MD · MS · DNB OPHTHALMOLOGY

MD · MS · DNB OPHTHALMOLOGY

Theory Question Bank

A subspecialty-wise compilation

667 questions · 15 subspecialties · 302 high-yield

CONTENTS

- Basic Sciences
- Optics, Refraction & Low Vision
- Instruments & Imaging
- Cornea & Refractive Surgery
- Lens & Cataract
- Glaucoma
- Uvea & Ocular Inflammation
- Retina & Vitreous
- Ocular Trauma
- Neuro-ophthalmology
- Strabismus & Paediatrics
- Oculoplasty, Orbit & Lacrimal
- Ocular Oncology
- Systemic Disease & General
- Community Ophthalmology

2026 Edition

How to use this book

Questions are arranged by subspecialty and grouped under topic headings. Each carries a reference code (e.g. **GL 12**) for quick cross-reference during revision.

HIGH-YIELD	Frequently asked — prepare these first.
DNB / UNIV	Asked in DNB and other university MD/MS examinations.
No tag	Standard topic — suitable for long answers and short notes.

Structuring a 10-mark answer

1	**Introduction**	Definition / one-line overview. Add epidemiology if relevant (Indian figures score).
2	**Applied basics**	Anatomy, physiology or pathogenesis — always with a labelled diagram.
3	**Classification**	Use the current, named classification (e.g. ICROP3, IC3D, SUN, BETTS).
4	**Clinical features**	Symptoms, signs, a table for differential diagnosis.
5	**Investigations**	Rank by utility; mention what each adds to management.
6	**Management**	Flow chart: medical → laser → surgical; include landmark trials.
7	**Recent advances**	Two or three genuinely current points — this is where marks separate.
8	**Conclusion**	One line on prognosis or public-health relevance.

Write with headings and underline key words; include at least one labelled diagram or flow chart; cite named classifications, landmark trials and current national programme data; budget time equally across questions.

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Bar shows the number of questions per section; the darker portion marks high-yield questions. Total 667 questions, 302 high-yield.

SECTION 01 · BS

Basic Sciences

01

Embryology · Anatomy · Physiology · Pharmacology · Immunology · Genetics

56 questions · 16 high-yield · 25 DNB / university

The foundation for every 'applied' question. Examiners repeatedly ask development, colobomas, barriers, pigment epithelium and genetics — learn them with diagrams.

Embryology & Development

BS 1	Describe the development of the eye. Discuss the retinal and other ocular disorders related to anomalies of development. HIGH-YIELD
BS 2	Iridofundal coloboma — embryology (failure of closure of the optic fissure), clinical types, systemic associations (CHARGE, microphthalmos), complications such as retinal detachment, and management. Coloboma of the uveal tract. HIGH-YIELD
BS 3	Congenital anomalies of the iris — aniridia, coloboma, persistent pupillary membrane, Peters anomaly: embryology and management. DNB / UNIV
BS 4	Describe the anterior segment of the newborn and its clinical significance; fundus changes in the newborn.
BS 5	Persistent pupillary membrane.
BS 6	Microphthalmos and nanophthalmos. DNB / UNIV
BS 7	Congenital anomalies of the optic disc — morning glory anomaly, optic pit and disc coloboma. DNB / UNIV
BS 8	Congenital anomalies of the eyelids and cornea — cryptophthalmos, megalocornea and others. DNB / UNIV
BS 9	Describe the development, anatomy, composition, metabolism and attachments of the vitreous, and the methods of its clinical examination. HIGH-YIELD
BS 10	Describe the genetic control of ocular development (PAX6, SOX2, OTX2) and its relevance to congenital anomalies.

Anatomy & Physiology

BS 11	Describe the structure and function of the pigmented epithelium throughout the eye. Discuss the retinal pigment epithelium and its functional significance. HIGH-YIELD
BS 12	Describe the blood-aqueous and blood-retinal barriers. Discuss their role in health and disease, with special reference to drugs acting on them. HIGH-YIELD
BS 13	Describe the anatomy and physiology of rods and cones (including electron microscopy) and the photochemistry of vision. What factors influence dark and light adaptation? HIGH-YIELD

BS 14	Microanatomy of the retina and the macula, with diagrams. DNB / UNIV
BS 15	Anterior and posterior ciliary circulation, with a diagram; ocular blood flow. DNB / UNIV
BS 16	Anatomy of the iris and its function. DNB / UNIV
BS 17	Anatomy of the ciliary body; ciliary ganglion. DNB / UNIV
BS 18	Choroid, choriocapillaris and Bruch's membrane — anatomy and functions. DNB / UNIV
BS 19	Autonomic innervation of the eye; drugs acting on the pupil. DNB / UNIV
BS 20	Supports of the eyeball and Tenon's capsule. DNB / UNIV
BS 21	Ageing changes in the anterior and posterior segments of the eye. DNB / UNIV
BS 22	Macular pigments in health and disease.
BS 23	Discuss visual perception and its evaluation.
BS 24	Protective mechanisms of the eye. DNB / UNIV
BS 25	Describe the circadian and non-image-forming visual system (intrinsically photosensitive retinal ganglion cells) and its clinical relevance.

Ocular Pharmacology & Therapeutics

BS 26	Classify immunosuppressants and immunomodulators (including cyclosporine). Discuss their role in various ophthalmic disorders. HIGH-YIELD
BS 27	Drug-delivery implants and intravitreal/periocular drug delivery — types, indications and limitations. HIGH-YIELD
BS 28	Factors affecting corneal drug penetration — corneal barriers, partition coefficient and formulation. DNB / UNIV
BS 29	Preservatives in topical ophthalmic preparations and their ocular side effects. DNB / UNIV
BS 30	Corticosteroids in ophthalmology — classification, indications and complications. HIGH-YIELD
BS 31	Non-steroidal anti-inflammatory drugs in ophthalmology. DNB / UNIV
BS 32	Ophthalmic antibiotics — classes, fluoroquinolones, intravitreal doses and retinal toxicity. DNB / UNIV
BS 33	Cycloplegics and mydriatics (atropine and others) — pharmacology, indications and side effects. DNB / UNIV
BS 34	Role of antioxidants in the eye and in ophthalmology.
BS 35	Collagen shields — principles and uses.
BS 36	Pulse steroid therapy in ophthalmology — indications (optic neuritis, traumatic optic neuropathy, early graft rejection, VKH, AION) and protocol.
BS 37	Antimetabolites in ophthalmology — mitomycin-C and 5-fluorouracil: uses and side effects. HIGH-YIELD

BS 38	Botulinum toxin in ophthalmology — mechanism, preparation, indications, contraindications and adverse effects. HIGH-YIELD
BS 39	Tissue adhesives in ophthalmology — cyanoacrylate and fibrin glue. DNB / UNIV
BS 40	Discuss ocular phototoxicity and ocular toxicity of systemic drugs (antitubercular drugs, hydroxychloroquine, sildenafil and others). HIGH-YIELD
BS 41	Biologics in ophthalmology — anti-TNF agents, rituximab, tocilizumab: mechanisms, indications and monitoring.
BS 42	Principles of ocular pharmacokinetics — routes of drug delivery, sustained-release systems and nanotechnology-based drug delivery.

Immunology, Pathology & Microbiology

BS 43	Pro-inflammatory cytokines and their role in ocular inflammation. DNB / UNIV
BS 44	Hypersensitivity reactions in the eye — examples, features and management. HIGH-YIELD
BS 45	Ocular immune privilege and anterior chamber-associated immune deviation (ACAID). DNB / UNIV
BS 46	HLA associations in eye disease; immunoglobulins and lymphocytes in the eye. DNB / UNIV
BS 47	Apoptosis and its role in ocular disease. DNB / UNIV
BS 48	Ocular microbiology laboratory — stains, culture media, PCR, ELISA and conjunctival impression cytology. HIGH-YIELD
BS 49	Histopathology of common ocular lesions — retinoblastoma, uveal melanoma, basal cell and sebaceous carcinoma, pterygium, sympathetic ophthalmitis. DNB / UNIV

Genetics & Molecular Biology

BS 50	Discuss the importance of genetics (molecular genetics) in ophthalmology, with a critical note on its role in important blinding disorders. HIGH-YIELD
BS 51	Analyse the role of genetics in retinal disorders.
BS 52	Mitochondrial inheritance and chromosomal disorders with ocular features. DNB / UNIV
BS 53	Gene therapy in ophthalmology — principles, vectors, voretigene neparvovec and the current pipeline.
BS 54	Genetic counselling in inherited eye disease — modes of inheritance, genetic testing and ethical issues.

Stem Cells & Regenerative Medicine

BS 55	Role of stem cells in ophthalmology — limbal, retinal and other applications. HIGH-YIELD
BS 56	Induced pluripotent stem cells and RPE transplantation — current status and challenges.

SECTION 02 · OP

Optics, Refraction & Low Vision

02

Physiological optics · Refraction · Accommodation · Colour & contrast · Low vision

37 questions · 16 high-yield · 13 DNB / university

Optics questions reward clean ray diagrams and formulae. Accommodation, colour vision, Sturm's conoid, prisms and LVA recur across boards.

Physiological Optics & Aberrations

OP 1	Schematic and reduced eye (Gullstrand, Donders) — cardinal points, with diagrams; the aphakic schematic eye. HIGH-YIELD
OP 2	Pinhole and stenopaic slit; angle kappa; Purkinje-Sanson images; Stiles-Crawford effect and Purkinje shift. DNB / UNIV
OP 3	Sturm's conoid — definition, interval and clinical applications. DNB / UNIV
OP 4	Optical aberrations of the eye — spherical, chromatic and higher-order; spectacle-induced aberrations and their minimisation. HIGH-YIELD
OP 5	Uniocular diplopia — causes and evaluation.
OP 6	Prisms — prismatic effect (Prentice rule), Fresnel prisms, and their clinical and therapeutic uses. HIGH-YIELD
OP 7	Wavefront analysis and higher-order aberrations — principles and clinical applications.

