

Competency Based Questions and Answers in **Ophthalmology** for Third MBBS Professional Examination

The main objective of this book is to introduce to the undergraduate students the subject of ophthalmology in a simplified manner in the form of questions and answers. The new CBME curriculum brings with it a finely structured method of learning both theory and practical aspects of ophthalmology. Also, the upcoming pattern of evaluation is another overwhelming change that a student must gear up for NEXT. Keeping these two new developments in mind, the questions are framed using Bloom's taxonomy verbs and the answers are written in a structured format using bulleted points to ease learning and memorizing.

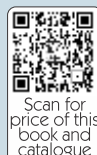
Salient Features

- Questions and MCQs have been framed as per the CBME guidelines
- Contents have been arranged as per the competencies set under the CBME guidelines, including both theory and practical components
- Conventional long essays, short essays, short answers, multiple choice questions of various types, and 'fill in the blanks' have been included for broader experience of the student
- Many image-based (both clinical and investigation) questions have been added
- All answers are heavily supported by numerous diagrams and flowcharts
- Some topics that were excluded under a separate heading for overall understanding of ophthalmology

Madhurima K Nayak MS, DNB is currently Consultant Ophthalmologist, Yenepoya Speciality Hospital, Mangaluru, Karnataka. She did her MBBS and MS in ophthalmology from Kasturba Medical College, Manipal University, Mangaluru, in 2011 and 2014 respectively. She secured DNB from the National Board of Examinations in Medical Sciences in 2015. She worked in the same institution as a senior resident for 2 years during which she was actively involved in academic activities. She has a special interest in neuro-ophthalmology and uveitis. She has to her credit around 30 papers published in national and international journals. She has co-authored *Competency Based Questions and Answers in Physiology*.



CBS Publishers & Distributors Pvt Ltd
4819/XI, Prahlad Street, 24 Ansari Road, Daryaganj, New Delhi 110 002, India
E-mail: delhi@cbspd.com, customercare@cbspd.com; Website: www.cbspd.com
New Delhi | Bengaluru | Chennai | Kochi | Kolkata | Lucknow | Mumbai
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SUSHRUTHA
Academy



Competency Based Questions and Answers in **Ophthalmology**

for Third MBBS Professional Examination

Compiled and designed as per
Competency Based Undergraduate Curriculum for the Indian Medical Graduate
prescribed by Medical Council of India

- 64 Long Essays
- 343 Short Essays
- 385 Short Answers
- 305 MCQs

Madhurima K Nayak
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Details of the Number of Questions and MCQs Included as per the Competency

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			<i>Qs and As</i>	<i>MCQs</i>	<i>Fill in the Blanks</i>
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2	Lids and Adnexa, Orbit	OP 2.1–2.8	51–98	482–488	
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Details of the Number of Questions and MCQs Included as per the Competency

S. No.	Competency No.	Competency Details	Long Essays	Short Essays	Short Answers	MCQs
1. Visual Acuity Assessment						
1	OP1.1	Describe the physiology of vision	1	6	9	5
2	OP1.2	Define, classify, and describe the types and methods of correcting refractive errors	4	9	14	9
3	OP1.3	Demonstrate the steps in performing the visual acuity assessment for distance vision, near vision, colour vision, the pin hole test and the menace and blink reflexes	—	3	9	6
4	OP1.4	Enumerate the indications and describe the principles of refractive surgery	1	4	8	6
5	OP1.5	Define, enumerate the types and the mechanism by which strabismus leads to amblyopia	—	4	5	5
		OP1 Miscellaneous	—	2	3	3
2. Lids and Adnexa, Orbit						
6	OP2.1	Enumerate the causes, describe and discuss the aetiology, clinical presentations and diagnostic features of common conditions of the lid and adnexa including Hordeolum externum/internum, blepharitis, preseptal cellulitis, dacryocystitis, hemangioma, dermoid, ptosis, entropion, lid lag, lagophthalmos	3	13	9	10
7	OP2.2	Demonstrate the symptoms and clinical signs of conditions enumerated in OP2.1	—	2	3	5
8	OP2.3	Demonstrate under supervision clinical procedures performed in the lid including: Bell's phenomenon, assessment of entropion/ectropion, perform the regurgitation test of lacrimal sac. Massage technique in cong. dacryocystitis, and trichiatic cilia removal by epilation	—	—	3	6
9	OP2.4	Describe the aetiology, clinical presentation. Discuss the complications and management of orbital cellulitis	1	1	7	5

