angle. Treatment.
52. Paralytic strabismus. Diagnosis and treatment.
53. Amblyopia. Causes.
54. Syndrome of superior orbit fissure.
55. Traumas of the eye (erosion, hemorrhage, traumatic cataract, retinal holes and retinal detachment). Diagnosis and treatment.
56. Penetrate injury of the eye. Diagnostic, treatment, complications. Diagnostic and localization methods of intraocular foreign body.
57. The complications of the penetrate injury (endophthalmitis, panophthalmitis), diagnostic and treatment.
58. Eye burning (thermal, chemical, radiation), primary care, treatment and prognosis.
59. Behcet's disease, Stevens-Johnson syndrome, Rieger syndrome, Marcus Gunn syndrome, Marin-Amat syndrome, Crouzon syndrome, Franceschetti syndrome, Marfan syndrome, Sjogren's syndrome, Mikulicz syndrome, Charlin's syndrome.