Refraction & Refractive Errors

OP 8	Discuss streak retinoscopy and the subjective verification of refraction. Principles and pitfalls of autorefraction. HIGH-YIELD
OP 9	Jackson cross cylinder — uses in refraction. HIGH-YIELD
OP 10	Duochrome test. DNB / UNIV
OP 11	Compound astigmatism.
OP 12	Types of astigmatism and the basic principles applied in its management and correction. HIGH-YIELD
OP 13	Hypermetropia — classification (manifest, latent), uncovering latent hypermetropia, and spectacle prescription. DNB / UNIV
OP 14	Anisometropia — definition, significance and management.
OP 15	Aniseikonia. DNB / UNIV

OP 16	Aphakia — problems of aphakic vision (jack-in-the-box phenomenon) and modalities of correction. DNB / UNIV
OP 17	Selection of cycloplegics and mydriatics in refraction.
OP 18	Visual acuity — definition, ETDRS chart and limitations of Snellen; age-appropriate vision tests from birth to school age. HIGH-YIELD
OP 19	Evaluation of visual function in opaque media; macular function tests. DNB / UNIV
OP 20	Discuss the changing concepts in the management of myopia (including pathological high myopia), with a clinical appraisal of the merits and demerits of the methods available. HIGH-YIELD
OP 21	Spectacle lenses — bifocal designs, progressive-power and toric lenses; centration, decentration and back-vertex distance. HIGH-YIELD
OP 22	Computer vision syndrome; asthenopia and eye strain. DNB / UNIV
OP 23	Space myopia, night myopia and pseudomyopia. DNB / UNIV
OP 24	Myopia control in children — low-dose atropine, myopia-control spectacle lenses, orthokeratology and outdoor time: evidence and practice.

Accommodation & Presbyopia

OP 25	Discuss the mechanism (and theories) of accommodation, lens changes during accommodation, range and amplitude, and methods of assessment of its anomalies. HIGH-YIELD
OP 26	Presbyopia — assessment and management, including recent advances without spectacles. HIGH-YIELD
OP 27	Spasm of accommodation; anomalies of convergence (insufficiency and excess). DNB / UNIV
OP 28	Pharmacological and surgical correction of presbyopia — presbyopia-correcting drops, corneal inlays, monovision and EDOF/multifocal IOLs.

Colour Vision & Contrast Sensitivity

OP 29	Discuss the theories and recent concepts of the psychophysiology of colour vision, types of colour vision deficiency, and compare the tests available, including colour visual field examination. HIGH-YIELD
OP 30	Role of contrast sensitivity in ophthalmology — principles, methods of testing and clinical applications. HIGH-YIELD

Contact Lenses

OP 31	Optics of contact lenses; selection, indications and contraindications. HIGH-YIELD
OP 32	Types of contact lenses — RGP, soft, extended-wear, disposable, therapeutic/bandage and cosmetic lenses; safe contact-lens practice. HIGH-YIELD
OP 33	Contact lenses in keratoconus and irregular astigmatism; orthokeratology. DNB / UNIV
OP 34	Complications of contact-lens wear. DNB / UNIV

Low Vision & Rehabilitation

OP 35	What are low vision aids? Discuss their optical principles, indications and clinical applicability. HIGH-YIELD
OP 36	WHO definitions of low vision; evaluation of a person with low vision and goals of visual rehabilitation. DNB / UNIV
OP 37	Electronic and smartphone-based low vision devices and assistive technology.

SECTION 03 · IN

Instruments, Imaging & Investigations

03

Principles · Optics · Interpretation · Care of instruments

42 questions · 23 high-yield · 10 DNB / university

A favourite of RPC examiners. For every instrument, learn: principle, optics (diagram), procedure, interpretation, advantages, limitations and recent advances.

Ophthalmoscopy & Slit Lamp

IN 1	Optics of the direct and binocular indirect ophthalmoscope — magnification, field and comparison. Detail the selection criteria for your own ophthalmoscopes, their everyday applications and the care needed for their maintenance. HIGH-YIELD
IN 2	Optics and magnification of +90D/+78D and 20D lenses; slit-lamp lenses for the central retina. DNB / UNIV
IN 3	Slit-lamp biomicroscope — optics, illumination techniques (including specular reflection) and accessory lenses. HIGH-YIELD
IN 4	Prisms in ophthalmic instruments — slit lamp, indirect ophthalmoscope, operating microscope and applanation tonometer.
IN 5	Lensometer (focimeter) — principle, including Badal's principle. HIGH-YIELD
IN 6	Amsler grid. DNB / UNIV
IN 7	Three-mirror lens and other diagnostic contact lenses. DNB / UNIV
IN 8	Ophthalmodynamometry. DNB / UNIV

Operating Microscope & Viewing Systems

IN 9	Discuss, with labelled diagrams, the optical principles of the ophthalmic operating microscope and its technological advances. HIGH-YIELD
IN 10	Wide-angle viewing systems in vitrectomy — optics, areas visualised and applications. HIGH-YIELD
IN 11	Three-dimensional heads-up surgery and intraoperative OCT.

Corneal Evaluation

IN 12	Critically evaluate the principles, advantages and limitations of various keratometers. Recent advances in examining and documenting the cornea (specular microscopy, confocal microscopy, Pentacam, Orbscan, AS-OCT, wavefront). HIGH-YIELD
IN 13	Describe the optical principles, documentation and applications of corneal topography and tomography; Scheimpflug principle. HIGH-YIELD
IN 14	Pachymetry — methods, and the role of corneal thickness in glaucoma. HIGH-YIELD
IN 15	Specular microscopy — optics and interpretation. DNB / UNIV
IN 16	Ocular Response Analyzer and corneal biomechanics.

Tonometry

IN 17	Goldmann applanation tonometry — principle, technique, advantages and sources of error. HIGH-YIELD
IN 18	Types of tonometers — indentation, non-contact and rebound: merits and demerits. DNB / UNIV
IN 19	Dynamic contour tonometry and other newer tonometers.

Posterior Segment & Glaucoma Imaging

IN 20	Discuss the principles, evolution and applications of OCT in ophthalmology (cornea, retina, glaucoma) as compared to other modalities. HIGH-YIELD
IN 21	Fundus fluorescein angiography — principles, technique, causes of hyper- and hypofluorescence, complications and management of dye reactions; oral fluorescein angiography. HIGH-YIELD
IN 22	Indocyanine green angiography — principles and applications. HIGH-YIELD
IN 23	Role of OCT and FFA in retinal disorders. HIGH-YIELD
IN 24	Advances in diagnostic ophthalmic ultrasonography (A-scan, B-scan, orbital echography). HIGH-YIELD
IN 25	Ultrasound biomicroscopy — principles and its role today; advantages and disadvantages compared with AS-OCT. HIGH-YIELD
IN 26	Anterior segment OCT — principles and applications.
IN 27	IOL Master and optical biometry; A-scan biometry. HIGH-YIELD
IN 28	Retinal nerve fibre layer imaging — GDx, HRT (confocal scanning laser ophthalmoscopy) and OCT.
IN 29	CT and MRI in ophthalmology; ocular colour Doppler. HIGH-YIELD
IN 30	OCT angiography — principles, artefacts and clinical applications.
IN 31	Ultra-widefield imaging and autofluorescence in retinal disease.
IN 32	Artificial intelligence in ophthalmic imaging — screening for diabetic retinopathy, glaucoma and ROP.

Electrophysiology & Psychophysics

IN 33	Electroretinogram — types, technique, interpretation and clinical uses. HIGH-YIELD
IN 34	Multifocal ERG — principle and applications. HIGH-YIELD
IN 35	Detail the techniques of recording VEP/VER, their types, role in modern practice and limitations. HIGH-YIELD
IN 36	Electro-oculogram — principle and clinical application. DNB / UNIV
IN 37	Automated perimetry — indications, utility and analysis. HIGH-YIELD
IN 38	Short-wavelength automated perimetry, frequency-doubling and static perimetry; Bjerrum screen. DNB / UNIV

Lasers & Energy in Ophthalmology

IN 39	Lasers in ophthalmology — physics, tissue effects and applications (argon, Nd:YAG, diode, excimer, PASCAL, micropulse, transpupillary thermotherapy). HIGH-YIELD
IN 40	Femtosecond laser — principles and applications in ophthalmology. DNB / UNIV
IN 41	Cryotherapy in ophthalmology — principles and uses. DNB / UNIV

Dyes in Ophthalmology

IN 42	Various dyes in ophthalmology, including intraocular and vital dyes (fluorescein, ICG, trypan blue, brilliant blue, rose bengal, lissamine green). HIGH-YIELD

SECTION 04 · CO

Cornea, Ocular Surface & Refractive Surgery

04

Conjunctiva · Keratitis · Dystrophies · Keratoplasty · Eye banking · Refractive surgery

90 questions · 38 high-yield · 32 DNB / university

Large, high-scoring section. Infective keratitis, dry eye, chemical injury, stem cells, keratoconus and keratoplasty are perennial favourites across boards.