S. No.	Competency No.	Competency Details	Long Essays	Short Essays	Short Answers	MCQs
10	OP2.5	Describe the clinical features on ocular examination and management of a patient with cavernous sinus thrombosis	—	3	4	3
11	OP2.6	Enumerate the causes and describe the differentiating features, and clinical features and management of proptosis	2	5	5	6
12	OP2.7	Classify the various types of orbital tumours. Differentiate the symptoms and signs of the presentation of various types of ocular tumours	—	—	6	3
13	OP2.8	List the investigations helpful in diagnosis of orbital tumors. Enumerate the indications for appropriate referral	—	2	2	5
	OP2 Miscellaneous		—	4	6	4
3. Conjunctiva						
14	OP3.1	Elicit document and present an appropriate history in a patient presenting with a “red eye” including congestion, discharge, pain	—	2	—	4
15	OP3.2	Demonstrate document and present the correct method of examination of a “red eye” including vision assessment, corneal lustre, pupil abnormality, ciliary tenderness	—	1	5	3
16	OP3.3	Describe the aetiology, pathophysiology, ocular features, differential diagnosis, complications and management of various causes of conjunctivitis	1	4	2	5
17	OP3.4	Describe the aetiology, pathophysiology, ocular features, differential diagnosis, complications and management of trachoma.	2	3	6	5
18	OP3.5	Describe the aetiology, pathophysiology, ocular features, differential diagnosis, complications and management of vernal catarrh	1	8	5	5
19	OP3.6	Describe the aetiology, pathophysiology, ocular features, differential diagnosis, complications and management of pterygium	1	1	7	4
20	OP3.7	Describe the aetiology, pathophysiology, ocular features, differential diagnosis, complications and management of symblepharon	—	1	3	5

S. No.	Competency No.	Competency Details	Long Essays	Short Essays	Short Answers	MCQs
21	OP3.8	Demonstrate correct technique of removal of foreign body from the eye in a simulated environment	—	2	4	3
22	OP3.9	Demonstrate the correct technique of instillation of eye drops in a simulated environment	—	2	—	4
		OP3 Miscellaneous	—	3	2	—
4. Corneas						
23	OP4.1	Enumerate, describe and discuss the types and causes of corneal ulceration	2	11	8	7
24	OP4.2	Enumerate and discuss the differential diagnosis of infective keratitis	2	12	3	5
25	OP4.3	Enumerate the causes of corneal edema	2	3	2	5
26	OP4.4	Enumerate the causes and discuss the management of dry eye	1	3	5	6
27	OP4.5	Enumerate the causes of corneal blindness	—	3	6	4
28	OP4.6	Enumerate the indications and the types of keratoplasty	—	11	7	5
29	OP4.7	Enumerate the indications and describe the methods of tarsorrhaphy	—	2	—	3
30	OP4.8	Demonstrate technique of removal of foreign body in the cornea in a simulated environment	—	2	—	2
31	OP4.9	Describe and discuss the importance and protocols involved in eye donation and eye banking	—	0	1	5
32	OP4.10	Counsel patients and family about eye donation in a simulated environment	1	7	17	3
		Miscellaneous	1	—	—	
5. Sclera						
33	OP5.1	Define, enumerate and describe the aetiology, associated systemic conditions, clinical features complications indications for referral and management of episcleritis	—	2	1	3
34	OP5.2	Define, enumerate and describe the aetiology, associated systemic conditions, clinical features, complications, indications for referral and management of scleritis	1	3	4	5

