

**OPHTHALMOLOGY**

**PAPER – I**

Time : 3 hours

Max. Marks : 100

OPH/D/12/26/I

**Attempt all questions in order.  
Each question carries 10 marks.**

1. Describe briefly anatomy of choroid. Discuss the developmental basis of choroidal coloboma. Classify types of choroidal colobomas. 3+5+2
2. Classify fungal infections of the eye. Discuss in brief the presentation, diagnosis and specific management of fungal keratitis. 2+(3+2+3)
3. Give various milestones in vision development in a child. Enumerate four important tests for visual activity testing in preverbal children and children between 3-6 years with one merit and demerit of each test. 2+(2+2+2+2)
4. Describe in brief four clinical uses of prisms in ophthalmology. What are Fresnel prisms and mention one important application of these types of prisms? Give principle of induction of prismatic effect through spectacle lens. 4+3+3
5. Describe the etiopathogenesis and histopathology of ocular surface squamous neoplasia (OSSN). Write briefly on the use of anti-metabolites in the management of OSSN. (2+4)+4
6. Write short note on lens development, anatomy, lens sutures and factors affecting lens transparency. 2+3+2+3
7. A patient who sustained corneo-scleral perforation in road traffic accident was admitted and repair was done. 3 days after the surgery he complained of photophobia and blurry vision in other eye. What is your diagnosis? How will you manage it? What are the histopathological findings expected in this case? 2+4+4
8. Discuss the pharmacology, indications for use and adverse effects of botulinum toxins in Ophthalmology. 2+4+4
9. Enumerate the routes of drug delivery in eye. Mention four commonly used intravitreal drugs with their dosages and indications. 2+8
10. Discuss the components of tear film and functions of each layer. Give Lemp's classification of dry eye syndrome. (3+3)+4

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FINAL EXAM  
DECEMBER 2012

NATIONAL BOARD OF EXAMINATIONS

OPHTHALMOLOGY

PAPER – II

Time : 3 hours  
Max. Marks : 100

OPH/D/12/26/II

Attempt all questions in order.  
Each question carries 10 marks.

1. Discuss the pre-operative assessment of entropion. Briefly discuss the surgical options for the correction of involuntal entropion. 3+7
2. Discuss briefly various approaches in orbital surgery with specific indications in each approach. Enumerate four important complications of orbital surgery. 8+2
3. Write the definition of blindness as per WHO standards. Enumerate important causes of blindness as per 4 important surveys in India. 2+8
4. Discuss endophthalmitis-vitreotomy study with respect to aim, design and outcomes. 3+3+4
5. Discuss the causes and presentation of pterygium. How will you manage it? 3+3+4
6. Discuss pathogenesis, clinical features, diagnosis, differential diagnosis and management of intermediate uveitis. 2+2+2+2+2
7. What is capsular block syndrome? Classify capsular block syndrome with respect to early, intra-operative and late causes. How are they avoided and/or managed? 2+4+4
8. What are artificial drainage shunts? Write briefly about various drainage devices. Give indications and complications of these devices. 1+6+3
9. Define clinically significant macular edema, high risk PDR and management of these conditions. 2+2+6
10. What is microtropia? Discuss the types and clinical features of microtropia. 2+(4+4)

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**OPHTHALMOLOGY**

**PAPER – III**

**Time : 3 hours**  
**Max. Marks : 100**

**OPH/D/12/26/III**

**Attempt all questions in order.**  
**Each question carries 10 marks.**

1. Describe the clinical features and management of partially accommodative esotropia. 5+5
2. Write the causes, clinical features, diagnosis and surgical management of macular holes. 2+2+2+4
3. Describe the clinical features and clinicopathologic correlation of age related macular degeneration (ARMD). Describe the role of various modalities in the management of ARMD. (2+3)+5
4. Describe the clinical characteristics and staging of retinopathy of prematurity (ROP). Write the criteria for its screening with management principles. (2+2)+(3+3)
5. Define gaze palsy. Discuss various forms of gaze palsy with their localization value. 2+(6+2)
6. What are the commonly used phakic IOL in refractive surgery? What material are they made of? What are the indications of these lenses? 3+4+3
7. List the various prostaglandin analogues available in the management of glaucoma. Give their mechanism of action, dose schedule and side effects. 3+(2+2+3)
8. Give the international classification of retinoblastoma. Discuss the management of retinoblastoma with recent advances in detail. 3+7
9. Discuss the clinical features, diagnosis and management of acanthamoeba keratitis. 2+4+4
10. What are the minimum diagnostic criteria for Primary Open Angle Glaucoma (POAG)? Give severity classification of POAG with concept of target pressure? 3+(3+4)

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OPHTHALMOLOGY

PAPER – IV

Time : 3 hours  
Max. Marks : 100

OPH/D/12/26/IV

Attempt all questions in order.  
Each question carries 10 marks.

1. Describe the applied anatomy of oculomotor nerve with the help of a diagram. Give causes of 3<sup>rd</sup> nerve palsy with treatment outline. 3+(4+3)
2. Write briefly about UBM and OCT in anterior segment diagnostics with potential limitations and clinical applications. 5+5
3. Discuss the causes of unilateral cupping of disc. 10
4. What is "Reverse pupillary block glaucoma"? Give the clinical appearance, investigations and management of this glaucoma. 2+(4+2+2)
5. Discuss the principles of contrast sensitivity. Give various methods of contrast sensitivity testing and its role in ocular disorders. 2+(2+6)
6. What are the surgical spaces of the orbit? Compare and contrast ultrasonography Vs CT scan for orbital disease. 5+5
7. What is the role of laser in cataract surgery? Discuss its advantages with respect to conventional phaco-emulsification. 5+5
8. What are multifocal IOL's and give principle of various types of multifocal IOL's. Give advantages and disadvantages of these IOL's. 3+(4+3)
9. Discuss clinical features and diagnostic tests to differentiate between retinoschisis and retinal detachment. 5+5
10. List various aberrations of the eye. What are higher order aberrations and give basic principle of WF related refractive surgery? 5+(3+2)

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