Applied Anatomy & Physiology

CO 1	Discuss in detail the anatomy of the corneoscleral (surgical) limbus and its importance. HIGH-YIELD
CO 2	Factors involved in maintaining corneal transparency. HIGH-YIELD
CO 3	Endothelial pump and corneal endothelium — physiology, and changing concepts in the management of endothelial dysfunction. HIGH-YIELD
CO 4	Describe tear formation and the precorneal tear film (with diagram and neuronal reflex arc). Discuss tear-film dynamics in disease, with medications and in iatrogenic situations, and their evaluation. HIGH-YIELD
CO 5	Corneal anatomy and its implications for refractive surgery. DNB / UNIV
CO 6	Corneal metabolism and wound healing. DNB / UNIV
CO 7	Corneal oedema and decompensation — causes and management. DNB / UNIV
CO 8	Ocular surface — concept and components.
CO 9	Vital stains in corneal evaluation.
CO 10	Method of clinical examination of the cornea. DNB / UNIV

Ocular Surface Disease & Dry Eye

CO 11	Discuss the aetiology, classification, investigations (Schirmer and others) and treatment of dry eye, with recent trends in diagnosis and management. HIGH-YIELD
CO 12	Classification of ocular lubricants and tear substitutes; role of preservatives. DNB / UNIV
CO 13	Sjögren syndrome — features, investigations and management. DNB / UNIV
CO 14	Ocular surface disorders and their management, including severe ocular surface disease (unilateral and bilateral). HIGH-YIELD
CO 15	Stevens-Johnson syndrome and ocular cicatricial pemphigoid — acute and chronic ocular management. HIGH-YIELD

CO 16	What are limbal stem cells? Clinical and applied significance; classification and management of limbal stem cell deficiency. HIGH-YIELD
CO 17	Amniotic membrane grafting — techniques and applications in ocular disorders. HIGH-YIELD
CO 18	Xerophthalmia. HIGH-YIELD
CO 19	Exposure keratitis.
CO 20	Neuroparalytic (neurotrophic) keratitis.
CO 21	Persistent epithelial defects and recurrent corneal erosion — causes and management. DNB / UNIV
CO 22	Filamentary keratitis. DNB / UNIV
CO 23	Meibomian gland dysfunction — newer diagnostics and treatment (thermal pulsation, IPL).
CO 24	Simple limbal epithelial transplantation (SLET), CLET and Boston ocular surface prosthesis.
CO 25	Neurotrophic keratopathy — cenegermin and corneal neurotisation.

Conjunctiva

CO 26	Classification of conjunctivitis; discuss the intricacies in its diagnosis and best management. HIGH-YIELD
CO 27	Viral conjunctivitis and epidemic keratoconjunctivitis — features, management and sequelae. HIGH-YIELD
CO 28	Acute haemorrhagic conjunctivitis.
CO 29	Trachoma — WHO grading, laboratory diagnosis, complications and the SAFE strategy. DNB / UNIV
CO 30	Allergic conjunctivitis — classification; vernal and atopic keratoconjunctivitis: pathophysiology and treatment rationale. DNB / UNIV
CO 31	Ophthalmia neonatorum — causes and prophylaxis. DNB / UNIV
CO 32	Phlyctenular keratoconjunctivitis. DNB / UNIV
CO 33	Superior limbic keratoconjunctivitis; giant papillary conjunctivitis. DNB / UNIV
CO 34	Follicles vs papillae; membranous and pseudomembranous conjunctivitis. DNB / UNIV
CO 35	Pigmented conjunctival lesions. DNB / UNIV
CO 36	Pterygium — histopathology, indications and techniques of surgery (including PERFECT), and prevention of recurrence (recurrent pterygium); pseudopterygium. HIGH-YIELD
CO 37	Ocular surface squamous neoplasia and premalignant epibulbar lesions — aetiopathogenesis, histopathology and antimetabolite therapy; dermolipoma. HIGH-YIELD

Infective Keratitis

CO 38	Corneal ulcer — tabular comparison of bacterial, fungal and viral keratitis; laboratory diagnosis and management. HIGH-YIELD
CO 39	Discuss the clinical features, diagnosis and current concepts in the management of fungal keratitis (keratomycosis). HIGH-YIELD
CO 40	Management of the non-healing / non-responding corneal ulcer. HIGH-YIELD
CO 41	Perforated corneal ulcer and descemetocele — management. DNB / UNIV
CO 42	Acanthamoeba keratitis — features, laboratory diagnosis, prevention and management. HIGH-YIELD
CO 43	Viral keratitis, with special reference to herpes simplex (dendritic, disciform, stromal and recurrent) keratitis; Herpetic Eye Disease Study recommendations. HIGH-YIELD
CO 44	Herpes zoster ophthalmicus — clinical features and management. DNB / UNIV
CO 45	Interstitial keratitis; tubercular lesions of the cornea. DNB / UNIV
CO 46	Atypical keratitis — Nocardia and atypical mycobacteria; workup. DNB / UNIV
CO 47	Rosacea keratitis and other superficial keratitis. DNB / UNIV
CO 48	Antiviral agents in ophthalmology — classification, mechanism and side effects. HIGH-YIELD
CO 49	Antifungal drugs in ophthalmology — classification, mechanism and uses. HIGH-YIELD
CO 50	Role of steroids in keratitis.
CO 51	Corneal cross-linking (PACK-CXL) and newer adjuncts in infective keratitis.

Peripheral & Immune Keratitis

CO 52	Peripheral ulcerative keratitis and Mooren's ulcer — differential diagnosis, workup and surgical treatment of marginal corneal ulcer; keratitis in rheumatoid arthritis. HIGH-YIELD
CO 53	Peripheral corneal thinning disorders and peripheral degenerations (including Terrien) — management. HIGH-YIELD
CO 54	Corneal neovascularisation — associated conditions, mechanisms and treatment. DNB / UNIV

Degenerations, Dystrophies & Ectasias

CO 55	Corneal dystrophies — latest classification (IC3D); describe the stromal dystrophies with histopathology and stains. HIGH-YIELD
CO 56	Fuchs endothelial dystrophy. DNB / UNIV
CO 57	Classification of corneal degenerations; corneal deposits and pigmentation lines (including Kayser-Fleischer ring). HIGH-YIELD
CO 58	Spheroidal degeneration.
CO 59	Salzmann nodular degeneration.

CO 60	Band-shaped keratopathy. HIGH-YIELD
CO 61	Keratoconus — causes of ectatic cornea, topographic features and grading, and recent management. HIGH-YIELD
CO 62	Intrastromal corneal ring segments. DNB / UNIV
CO 63	Posterior keratoconus.
CO 64	Corneal opacity and its congenital variants — differential diagnosis of congenital corneal opacities; sclerocornea. HIGH-YIELD
CO 65	Limbal dermoid; differential diagnosis of a limbal nodule.
CO 66	Corneal collagen cross-linking — protocols, indications and outcomes.

Sclera

CO 67	Scleritis — classification (including necrotising and posterior scleritis), systemic associations and management; episcleritis. HIGH-YIELD
CO 68	Scleromalacia perforans. DNB / UNIV
CO 69	Staphyloma — anterior, ciliary and posterior.

Keratoplasty & Eye Banking

CO 70	Discuss lamellar keratoplasties (DALK, DSAEK, DMEK) and their role in corneal disorders. HIGH-YIELD
CO 71	Recent advances and concepts in corneal grafting, with special reference to high-risk keratoplasty. HIGH-YIELD
CO 72	Corneal graft rejection — immunology, features, risk factors and management; failed graft. HIGH-YIELD
CO 73	Pseudophakic bullous keratopathy — aetiopathogenesis, prevention and management. DNB / UNIV
CO 74	Keratoprosthesis — types (Boston, osteo-odonto) and indications. HIGH-YIELD
CO 75	Triple procedure — merits and demerits. DNB / UNIV
CO 76	Management of a shallow anterior chamber after keratoplasty.
CO 77	Corneal preservation — short- and intermediate-term methods and media; donor cornea evaluation. HIGH-YIELD
CO 78	Plan an ideal eye bank at a tertiary ophthalmic hospital. Eye banking and legislation. HIGH-YIELD
CO 79	Conductive keratoplasty. DNB / UNIV
CO 80	Descemet stripping only (DSO) and rho-kinase inhibitors for Fuchs endothelial dystrophy.

Refractive Surgery

CO 81	Critically discuss recent advances in keratorefractive procedures, with a note on patient selection. HIGH-YIELD
CO 82	Work-up for refractive surgery and absolute contraindications to laser refractive surgery. DNB / UNIV
CO 83	LASIK — surgery and its complications (e.g. in a -8 D myope); LASEK and PRK. HIGH-YIELD
CO 84	Customised (wavefront-guided) excimer laser corneal ablation. HIGH-YIELD
CO 85	Phototherapeutic keratectomy — indications. DNB / UNIV
CO 86	Historical refractive procedures — radial keratotomy, epikeratophakia and laser thermal keratoplasty. DNB / UNIV
CO 87	Dry eye after LASIK. DNB / UNIV
CO 88	Astigmatic and refractive corneal surgeries; refractive procedures for hyperopia.
CO 89	Phakic IOLs — types, indications, contraindications, power/size calculation and complications. DNB / UNIV
CO 90	SMILE — principles and comparison with LASIK.

SECTION 05 · LC

Lens & Cataract

05

Lens biology · Cataract surgery · Phaco · IOLs · Paediatric cataract · Complications

54 questions · 23 high-yield · 16 DNB / university

Expect at least one cataract question every paper. Developmental cataract, phaco principles, newer IOLs and complication management are the heavy hitters.

Lens Development, Anatomy & Biochemistry

LC 1	Describe the development of the human lens and its structure (sutures, zonules), with reference to the types of congenital cataract and methods for detailed clinical examination and documentation (optical section). HIGH-YIELD
LC 2	Functional and surgical anatomy of the lens, and maintenance of transparency of the lens throughout life. HIGH-YIELD
LC 3	Lens metabolism and biochemistry (proteins, glucose pathways); pathogenesis of senile cataract; mechanisms of diabetic and galactosaemic cataract. HIGH-YIELD
LC 4	Ageing changes in the lens; nuclear grading of cataract. DNB / UNIV
LC 5	Cataract associated with systemic conditions; metabolic cataract. DNB / UNIV
LC 6	Ciliary sulcus — anatomy and surgical relevance.

Paediatric Cataract & Aphakia

LC 7	Developmental and congenital cataract — aetiological and morphological classification (zonular, flake and others); critically evaluate its management. HIGH-YIELD
LC 8	Management of unilateral congenital cataract in a 2-3 year old — surgery, IOL and postoperative visual rehabilitation; bilateral cataract in a 2-year-old. HIGH-YIELD
LC 9	Differences between the paediatric and adult eye; precautions in paediatric cataract surgery and the relationship with glaucoma. DNB / UNIV
LC 10	Congenital rubella syndrome.
LC 11	Posterior capsulorhexis.
LC 12	Management of aphakia in children; IOLs in children. HIGH-YIELD
LC 13	Infant Aphakia Treatment Study and IOL power selection in children.