S. No.	Competency No.	Competency Details	Long Essays	Short Essays	Short Answers	MCQs
6. Iris and Anterior Chamber						
35	OP6.1	Describe clinical signs of intraocular inflammation and enumerate the features that distinguish granulomatous from non-granulomatous inflammation. Identify acute iridocyclitis from chronic condition	3	10	6	5
36	OP6.2	Identify and distinguish acute iridocyclitis from chronic iridocyclitis	—	1	3	4
37	OP6.3	Enumerate systemic conditions that can present as iridocyclitis and describe their ocular manifestations	—	7	5	5
38	OP6.4	Describe and distinguish hyphema and hypopyon	—	1	4	5
39	OP6.5	Describe and discuss the angle of the anterior chamber and its clinical correlates	3	2	2	5
40	OP6.6	Identify and demonstrate the clinical features and distinguish and diagnose common clinical conditions affecting the anterior chamber	—	—	1	5
41	OP6.7	Enumerate and discuss the aetiology, the clinical distinguishing features of various glaucomas associated with shallow and deep anterior chamber. Choose appropriate investigations and treatment for patients with above conditions.	1	23	18	5
42	OP6.8	Enumerate and choose the appropriate investigation for patients with conditions affecting the Uvea	—	2	3	5
43	OP6.9	Choose the correct local and systemic therapy for conditions of the anterior chamber and enumerate their indications, adverse events and interactions	—	6	4	5
44	OP6.10	Counsel patients with conditions of the iris and anterior chamber about their diagnosis, therapy and prognosis in an empathetic manner in a simulated environment	—	—	1	3
7. Lens						
45	OP7.1	Describe the surgical anatomy and the metabolism of the lens	—	6	3	5

S. No.	Competency No.	Competency Details	Long Essays	Short Essays	Short Answers	MCQs
46	OP7.2	Describe and discuss the aetio-pathogenesis, stages of maturation and complications of cataract	1	6	10	5
47	OP7.3	Demonstrate the correct technique of ocular examination in a patient with a cataract	—	2	2	5
48	OP7.4	Enumerate the types of cataract surgery and describe the steps, intra-operative and post-operative complications of extracapsular cataract extraction surgery	2	15	10	5
49	OP7.5	To participate in the team for cataract surgery	—	—	4	5
50	OP7.6	Administer informed consent and counsel patients for cataract surgery in a simulated environment	—	1	2	5
8. Retina and Optic Nerve						
51	OP8.1	Discuss the aetiology, pathology, clinical features and management of vascular occlusions of the retina	2	8	19	5
52	OP8.2	Enumerate the indications for laser therapy in the treatment of retinal diseases (including retinal detachment, retinal degenerations, diabetic retinopathy & hypertensive retinopathy)	—	4	4	5
53	OP8.3	Demonstrate the correct technique of a fundus examination and describe and distinguish the fundoscopic features in a normal condition and in conditions causing an abnormal retinal exam	—	3	16	5
54	OP8.4	Enumerate and discuss treatment modalities in management of diseases of the retina	8	26	24	8
55	OP8.5	Describe and discuss the correlative anatomy, aetiology, clinical manifestations, diagnostic tests, imaging and management of diseases of the optic nerve and visual pathway	11	25	24	8
		OP8 Miscellaneous	—	7	5	—
9. Miscellaneous						
56	OP9.1	Demonstrate the correct technique to examine extra ocular movements (Unocular and Binocular)	—	3	2	5

S. No.	Competency No.	Competency Details	Long Essays	Short Essays	Short Answers	MCQs
57	OP9.2	Classify, enumerate the types, methods of diagnosis and indications for referral in a patient with heterotropia/strabismus	—	10	14	5
58	OP9.3	Describe the role of refractive error correction in a patient with headache and enumerate the indications for referral	—	2	4	4
59	OP9.4	Enumerate, describe and discuss the causes of avoidable blindness and the National Programs for Control of Blindness (including vision 2020)	1	2	—	4
60	OP9.5	Describe the evaluation and enumerate the steps involved in the stabilisation, initial management and indication for referral in a patient with ocular injury	4	18	12	7
61		Miscellaneous	—	2	4	—
Total content			64	343	385	305
<i>Total number of Fill in the Blanks: 217</i>						