

**All India Institute of Medical Science**

MD Ophthalmology

Time: 3 hours Max. Marks: 100

Attempt all the questions briefly with labeled diagrams wherever possible

**MD (Ophthalmology)  
May 2007 Examination  
Paper I**

- Q1. Discuss the mechanisms of accommodation of the eye. Describe the various methods of assessment of the anomalies of accommodation. 20
- Q2. Briefly discuss disorders exhibiting developmental anomalies of the angle. Describe the stages of development of the angle structures & aqueous outflow channels. 20
- Q3. Describe briefly the origin, insertions and actions of the extra ocular muscles and discuss the functional basis of the various restrictive squints. 20
- Q4. Write short notes on: (10 x 4)
- Aspheric lens
  - Corneal Topography
  - Applied anatomy of the III cranial nerve nucleus.
  - Subjective verification of refraction

**MD (Ophthalmology)  
May 2007 Examination  
Paper II**

- Q1. Discuss the clinical picture, diagnosis and current approach to the management of fungal keratitis.
- Q2. Discuss the differential diagnosis and management of bilateral pan-uveitis.
- Q3. Discuss the current trends in the management of CSR. 20
- Q4. Write short notes on: (10 x 4)
- Anti VEGF drugs.
  - Prostaglandins in glaucoma
  - Ocular Toxoplasmosis
  - Nonsurgical management of esotropia

**MD (Ophthalmology)**  
**May 2007 Examination**  
**Paper III**

- Q1. Outline the management of a patient with recalcitrant diabetic macular oedema. 20
- Q2. Describe in detail the management of a case of unilateral axial proptosis in an adult. 20
- Q3. Describe critically the management of postoperative shallow anterior chamber following filtering surgery. 20
- Q4. Write short notes on: (10 x 4)
- Bimanual phacoemulsification
  - Faden operation
  - Intra-lenticular foreign body
  - Traumatic vitreous haemorrhage

**MD (Ophthalmology)**  
**May 2007 Examination**  
**Paper IV**

- Q1. Design a suitable screening programme for diabetic retinopathy at the community level and its importance in the light of recent advances in its management. 20
- Q2. Discuss the various approaches to rehabilitation of the visually handicapped. 20
- Q3. Outline the strategies to reduce the incidence of various ocular injuries in the community. 20
- Q4. Write short notes on: (10 x 4)
- Phacomatoses
  - Ocular sarcoidosis
  - Acquired ptosis
  - Botulinum toxin in ophthalmology

**MD (Ophthalmology)**  
**December 2007 Examination**  
**Paper I**

- Q1. Describe the development of the lens with respect to its clinical applications. 20
- Q2. Describe the visual perception and its evaluation. 20
- Q3. Describe the blood aqueous barrier. Discuss the formation and circulation of aqueous humour with special reference to various drugs acting on it. 20
- Q4. Clinically evaluate multifocals in clinical practice. 20
- Q5. Discuss the anatomical & physiological basis of binocular vision. 20

**MD (Ophthalmology)**  
**December 2007 Examination**  
**Paper II**

- Q1. Discuss amblyopia and the recent trends in its management. 20
- Q2. Detail your examination and management in a case of anisocoria. 20
- Q3. Discuss differential & management of unilateral orbital cellulitis. 20
- Q4. Write critical note on the role of genetics in important blinding disorders. 20
- Q5. Discuss verteporfin. 20

**MD (Ophthalmology)**  
**December 2007 Examination**  
**Paper III**

- Q1. Clinically evaluate the newer concepts in phacoemulsification including bimanual. 20
- Q2. Discuss closed angle glaucoma and the modalities available for its management. 20
- Q3. Describe peripheral corneal thinning disorders and their management. 20
- Q4. Evaluate in detail the surgical management and your criteria for decision making in a case of congenital ptosis. 20
- Q5. Discuss phacolytic glaucoma and its management. 20

**MD (Ophthalmology)**  
**December 2007 Examination**  
**Paper IV**

- Q1. Discuss in detail about reach-in programmes for management of cataracts in the community. 20
- Q2. Clinically evaluate the visually impaired disability categories and the disability percentages based on severity as per norms. 20
- Q3. Detail the selection criteria for your own ophthalmoscopes and the care you should exercise for their maintenance. 20
- Q4. Write a note on the ocular aspects of hypertension with special reference to pregnancy induced. 20
- Q5. Discuss visual aids and their relevance to our national programme for control of blindness and Vision 2020 in India. 20