Ectopia Lentis

LC 14	Subluxation of the crystalline lens — causes, tabulated differential diagnosis, systemic associations and a flow chart for management. Detail your examination, investigations and management of a subluxated lens in a 6-year-old boy. HIGH-YIELD
LC 15	Homocystinuria — biochemistry, ocular and systemic features, genetics and management; Marfan and Weill-Marchesani syndromes. DNB / UNIV
LC 16	Capsular tension ring — indications and types. HIGH-YIELD

Cataract Surgery: Techniques

LC 17	Critically evaluate newer concepts in phacoemulsification, including bimanual (microincision) phaco; comparison of phaco, SICS and MICS. HIGH-YIELD
LC 18	Phaco fluidics and power — flow, vacuum, rise time, surge, duty cycle, pulse and burst modes, and ultrasonic power modulation. DNB / UNIV
LC 19	Chop techniques in phacoemulsification.
LC 20	Manual small-incision cataract surgery — technique and advantages. HIGH-YIELD
LC 21	Continuous curvilinear capsulorhexis. DNB / UNIV
LC 22	Methods of anaesthesia in cataract surgery — topical, peribulbar, retrobulbar and facial blocks: merits and complications. HIGH-YIELD
LC 23	Phacoemulsification in a small pupil — difficulties and management. HIGH-YIELD
LC 24	Posterior polar cataract and its management.
LC 25	Principles of cataract surgery in different ocular situations — complicated, post-uveitic, traumatic, diabetic and black cataract; pseudoexfoliation and low endothelial count (soft-shell technique). HIGH-YIELD
LC 26	Critically evaluate a case of complicated cataract and its management. HIGH-YIELD
LC 27	Viscoelastics — definition, classification, properties and uses. HIGH-YIELD
LC 28	Surgically induced astigmatism and management of pre-existing astigmatism. DNB / UNIV
LC 29	Secondary IOL implantation. DNB / UNIV
LC 30	Femtosecond laser-assisted (blade-free) cataract surgery — advantages and disadvantages. HIGH-YIELD
LC 31	Evolution of cataract surgery — ICCE and ECCE: steps and complications. DNB / UNIV
LC 32	Cataract surgery after vitrectomy with silicone oil. DNB / UNIV
LC 33	Intraoperative zonular dialysis — diagnosis and management. DNB / UNIV

IOLs & Biometry

LC 34	IOL power calculation formulae and procedures to achieve emmetropia; IOL power after refractive surgery. HIGH-YIELD
LC 35	Critically discuss the pros and cons of accommodative and newer IOLs (materials and designs, foldable IOLs) in ophthalmic practice. HIGH-YIELD
LC 36	Multifocal IOLs — refractive vs diffractive principles, types, advantages, disadvantages and surgical considerations; IOLs to aid near vision. HIGH-YIELD
LC 37	Aspheric IOLs.
LC 38	Toric and toric multifocal IOLs — indications and complications. HIGH-YIELD
LC 39	Scleral-fixated IOLs.
LC 40	Decentred IOL — causes and management.
LC 41	Extended depth-of-focus IOLs, light-adjustable lenses and newer formulae (Barrett, Kane, Hill-RBF).

Complications of Cataract Surgery

LC 42	Posterior capsular opacification — intraoperative and postoperative methods of prevention; laser capsulotomy. HIGH-YIELD
LC 43	Posterior capsular rupture during phaco — causes, prevention and management. DNB / UNIV
LC 44	What are the differential diagnoses of postoperative inflammation after cataract surgery? Relate them to management. HIGH-YIELD
LC 45	Critically evaluate the management of a dropped nucleus. HIGH-YIELD
LC 46	Causes and management of diminished vision after phacoemulsification (early and at six weeks), including in a diabetic. DNB / UNIV
LC 47	Capsular block syndrome — classification and management. DNB / UNIV
LC 48	Striate keratopathy and postoperative IOP rise after cataract surgery. DNB / UNIV
LC 49	Complications of anterior chamber IOLs. DNB / UNIV
LC 50	Corneal complications of IOLs.
LC 51	Pseudophakic cystoid macular oedema.
LC 52	Intralenticular foreign body.
LC 53	Toxic anterior segment syndrome vs early endophthalmitis.
LC 54	Intraoperative floppy iris syndrome.

SECTION 06 · GL

Glaucoma

06

Aqueous dynamics · Angle · Diagnostics · Medical, laser & surgical management

56 questions · 24 high-yield · 18 DNB / university

Aqueous dynamics, angle anatomy and grading, secondary glaucomas, perimetry and trabeculectomy complications make up most questions across boards.

Aqueous Dynamics & Angle

GL 1	Describe the development, anatomy and anomalies of the anterior chamber angle and aqueous outflow channels (including uveoscleral outflow), with their application in health and disease. HIGH-YIELD
GL 2	Describe the dynamics of aqueous humour formation and circulation in health and disease, and the mechanisms of drugs affecting it. HIGH-YIELD
GL 3	Factors maintaining IOP and its diurnal variation; outflow facility (C-value) and tonography. HIGH-YIELD
GL 4	Gonioscopy — optical principles, types of gonioscopes and angle-grading systems (Shaffer, Spaeth, RP Centre); other modalities of angle assessment. HIGH-YIELD

Diagnosis & Evaluation

GL 5	Optic nerve head evaluation and nerve fibre layer, with special reference to glaucoma; causes of unilateral disc cupping. HIGH-YIELD
GL 6	Humphrey visual field analysis — field changes in open-angle glaucoma, their pathogenesis, documentation and limitations; global indices. HIGH-YIELD
GL 7	Pre-perimetric glaucoma — diagnosis and factors in the progression of field defects. HIGH-YIELD
GL 8	Concepts of glaucomatous optic nerve damage — mechanical and vascular theories. DNB / UNIV
GL 9	Target IOP. HIGH-YIELD
GL 10	Structure-function correlation and detecting progression (event and trend analysis, OCT).
GL 11	24-hour IOP monitoring and home tonometry.

Primary Glaucomas

GL 12	POAG — minimum diagnostic criteria, severity staging with target pressure; modern diagnosis and management. DNB / UNIV
GL 13	Glaucoma suspect and ocular hypertension — definition, management and follow-up. DNB / UNIV

GL 14	Angle-closure glaucoma — pathophysiology, modern classification (ISGEO/AIGS), clinical features and management; management of the acute attack. HIGH-YIELD
GL 15	Plateau iris syndrome. DNB / UNIV
GL 16	Provocative tests for angle-closure glaucoma. DNB / UNIV
GL 17	Reverse pupillary block. DNB / UNIV
GL 18	Pathogenesis and management of malignant glaucoma (aqueous misdirection) — correlate the management with its pathogenesis. HIGH-YIELD
GL 19	Normal-tension glaucoma — clinical features, pathogenesis and management. DNB / UNIV
GL 20	Advanced and absolute glaucoma — definition and management. DNB / UNIV
GL 21	ZAP and EAGLE trials — lens extraction in angle closure.

Childhood Glaucoma

GL 22	Primary congenital glaucoma (buphthalmos) — genetics, pathophysiology, differential diagnosis and surgical management. HIGH-YIELD
GL 23	Phakomatoses — Sturge-Weber syndrome: classification, signs and management of associated glaucoma. HIGH-YIELD
GL 24	Aniridia. DNB / UNIV
GL 25	Childhood Glaucoma Research Network classification.

Secondary Glaucomas

GL 26	Classify secondary glaucoma. Outline, in a flow chart, the steps to diagnose and manage the various types of lens-induced glaucoma. HIGH-YIELD
GL 27	Phacolytic glaucoma and its management.
GL 28	Neovascular glaucoma — causes of rubeosis, aetiopathogenesis, features and management (e.g. PDR with dense cataract and high IOP). HIGH-YIELD
GL 29	Steroid-induced glaucoma.
GL 30	Causes of secondary glaucoma; pattern of IOP rise in post-uveitic glaucoma.
GL 31	Glaucomatocyclitic crisis (Posner-Schlossman syndrome). HIGH-YIELD
GL 32	Pigment dispersion syndrome and pigmentary glaucoma. DNB / UNIV
GL 33	Inflammatory (uveitic) glaucoma — classification and treatment options. DNB / UNIV
GL 34	Angle recession and traumatic glaucoma. HIGH-YIELD
GL 35	ICE syndrome — definition, types, features and management. HIGH-YIELD

GL 36	Pseudoexfoliation syndrome — pathology, features and management. HIGH-YIELD
GL 37	Aphakic and pseudophakic glaucoma.

Medical Management

GL 38	Medical management of glaucoma — classification of antiglaucoma drugs; prostaglandin analogues (latanoprost), carbonic anhydrase inhibitors (dorzolamide) and newer drugs. HIGH-YIELD
GL 39	Critically analyse the side effects of various antiglaucoma medications. HIGH-YIELD
GL 40	Neuroprotection in glaucoma and its mechanism of action. HIGH-YIELD
GL 41	Newer agents — rho-kinase inhibitors, latanoprostene bunod, omidenepag; preservative-free therapy.

Laser & Surgical Management

GL 42	Advances in the management of glaucoma and their limitations. HIGH-YIELD
GL 43	Role of lasers in glaucoma — laser peripheral iridotomy, iridoplasty, ALT/SLT. DNB / UNIV
GL 44	Trabeculectomy — indications, steps, factors affecting success and failure, and wound modulation (antimetabolites). DNB / UNIV
GL 45	Surgical management of failed trabeculectomy, failed bleb and refractory (intractable) glaucoma. HIGH-YIELD
GL 46	Differential diagnosis and management of shallow anterior chamber (on day 1) following filtering surgery. HIGH-YIELD
GL 47	Management of encapsulated bleb following filtering surgery.
GL 48	Releasable sutures.
GL 49	Glaucoma drainage devices (setons, Ahmed, Baerveldt) — types, mechanism, indications and complications. DNB / UNIV
GL 50	Cyclophotocoagulation — diode and micropulse. DNB / UNIV
GL 51	Non-penetrating glaucoma surgery — viscocanalostomy and deep sclerectomy. DNB / UNIV
GL 52	Combined phaco-trabeculectomy. DNB / UNIV
GL 53	Goniotomy and trabeculotomy. DNB / UNIV
GL 54	Selective laser trabeculoplasty as first-line therapy (LiGHT trial).
GL 55	Minimally invasive glaucoma surgery (MIGS) — types, indications and outcomes.

Public Health Aspects

GL 56	Strategies to decrease glaucoma morbidity in the country; ideal model of glaucoma services in a tertiary care centre; glaucoma screening.

SECTION 07 · UV

Uvea & Ocular Inflammation

07

Classification · Investigations · Specific entities · Infections · Complications

34 questions · 19 high-yield · 9 DNB / university

Classification (SUN), investigative approach, anterior and intermediate uveitis, VKH and sympathetic ophthalmitis are the most repeated. Know infectious uveitis common in India.

Classification & Approach

UV 1	Classify uveitis. Enumerate the role of the various investigations (including HLA typing) with respect to management modalities. HIGH-YIELD
UV 2	Uveitis — types, aetiologies and recent advances in management. HIGH-YIELD
UV 3	Granulomatous vs non-granulomatous uveitis; iris nodules. HIGH-YIELD
UV 4	Keratic precipitates, hypopyon and pseudohypopyon. DNB / UNIV
UV 5	Masquerade syndromes — primary intraocular lymphoma. DNB / UNIV
UV 6	Investigative profile in uveitis.
UV 7	Differential diagnosis and management of bilateral panuveitis. HIGH-YIELD

Anterior & Intermediate Uveitis

UV 8	Acute anterior uveitis (iridocyclitis) — aetiology, HLA-B27 association, signs, complications and management. DNB / UNIV
UV 9	Anterior uveitis with raised IOP (hypertensive uveitis). DNB / UNIV
UV 10	Uveitis in spondyloarthropathies and reactive arthritis (Reiter syndrome). DNB / UNIV
UV 11	Intermediate uveitis and pars planitis — aetiopathogenesis, clinical features, complications and management. HIGH-YIELD
UV 12	Heterochromic iridocyclitis (Fuchs uveitis syndrome). HIGH-YIELD
UV 13	Short note: white iritis.
UV 14	Presentation, investigations and management of paediatric uveitis; Still's disease (JIA). HIGH-YIELD

Posterior & Panuveitis

UV 15	Posterior uveitis — clinical features, aetiology, investigations and management. DNB / UNIV
UV 16	Vogt-Koyanagi-Harada disease — sunset-glow fundus and management. HIGH-YIELD

UV 17	Sympathetic ophthalmitis — pathogenesis, histopathology (Dalen-Fuchs nodules) and management. DNB / UNIV
UV 18	Ocular sarcoidosis — clinical features, diagnosis and management. HIGH-YIELD
UV 19	Behçet disease — aetiology, ocular features and management. HIGH-YIELD
UV 20	White dot syndromes, including APMPPE. HIGH-YIELD
UV 21	Chorioretinitis.
UV 22	Serpiginous choroiditis and birdshot chorioretinopathy. DNB / UNIV

Infectious Uveitis

UV 23	Ocular tuberculosis — pathogenesis, manifestations, differential diagnosis and management. HIGH-YIELD
UV 24	Ocular toxoplasmosis. HIGH-YIELD
UV 25	Toxocariasis.
UV 26	Ophthalmic manifestations of Hansen's disease (leprosy). HIGH-YIELD
UV 27	Ocular manifestations of HIV, the significance of CD4 count and the impact of HAART. HIGH-YIELD
UV 28	CMV retinitis — pathogenesis, fundus features, differential diagnosis and treatment. HIGH-YIELD
UV 29	Acute retinal necrosis. HIGH-YIELD
UV 30	Ocular syphilis and post-fever retinitis (rickettsial, dengue, chikungunya). HIGH-YIELD
UV 31	Parasitic and tropical infestations — onchocerciasis, Loa loa, myiasis, rhinosporidiosis. DNB / UNIV

Complications & Therapy

UV 32	Surgical management of complications of uveitis; cataract surgery in uveitis. HIGH-YIELD
UV 33	Post-uveitic cataract.
UV 34	Biologics and local steroid implants (fluocinolone, dexamethasone) in non-infectious uveitis.

SECTION 08 · RE

Retina & Vitreous

08

Medical retina · Vascular disease · Macula · RD & vitreoretinal surgery · ROP

71 questions · 35 high-yield · 21 DNB / university

The largest section. AMD, DR/DME, RVO, CSR, ROP and RD recur in almost every paper — learn trial evidence and current protocols.

Applied Anatomy & Physiology

RE 1	Blood supply of the retina and optic nerve. HIGH-YIELD
RE 2	RPE and its significance.
RE 3	Posterior vitreous detachment; photopsia and floaters; asteroid hyalosis and synchysis scintillans. DNB / UNIV
RE 4	Cherry-red spot — causes. HIGH-YIELD

Age-related Macular Degeneration

RE 5	Pathology, clinical features, FFA picture, differential diagnosis and management of ARMD (dry and wet); critically analyse the changing scenario and recent advances in its management. HIGH-YIELD
RE 6	Choroidal neovascular membrane — causes and management (including intrafoveal CNVM). DNB / UNIV
RE 7	Verteporfin and photodynamic therapy. HIGH-YIELD
RE 8	Geographic atrophy — complement inhibitors (pegcetacoplan, avacincaptad pegol).
RE 9	Polypoidal choroidal vasculopathy — features, diagnosis and management. DNB / UNIV

Diabetic Retinopathy & Macular Oedema

RE 10	Classification and current concepts in the pathology of diabetic retinopathy and their relevance to management. HIGH-YIELD
RE 11	Discuss the pathogenesis, features, investigations and management of diffuse diabetic macular oedema (CSME), with recent developments; management of recalcitrant DME. HIGH-YIELD
RE 12	Proliferative diabetic retinopathy — features and management; panretinal photocoagulation; vitrectomy in diabetic retinopathy. HIGH-YIELD
RE 13	ETDRS — classification, findings and significance.
RE 14	Role of HbA1c, blood pressure and lipids in diabetic retinopathy; pathogenesis of cotton-wool spots and hard exudates. DNB / UNIV

RE 15	Landmark trials in retina — DRS, ETDRS, DRVS, MARINA/ANCHOR, CATT, SCORE, BRAVO/CRUISE, CVOS/BVOS. DNB / UNIV
RE 16	Indications for ophthalmic referral in juvenile diabetes. DNB / UNIV
RE 17	DRCR Retina Network protocols (T, V, S, AA) and their impact on practice.

Retinal Vascular Disease

RE 18	Branch retinal vein occlusion — differential diagnosis and management. HIGH-YIELD
RE 19	Central retinal vein occlusion — aetiopathogenesis, features, newer modalities of management, surgical intervention and the CVO trials. HIGH-YIELD
RE 20	Central retinal artery occlusion — fundus picture and management. DNB / UNIV
RE 21	Ocular changes in hypertension and their management, with special reference to pregnancy-induced hypertension. HIGH-YIELD
RE 22	Haematological disorders and the retina (anaemia, leukaemia, sickle cell disease). HIGH-YIELD
RE 23	Retinal vasculitis and Eales disease; describe granulomatosis with polyangiitis (Wegener's). HIGH-YIELD
RE 24	Amaurosis fugax.
RE 25	Angioid streaks. DNB / UNIV
RE 26	Coats disease; macular telangiectasia. DNB / UNIV
RE 27	Ocular ischaemic syndrome. DNB / UNIV
RE 28	Retinal changes at high altitude. DNB / UNIV

Macular Disorders

RE 29	Macular hole — definition, classification, pathophysiology, OCT features in relation to management, prognostic factors and recent advances. HIGH-YIELD
RE 30	Central serous chorioretinopathy — aetiology, clinical features and current trends in management. HIGH-YIELD
RE 31	Cystoid macular oedema — causes, features and treatment; pseudophakic CME. HIGH-YIELD
RE 32	Toxic retinopathies — hydroxychloroquine and others: screening. DNB / UNIV
RE 33	Epiretinal membrane — causes and management; ILM peeling. DNB / UNIV
RE 34	Vitreomacular traction and the International Vitreomacular Traction Study classification.
RE 35	Pachychoroid spectrum disease.

Pharmacotherapy

RE 36	Anti-VEGF agents and their role in ocular pathologies; intravitreal injections — technique and complications. HIGH-YIELD
RE 37	Intravitreal steroids (triamcinolone and implants). HIGH-YIELD
RE 38	Newer anti-VEGF and bispecific agents (brolucizumab, faricimab, high-dose aflibercept), biosimilars and port delivery system.

Hereditary Retinal Disorders & Degenerations

RE 39	Retinitis pigmentosa — clinical features, genetics, associated systemic syndromes (Usher, Laurence-Moon-Bardet-Biedl), atypical RP and recent advances. HIGH-YIELD
RE 40	Outline the dystrophies and degenerations of the eye; hereditary macular dystrophies. HIGH-YIELD
RE 41	Peripheral retinal degenerations — lattice degeneration; prophylaxis of retinal breaks. HIGH-YIELD
RE 42	Retinoschisis — features and management. DNB / UNIV
RE 43	Night blindness — causes; congenital stationary night blindness and fundus albipunctatus. DNB / UNIV
RE 44	Discuss the changing concepts in the management of pathological high myopia. HIGH-YIELD
RE 45	Stargardt disease and Best disease — genetics and emerging therapies.

Retinopathy of Prematurity & Paediatric Retina

RE 46	Retinopathy of prematurity — risk factors, classification, screening protocol in India, guidelines for intervention, treatment modalities and prevention; plus disease. HIGH-YIELD
RE 47	Persistent hyperplastic primary vitreous (persistent fetal vasculature).
RE 48	ICROP3 classification, anti-VEGF in ROP (RAINBOW trial) and tele-ROP screening.