**MD (Ophthalmology)**  
**May 2008 Examination**  
**Paper I**

- Q1. Describe subjective verification of refraction, including the role of autorefractors. 20
- Q2. Discuss tear films and dynamics in diseases & medications and their evaluations. 20
- Q3. Describe the human optic chiasma and its role in health and disease. 20
- Q4. Describe the structures and functions of the pigment epithelium throughout the eye .20
- Q5. Discuss the selection and care of your ophthalmoscope. 20

**MD (Ophthalmology)**  
**May 2008 Examination**  
**Paper II**

- Q1. Outline the dystrophies and degenerations of the eye. 20
- Q2. Detail your examination, investigations and management in a case of subluxated lens in a 6-year old boy. 20
- Q3. Discuss the differential diagnosis and management of unilateral ptosis. 20
- Q4. Write a critical note on the advancements in the management of glaucoma. 20
- Q5. Discuss the recent classifications of retinoblastomas from clinical and pathological viewpoints, with special reference to prognosis and management. 20

**MD (Ophthalmology)**  
**May 2008 Examination**  
**Paper III**

- Q1. Clinically evaluate the management of developmental cataract.20
- Q2. Discuss orbital fractures in relation to structural anatomy. 20
- Q3. Correlate the management of malignant glaucoma to its pathogenesis.20
- Q4. Critically discuss the recent advances in keratorefractive procedures. 20
- Q5. Outline the differential diagnosis and management of watering of eyes in children. 20

**MD (Ophthalmology)**  
**May 2008 Examination**  
**Paper IV**

- Q1. Discuss your strategies for tackling major causes of visual impairment in the community with special reference to children, under the National Programme for Control of Blindness and Vision 2020 in India. 20
- Q2. Evaluate the rational management of endophthalmitis, including a critical note on therapy induced problems.
- Q3. Discuss juvenile systemic disorders affecting the eye. 20
- Q4. Write notes on the ocular aspects of a (a) myasthenia and (b) Multiple sclerosis 20
- Q5. Discuss suprachoroidal and expulsive haemorrhages and their management. 20

**MD (Ophthalmology)**  
**December 2008 Examination**  
**Paper I**

- Q1. Discuss the structural and dysfunctional aspects of lacrimal pump mechanism. 20
- Q2. Along with the details of the areas visualized, discuss the optics and applications of the various viewing systems used in (a) Specular Microscopy (b) Vitrectomy 20
- Q3. Describe the orbital spaces, with their significances in investigations and salient disorders. 20
- Q4. Discuss the development and abnormalities of the anterior chamber angle, with their applications to functions in health and disease.
- Q5. How would you evaluate the integrity of the visual pathways? Discuss briefly about localization of their lesions in the context of neuro-ophthalmology. 20

**MD (Ophthalmology)**  
**December 2008 Examination**  
**Paper II**

- Q1. Discuss the intricacies in the diagnosis and best management of conjunctivitis. 20
- Q2. What are the prognostic significances of the various manifestations of ocular trauma on globe and adnexae, as applicable to a patient in your casualty? 20
- Q3. Discuss lacrimal gland lesions from standpoints of their differential diagnosis and management. 20
- Q4. Discuss the changing scenario in diverse refractive procedures and measures. 20
- Q5. Evaluate the role of various anti-VEGF agents in different ocular pathologies. 20

**MD (Ophthalmology)**  
**December 2008 Examination**  
**Paper III**

- Q1. Clinically evaluate the classification of blepharoptosis and its relevance to management and complications. 20
- Q2. Discuss the role of stem cells with special reference to ophthalmology. 20
- Q3. Describe the technique and applications of amniotic membrane grafting in ocular disorders. 20
- Q4. Critically discuss the pros and cons of accommodative and newer IOLs in ophthalmic disorders. 20
- Q5. Discuss the iatrogenic disorders of the eye. 20

**MD (Ophthalmology)**  
**December 2008 Examination**  
**Paper IV**

- Q1. Discuss the salient indications and hazards of radiation to the eye. 20
- Q2. Critically evaluate nutritional factors causing ocular morbidity. 20
- Q3. How would you organize an upgraded residency training programme in ophthalmology in your institution? 20
- Q4. What are the ocular manifestations of HIV and their management? 20
- Q5. Evaluate strategies to reduce childhood blindness in the vision 2020 programme. 20