Retinal Detachment & Vitreoretinal Surgery

RE 49	Classification of retinal detachment; discuss the changing concepts in the management of different types of RD. HIGH-YIELD
RE 50	Rhegmatogenous RD — predisposing factors, diagnosis and management. DNB / UNIV
RE 51	Exudative retinal detachment — causes and treatment; choroidal detachment and effusion. DNB / UNIV
RE 52	Tractional retinal detachment — causes, investigations and management. DNB / UNIV
RE 53	Prognostic factors in rhegmatogenous RD; retinopexy methods (laser, cryo) and SRF drainage. DNB / UNIV
RE 54	Hypotony — causes and management. DNB / UNIV

RE 55	Retinal detachment surgery — principles of conventional reattachment surgery; scleral buckling vs vitrectomy. HIGH-YIELD
RE 56	Pneumatic retinopexy. DNB / UNIV
RE 57	Retinal detachment with proliferative vitreoretinopathy — classification and modern management. HIGH-YIELD
RE 58	Giant retinal tear; retinal dialysis. HIGH-YIELD
RE 59	Secondary rhegmatogenous retinal detachment.
RE 60	Vitreous haemorrhage — causes, evaluation and management (including recurrent). HIGH-YIELD
RE 61	Pars plana vitrectomy and its indications; current trends in vitreoretinal and macular surgery. HIGH-YIELD
RE 62	Small-gauge (25-gauge) sutureless vitrectomy. HIGH-YIELD
RE 63	Internal tamponades — intravitreal gases (C3F8, SF6) and silicone oil. HIGH-YIELD
RE 64	Perfluorocarbon liquids.
RE 65	Vitreous substitutes and viscoelastics. HIGH-YIELD
RE 66	Terson syndrome.

Endophthalmitis & Infections

RE 67	Endophthalmitis — aetiology, investigations, rational management, including a critical note on therapy-induced problems. HIGH-YIELD
RE 68	Postoperative (pseudophakic) endophthalmitis — diagnosis, treatment and prevention. HIGH-YIELD
RE 69	Ocular cysticercosis — diagnosis and management. HIGH-YIELD
RE 70	Endogenous endophthalmitis; lessons from EVS and intracameral antibiotic prophylaxis (ESCRS).

Suprachoroidal Haemorrhage

RE 71	Suprachoroidal and expulsive haemorrhage — pathophysiology, recognition and management. HIGH-YIELD

SECTION 09 · TR

Ocular Trauma

09

Classification · Open & closed globe · IOFB · Chemical injury · Prevention

18 questions · 9 high-yield · 6 DNB / university

Trauma questions demand a systematic answer: BETTS classification, OTS, investigations, step-wise management and prevention.

Classification & Approach

TR 1	Discuss the classification of ocular trauma (BETTS). Evaluate vision-threatening injuries and the principles of their management for the best possible outcome. HIGH-YIELD
TR 2	Prognostic significance of various manifestations of ocular trauma on the globe and adnexa. HIGH-YIELD
TR 3	Three most important ophthalmic emergencies needing immediate management. DNB / UNIV
TR 4	Ocular Trauma Score and its prognostic value.

Open Globe Injury

TR 5	Open globe (penetrating/perforating) injury — management. HIGH-YIELD
TR 6	Corneoscleral perforation with uveal or vitreous prolapse (e.g. bow-and-arrow injury in a child) — repair techniques. DNB / UNIV
TR 7	Outline the types of intraocular foreign bodies, their localisation and critical management. HIGH-YIELD
TR 8	Siderosis bulbi (with ERG changes) and chalcosis. HIGH-YIELD
TR 9	Corneal and conjunctival foreign bodies. DNB / UNIV
TR 10	Penetrating injury involving the posterior segment. DNB / UNIV

Closed Globe Injury

TR 11	Hyphaema — grading, investigations, complications (including corneal blood staining), medical management and indications for surgery; with secondary glaucoma. HIGH-YIELD
TR 12	Ocular manifestations of blunt (concussion) trauma; Berlin's oedema. DNB / UNIV
TR 13	Traumatic cataract.
TR 14	Angle recession.
TR 15	Traumatic optic neuropathy and optic nerve avulsion — clinical features and management. HIGH-YIELD
TR 16	Photic and radiational injuries of the eye. DNB / UNIV

Chemical Injury

TR 17	Classify chemical injuries and discuss their prognostic indicators, management of the acute alkali burn, recent advances and management of sequelae. HIGH-YIELD

Prevention

TR 18	Strategies to reduce morbidity and the incidence of preventable ocular injuries in the community. HIGH-YIELD

SECTION 10 · NO

Neuro-ophthalmology

10

Visual pathway · Optic nerve · Pupil · Ocular motor nerves · Nystagmus

48 questions · 23 high-yield · 18 DNB / university

Anatomy with clean diagrams scores well here. Localisation of field defects, pupil pathways, optic neuropathies and cranial nerve palsies are repeat topics across boards.

Visual Pathway

NO 1	How would you evaluate the integrity of the visual pathways? Draw the pathway with its blood supply and discuss the localisation of lesions at each level. HIGH-YIELD
NO 2	Anatomy of the optic chiasma, tracts and radiations; discuss the lesions affecting the visual fields (bitemporal and homonymous hemianopia). HIGH-YIELD
NO 3	Describe the aetiopathogenesis and appearance of visual field changes in neurological disorders.
NO 4	Scotoma — definition, positive vs negative; altitudinal field defects. DNB / UNIV
NO 5	Visual cortex.
NO 6	Pituitary lesions and craniopharyngioma for the ophthalmologist. HIGH-YIELD

Optic Nerve

NO 7	Describe the anatomy, relations and blood supply of the optic nerve; functional anatomy of the optic nerve head and its FFA. HIGH-YIELD
NO 8	Signs of optic nerve dysfunction and investigations to assess optic nerve function. DNB / UNIV
NO 9	Discuss the aetiopathogenesis, differential diagnosis and management of unilateral optic disc swelling. HIGH-YIELD
NO 10	Papilloedema — pathogenesis, pathology, features and differential diagnosis (pseudopapilloedema); papilloedema and head injury. HIGH-YIELD
NO 11	AION — types (arteritic, NAION), aetiopathogenesis, clinical picture and management. HIGH-YIELD
NO 12	Giant cell (temporal) arteritis — clinical features and management. DNB / UNIV
NO 13	Optic neuritis, papillitis and neuroretinitis — classification, aetiology, features, diagnosis and management. HIGH-YIELD
NO 14	Drusen of the optic nerve head. HIGH-YIELD
NO 15	Toxic and drug-induced optic neuropathies; toxic amblyopia. HIGH-YIELD
NO 16	Describe the clinical features, diagnosis and management of methyl alcohol poisoning.

NO 17	Leber hereditary optic neuropathy — features and differential diagnosis. DNB / UNIV
NO 18	Foster Kennedy syndrome. DNB / UNIV
NO 19	Cortical blindness. DNB / UNIV
NO 20	Optic atrophy — primary and secondary. DNB / UNIV
NO 21	Benign (idiopathic) intracranial hypertension — presentation, causes, diagnosis and treatment. DNB / UNIV
NO 22	Multiple sclerosis and demyelinating disease — ocular aspects.
NO 23	Optic nerve tumours — glioma and meningioma. HIGH-YIELD
NO 24	MOG antibody disease and NMOSD (aquaporin-4); lessons from the ONTT and IIHTT.

Pupil

NO 25	Describe the pupillary pathways (light reflex and sympathetic) in detail, their affections and the tests to elucidate them. HIGH-YIELD
NO 26	Detail your examination and management of a case of anisocoria — causes and differential diagnosis. HIGH-YIELD
NO 27	Relative afferent pupillary defect (Marcus Gunn pupil). DNB / UNIV
NO 28	Light-near dissociation — Argyll Robertson pupil, Adie tonic pupil and other causes. DNB / UNIV
NO 29	Horner syndrome — clinical features, pharmacological tests and management. DNB / UNIV

Ocular Motor System

NO 30	Anatomy of the 3rd, 4th and 6th cranial nerves; applied anatomy of the 3rd nerve nucleus. HIGH-YIELD
NO 31	Third nerve palsy — localisation of the lesion, causes, aberrant regeneration and treatment. HIGH-YIELD
NO 32	Fourth nerve palsy — clinical features. DNB / UNIV
NO 33	Sixth nerve palsy — aetiology, clinical features, investigations and management; sequelae of lateral rectus palsy. DNB / UNIV
NO 34	Describe the investigations and management of a case of ophthalmoplegia. HIGH-YIELD
NO 35	Types of eye movements and their supranuclear control; gaze palsies, internuclear ophthalmoplegia and one-and-a-half syndrome. HIGH-YIELD
NO 36	Chronic progressive external ophthalmoplegia. DNB / UNIV
NO 37	Painful ophthalmoplegia — differential diagnosis (Tolosa-Hunt syndrome). DNB / UNIV
NO 38	Myasthenia gravis — pathogenesis, ocular aspects, diagnosis and management. HIGH-YIELD

NO 39	Cavernous sinus — depict and discuss its ophthalmic connections; cavernous sinus thrombosis. HIGH-YIELD
NO 40	Carotid-cavernous fistula. HIGH-YIELD

Nystagmus

NO 41	Nystagmus — types, investigations, associated conditions and management; optokinetic nystagmus. HIGH-YIELD

Miscellaneous

NO 42	Migraine — types, ocular migraine and differential diagnosis of visual phenomena. HIGH-YIELD
NO 43	Critically evaluate the differential diagnosis of failing vision in an elderly patient; sudden painless profound loss of vision in a young and an elderly patient. HIGH-YIELD
NO 44	Malingering — detection.
NO 45	Ocular manifestations of head injury vis-à-vis their role in management.
NO 46	Essential blepharospasm. DNB / UNIV
NO 47	Paraneoplastic syndromes of the eye. DNB / UNIV
NO 48	Localising signs of intracranial tumours; ocular aspects of cerebellopontine angle lesions and facial palsy. DNB / UNIV

SECTION 11 · SQ

Strabismus & Paediatric Ophthalmology

11

EOM anatomy · Binocular vision · Eso/exo deviations · Amblyopia · Surgery · Paediatrics

45 questions · 20 high-yield · 17 DNB / university

Binocular vision, infantile esotropia, exodeviations and amblyopia are the core. Diagrams of muscle actions and test set-ups earn marks.

Anatomy of Extraocular Muscles

SQ 1	Describe the origin, insertion, actions, functional anatomy and development of the extraocular muscles; discuss the basis of restrictive squints. HIGH-YIELD
SQ 2	Annulus of Zinn.
SQ 3	Superior oblique — anatomy, actions in various gazes, and management of unilateral and bilateral palsy. HIGH-YIELD
SQ 4	Inferior oblique — anatomy and surgery. DNB / UNIV
SQ 5	Hering's and Sherrington's laws; sequelae of paralytic squint over time. DNB / UNIV

Binocular Vision & Sensory Tests

SQ 6	Anatomical and physiological basis of binocular vision — grades, development, horopter and Panum's area; its comprehensive assessment and tests for stereopsis. HIGH-YIELD
SQ 7	What are the sensory adaptations in strabismus (suppression, ARC)? Discuss their diagnosis and clinical significance. HIGH-YIELD
SQ 8	Worth four-dot test. HIGH-YIELD
SQ 9	Method and significance of Bagolini striated glasses test. HIGH-YIELD
SQ 10	Cover tests; Maddox rod and wing; Hess/Lees screen and diplopia charting. HIGH-YIELD
SQ 11	AC/A ratio — measurement and importance. DNB / UNIV
SQ 12	Eccentric fixation. DNB / UNIV
SQ 13	Microtropia — definition, types and features. HIGH-YIELD

Esodeviations

SQ 14	Infantile (congenital) esotropia — features, differential diagnosis, timing of surgery, protocols of treatment and binocular prognosis. HIGH-YIELD
SQ 15	Accommodative and partially accommodative esotropia. HIGH-YIELD
SQ 16	Classification of esotropia; investigations and management in a 1-year-old and in a 3-6-year-old child. HIGH-YIELD
SQ 17	Non-surgical management of esotropia.
SQ 18	Pseudostrabismus and epicanthus. DNB / UNIV

Exodeviations & Heterophoria

SQ 19	Primary exodeviation — classification, work-up and management; intermittent exotropia. DNB / UNIV
SQ 20	Heterophoria — aetiology, diagnosis and treatment. DNB / UNIV
SQ 21	Convergence insufficiency. DNB / UNIV

Vertical, Pattern & Special Forms

SQ 22	Aetiology, diagnosis and management of superior oblique overaction.
SQ 23	Dissociated vertical deviation. HIGH-YIELD
SQ 24	Management of vertical diplopia.
SQ 25	A and V patterns — aetiology, diagnosis, clinical significance and management. DNB / UNIV
SQ 26	Congenital cranial dysinnervation disorders — Duane retraction syndrome (types, management with abnormal head posture); Brown syndrome (superior oblique sheath syndrome); double elevator palsy. HIGH-YIELD
SQ 27	Paralytic strabismus — diagnosis, investigation and surgery; recent-onset diplopia in an adult. DNB / UNIV

Amblyopia & Paediatric Vision

SQ 28	Amblyopia — definition, causes, pathogenesis, classification, critical period and recent trends in management (including anisometropic amblyopia and penalisation). HIGH-YIELD
SQ 29	Vision assessment in a child; fixation reflexes. HIGH-YIELD
SQ 30	Differential diagnosis of poor vision in a child and how you would manage such a child. HIGH-YIELD
SQ 31	Dichoptic and binocular digital therapy for amblyopia (PEDIG studies).

Strabismus Surgery

SQ 32	Lateral rectus resection; hang-back recession; inferior oblique recession.
SQ 33	Faden operation (posterior fixation suture). HIGH-YIELD
SQ 34	Adjustable sutures in strabismus surgery. HIGH-YIELD
SQ 35	Evaluate the various transposition (muscle transplantation) procedures in strabismus. HIGH-YIELD
SQ 36	Surgical options for nystagmus and their outcome; Kestenbaum-Anderson procedure. HIGH-YIELD
SQ 37	Botulinum toxin in strabismus.
SQ 38	Recent advances in surgical and non-surgical management of squint. DNB / UNIV

Paediatric Ophthalmology

SQ 39	Acquired eye diseases in children — types, causes and management. DNB / UNIV
SQ 40	Ophthalmic findings in inborn errors of metabolism; mucopolysaccharidoses. DNB / UNIV
SQ 41	Craniofacial syndromes — Crouzon, Apert and Goldenhar. DNB / UNIV
SQ 42	Peters anomaly and other anterior segment dysgeneses. DNB / UNIV
SQ 43	Oculocutaneous albinism. DNB / UNIV
SQ 44	Congenital infections — rubella, toxoplasmosis. DNB / UNIV
SQ 45	Paediatric ocular screening and vision-screening devices.

SECTION 12 · OL

Oculoplasty, Orbit & Lacrimal

12

Lids · Ptosis · Lacrimal system · Orbit · Thyroid eye disease

48 questions · 29 high-yield · 9 DNB / university

Proptosis (adult and child), ptosis, lid tumours and lacrimal obstruction dominate. A clear clinical algorithm is the scoring formula.

Eyelids

OL 1	Anatomy of the eyelid with a labelled vertical section; lid margin. HIGH-YIELD
OL 2	Describe and discuss the principles and techniques of lid reconstruction (including upper lid) — Cutler-Beard, Mustardé flap and Z-plasty. HIGH-YIELD
OL 3	Entropion — aetiology, classification and correction (congenital, senile, cicatricial, trachomatous). HIGH-YIELD
OL 4	Ectropion — classification and surgical management (senile, paralytic, cicatricial; Kuhnt-Szymanowski); lagophthalmos. HIGH-YIELD
OL 5	Tarsorrhaphy. DNB / UNIV
OL 6	Floppy eyelid syndrome; distichiasis; telecanthus and epicanthus. DNB / UNIV
OL 7	Blepharitis — clinical types and management; chalazion (differential diagnosis and histopathology). DNB / UNIV
OL 8	Differential diagnosis of a painless, nodular, progressively increasing swelling of the lower lid in a 60-year-old male.
OL 9	Differential diagnosis and management of a growth of the lateral part of the eyelids.
OL 10	Malignant lid tumours — basal cell, squamous cell, sebaceous (meibomian) gland and Merkel cell carcinoma: clinical and pathological features and treatment. HIGH-YIELD
OL 11	Symblepharon; xanthelasma; molluscum contagiosum. DNB / UNIV

Ptosis

OL 12	Classification of blepharoptosis, its evaluation and relevance to management and complications. HIGH-YIELD
OL 13	Outline the surgical and functional anatomy of the levator palpebrae superioris. HIGH-YIELD
OL 14	Discuss the modalities of management of ptosis and their indications; critically evaluate the operative procedures and the prevention and treatment of postoperative problems. HIGH-YIELD

OL 15	Congenital ptosis — investigations, surgical management and your criteria for decision making; frontalis sling. HIGH-YIELD
OL 16	Acquired (including myogenic and synkinetic) ptosis. HIGH-YIELD
OL 17	Blepharophimosis syndrome; Marcus Gunn jaw-winking ptosis. DNB / UNIV
OL 18	Outline your approach to the evaluation and management of failed ptosis surgery and ptosis in special (complicated) situations. HIGH-YIELD

Lacrimal System

OL 19	Describe tear formation and drainage, and the lacrimal pump mechanism (structural and functional aspects). How would you evaluate a watering eye and manage different types of lacrimal obstruction? HIGH-YIELD
OL 20	Acute dacryocystitis; classification of dacryocystitis; mucocele. DNB / UNIV
OL 21	Chronic dacryocystitis — aetiopathogenesis and management; DCR (indications, steps, recent modifications). HIGH-YIELD
OL 22	Management of failed DCR — causes and management. HIGH-YIELD
OL 23	Outline the differential diagnosis and management of a watering eye in children; congenital NLD obstruction. HIGH-YIELD
OL 24	Evaluate the management of functional epiphora; Jones dye tests.
OL 25	Lacrimal gland lesions and tumours (pleomorphic adenoma, adenoid cystic carcinoma) — clinical picture, histopathology, differential diagnosis and management. HIGH-YIELD
OL 26	Endoscopic DCR, lacrimal intubation and balloon dacryoplasty; types of DCR and their complications. HIGH-YIELD
OL 27	Canalicular obstruction — surgical management and Lester Jones tube; dacryocele and dacryolith. DNB / UNIV

Orbit: Anatomy

OL 28	Describe, with diagrams, the functional and surgical anatomy of the bony orbit (walls and weak spots), its spaces and their clinical significance, along with development and important disorders. HIGH-YIELD
OL 29	Anatomy of the superior orbital fissure (with labelled diagram); orbital apex syndrome. HIGH-YIELD
OL 30	Applied anatomy of the orbital apex.

Proptosis & Orbital Disease

OL 31	Describe the aetiology, clinical features and management of unilateral proptosis; your approach to unilateral axial proptosis in an adult. HIGH-YIELD

OL 32	How would you manage a case of proptosis in a child? Differential diagnosis of proptosis and acute proptosis in a 3-year-old. HIGH-YIELD
OL 33	Causes of bilateral proptosis; enophthalmos — causes and investigations. DNB / UNIV
OL 34	Differential diagnosis and management of unilateral orbital cellulitis, with special reference to children. HIGH-YIELD
OL 35	Discuss the differential diagnosis of pulsatile proptosis and its investigation and management. HIGH-YIELD
OL 36	Exophthalmometry.
OL 37	Pseudotumour of the orbit (idiopathic orbital inflammation) — describe and discuss management; Tolosa-Hunt syndrome; painful orbital swelling. HIGH-YIELD
OL 38	Mucormycosis — rhino-orbital-cerebral.
OL 39	Classification of orbital tumours; common central-space tumours (cavernous haemangioma, dermoid); metastatic orbital tumours; lymphoma. HIGH-YIELD

Orbital Surgery

OL 40	Surgical approaches to the orbit — lateral orbitotomy (indications, steps, complications) and transfrontal orbitotomy. HIGH-YIELD
OL 41	Orbital implants; enucleation, evisceration and exenteration — indications and techniques. HIGH-YIELD
OL 42	Contracted socket. DNB / UNIV
OL 43	Artificial eye.

Thyroid Eye Disease

OL 44	Describe the progressive clinical features of dysthyroid ophthalmopathy, grading, diagnostic modalities, indications for intervention and surgical management. HIGH-YIELD
OL 45	Describe the thyroid function tests and the clinical picture and management of hyperthyroidism with special regard to ocular involvement; lid retraction; orbital decompression.
OL 46	Clinical Activity Score, EUGOGO guidelines and teprotumumab.

Orbital Trauma

OL 47	How would you approach and manage a suspected blow-out fracture (pure vs impure)? Orbital fractures in relation to structural anatomy. HIGH-YIELD
OL 48	Critically analyse recent advances in orbital and canalicular interventions, with special reference to trauma.

SECTION 13 · ON

Ocular Oncology

13

Retinoblastoma · Leukocoria · Uveal melanoma · Other tumours · Phakomatoses

18 questions · 9 high-yield · 6 DNB / university

Retinoblastoma is the single most repeated oncology topic — classification, genetics, histopathology and modern management of bilateral disease.

Classification

ON 1	Classify the extraocular and intraocular tumours, with a note on their prognosis; malignant tumours of the eye and adnexa. HIGH-YIELD
ON 2	Describe the investigations for intraocular malignancies in an adult and the options for their management. HIGH-YIELD

Leukocoria & Retinoblastoma

ON 3	Leukocoria — differential diagnosis and investigation of a child with leukocoria. DNB / UNIV
ON 4	Recent classifications of retinoblastoma (Reese-Ellsworth, ICRB) from clinical and pathological viewpoints, with reference to prognosis and management. HIGH-YIELD
ON 5	Genetic transmission of retinoblastoma and genetic counselling. HIGH-YIELD
ON 6	Pathology and histopathology of retinoblastoma — rosettes, spread and pseudoglioma. HIGH-YIELD
ON 7	Role of the various investigative modalities in retinoblastoma. HIGH-YIELD
ON 8	Critically evaluate treatment strategies for bilateral retinoblastoma in an 18-month-old (or 1-year-old) child — conservative management, chemoreduction, radiotherapy and newer modalities. HIGH-YIELD
ON 9	Intra-arterial and intravitreal chemotherapy; the 8th edition AJCC TNMH classification.

Uveal & Other Tumours

ON 10	Uveal (choroidal) melanoma — types, clinical features, pathology, management and prognosis. HIGH-YIELD
ON 11	Choroidal haemangioma and choroidal osteoma. DNB / UNIV
ON 12	Retinal vascular tumours — capillary haemangioma (von Hippel-Lindau), cavernous haemangioma. DNB / UNIV
ON 13	Pigmented iris lesions and iris cysts — differential diagnosis. DNB / UNIV
ON 14	Rhabdomyosarcoma — clinical features and histopathology. DNB / UNIV

ON 15	Write briefly on metastatic lesions of the eye.
ON 16	Kaposi sarcoma. DNB / UNIV
ON 17	Discuss the phakomatoses affecting the eye — syndromes and their systemic and ocular features. HIGH-YIELD
ON 18	COMS study and current management of uveal melanoma.

SECTION 14 · SY

Systemic Disease & General Topics

14

Systemic associations · Infections · Iatrogenic · Hospital practice

25 questions · 6 high-yield · 6 DNB / university

Broad 'outline' questions test integration. Prepare tables of systemic disease vs ocular signs.

Systemic Disease & the Eye

SY 1	Outline important systemic disorders affecting the eye and their salient ocular symptoms and signs; fundus changes in hypertension, leukaemia and diabetes. HIGH-YIELD
SY 2	Juvenile systemic disorders affecting the eye.
SY 3	Ocular manifestations of connective tissue (collagen vascular) disorders. HIGH-YIELD
SY 4	Outline the ocular lesions connected with specific systemic infections. HIGH-YIELD
SY 5	Haematological disorders in ophthalmology. HIGH-YIELD
SY 6	Marfan syndrome; Hutchinson's triad and congenital syphilis. DNB / UNIV
SY 7	Inborn errors of metabolism — Wilson disease, galactosaemia, mucopolysaccharidoses. DNB / UNIV
SY 8	Non-retinal ocular manifestations of diabetes. DNB / UNIV
SY 9	Ocular changes in pregnancy. DNB / UNIV
SY 10	Ocular manifestations of sexually transmitted diseases. DNB / UNIV
SY 11	Eye in epidemic dropsy.
SY 12	Critically evaluate nutritional factors causing ocular morbidity.
SY 13	Ocular manifestations of COVID-19 and its treatment.

Iatrogenic & Environmental

SY 14	Discuss iatrogenic disorders of the eye.
SY 15	Indications for and hazards of radiation to the eye.
SY 16	Red eye and painful blind eye — causes and management. DNB / UNIV

Infection Control & Hospital Practice

SY 17	Describe disinfection and sterilisation in ophthalmology in relation to common investigations, sharp instruments and the operation theatre. HIGH-YIELD

SY 18	Postoperative infections — prevention and management.
SY 19	Discuss the aetiology and management perspective of advanced terminal situations on the verge of total blindness.
SY 20	How would you organise an upgraded residency training programme in ophthalmology in your institute?
SY 21	Critically evaluate the organisation of an ideal (eye/blood) bank to meet the needs of your region.
SY 22	Medico-legal aspects in ophthalmology — informed consent, documentation and the Consumer Protection Act.
SY 23	Simulation and wet-lab training in ophthalmic surgical education.

Telemedicine & Technology

SY 24	Role of telemedicine and computers in ophthalmology. HIGH-YIELD
SY 25	Artificial intelligence and deep learning in ophthalmology — current applications and limitations.

SECTION 15 · CM

Community Ophthalmology

15

NPCBVI · VISION 2020 · Surveys · Screening · Rehabilitation · Disability

25 questions · 12 high-yield · 7 DNB / university

Always asked. Quote current programme names and figures, draw organograms, and end with a practical plan for your region.

Epidemiology & Surveys

CM 1	WHO definitions of blindness and visual impairment; predominant causes of blindness in India from national surveys, and national initiatives for their prevention. HIGH-YIELD
CM 2	Plan a survey for cataract blindness — incidence vs prevalence, sample size; RAAB methodology. DNB / UNIV
CM 3	National Blindness and Visual Impairment Survey (2015-19) — key findings; WHO World Report on Vision.

National Programmes

CM 4	VISION 2020: The Right to Sight — objectives, diseases covered, strategies and organisation; its status in India. HIGH-YIELD
CM 5	Discuss NPCB, with special reference to combating corneal blindness. HIGH-YIELD
CM 6	Constitution and functions of the District Health Society (District Blindness Control Society). DNB / UNIV
CM 7	Strategies to control cataract blindness in India; cataract surgical rate and visual outcome; plan to eliminate the cataract backlog in your state. HIGH-YIELD
CM 8	Eye camp approach vs reach-in approach for cataract in the community. HIGH-YIELD
CM 9	Primary eye care — role of PHC, health assistant and NGOs; organisation and problems of eye camps. DNB / UNIV
CM 10	Discuss visual aids and their relevance to the national programme for control of blindness.
CM 11	NPCBVI — current structure, targets and the shift to comprehensive eye care; eREC and eCSC indicators.

Childhood Blindness & Nutrition

CM 12	Causes of childhood blindness and strategies to decrease them; prevention of childhood eye disorders and the role of school health programmes. HIGH-YIELD
CM 13	How would you organise an effective eye screening programme in a semi-urban school, with special reference to refractive errors? HIGH-YIELD
CM 14	Discuss viable strategies to reduce amblyopia at the community level.
CM 15	Strategies for tackling major causes of visual impairment in children under NPCB. HIGH-YIELD
CM 16	Vitamin A deficiency — xerophthalmia, keratomalacia, management of a malnourished child with xerophthalmia, and prophylaxis programmes. HIGH-YIELD

Diabetes & Screening

CM 17	Design a suitable community screening programme for diabetic retinopathy and discuss strategies to reduce ocular morbidity in diabetics. HIGH-YIELD

Rehabilitation & Disability

CM 18	Discuss the various approaches to rehabilitation of the visually handicapped, including problems in visually handicapped children. HIGH-YIELD
CM 19	Critically evaluate visual disability categories and percentages based on severity as per current norms. HIGH-YIELD
CM 20	Recent advances in the alleviation of irreversible blindness — low vision aids, stem cells and retinal implants.
CM 21	Rights of Persons with Disabilities Act 2016 and the current visual disability certification guidelines.

Research Methodology & Biostatistics

CM 22	Study designs — observational and prospective studies; randomised controlled trials and randomisation. DNB / UNIV
CM 23	Bias and confounding — sources and methods to avoid them (e.g. in a glaucoma drug trial). DNB / UNIV
CM 24	Sensitivity, specificity, positive and negative predictive value. DNB / UNIV
CM 25	Measures of central tendency and variability; standard deviation, confidence interval and tests of significance. DNB / UNIV

Best wishes for your examinations

Revise high-yield questions first, practise timed answers with diagrams, and keep your answers updated with new classifications, trials and guidelines.

Question sources: Dr. R.P. Centre for Ophthalmic Sciences (AIIMS) MD theory papers; DNB Ophthalmology papers; university MD/MS ophthalmology papers (MUHS, KLE, RGUHS, BHU, Dibrugarh, Assam).