

--	--	--	--	--	--	--	--	--	--	--

**MANIPAL UNIVERSITY****MS (OPHTHALMOLOGY) DEGREE EXAMINATION – OCTOBER 2013****SUBJECT: PAPER I: BASIC SCIENCES RELATED TO OPHTHALMOLOGY**

Monday, October 07, 2013

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

✍ **Answer ALL the questions. Draw neat, labeled diagrams wherever necessary.**

1. Mention factors for maintaining corneal transparency.
2. Mention layers of retina and its blood supply.
3. Discuss aqueous humour outflow.
4. Discuss microscopic features of Retinoblastoma.
5. Outline blood supply of optic nerve head.
6. Classify astigmatism with a labeled diagram of Sturm's conoid.
7. Mention types and uses of contact lenses.
8. Discuss anti- VEGF drugs.
9. Discuss optics of indirect ophthalmoscope.
10. Discuss use of Fluorescein in ophthalmology.

(10×10 = 100 marks)



**MANIPAL UNIVERSITY**  
**MS (OPHTHALMOLOGY) DEGREE EXAMINATION – OCTOBER 2013**  
**SUBJECT: PAPER II: CLINICAL OPHTHALMOLOGY**

Tuesday, October 08, 2013

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

☞ **Answer ALL the questions. Draw neat, labeled diagrams wherever necessary.**

1. Discuss various techniques for evaluation of optic nerve head.
2. Discuss plan for “Vision 2020: The right to sight initiative in India”.
3. Discuss principle of B-scan. Add a note on its role in diagnosis of retinal detachment in comparison with posterior vitreous detachment.
4. Discuss low vision aids.
5. Describe the clinical features and management of Herpes Zoster Ophthalmicus.
6. Discuss the motor evaluation of a strabismus patient.
7. Describe the aetiopathogenesis and management of Inflammatory Optic Neuritis and Neuroretinitis.
8. Discuss clinical features and management of Fuchs uveitis syndrome.
9. Discuss management of chemical injuries to eye.
10. Describe various field defects associated with post chiasmal lesions.

(10×10 = 100 marks)



**MANIPAL UNIVERSITY****MS (OPHTHALMOLOGY) DEGREE EXAMINATION – OCTOBER 2013****SUBJECT: PAPER III: PRINCIPLES AND PRACTICE OF SURGERY OF EYE AND RELATED TOPICS**

Wednesday, October 09, 2013

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

**Answer ALL the questions. Draw diagrams wherever necessary.**

1. Discuss the surgical correction of blepharoptosis.
2. Enumerate the steps of dacryocystorhinostomy. Add a note on the contraindications of dacryocystorhinostomy.
3. Discuss the options for preventing recurrence after pterygium excision.
4. Enumerate the indications of penetrating keratoplasty. Describe the causes for failure of the graft.
5. Discuss the surgical management of congenital glaucoma.
6. Classify and discuss the various types of iridectomy.
7. Describe the principle of Nd YAG laser with its role in ophthalmology. Add a note on the treatment of after cataract.
8. What are the principles of primary repair of a corneal tear?
9. Discuss exenteration with emphasis on indications, steps of surgery and post operative rehabilitation.
10. Explain pneumoretinopexy.

(10×10 = 100 marks)



**MANIPAL UNIVERSITY**  
**MS (OPHTHALMOLOGY) DEGREE EXAMINATION – OCTOBER 2013**  
**SUBJECT: PAPER IV: RECENT ADVANCES IN OPHTHALMOLOGY**

Thursday, October 10, 2013

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

✍ **Answer ALL the questions. Draw diagrams wherever necessary.**

1. Write a note on mechanism of action of anti VEGF (vascular endothelial growth factor) agents and indications for use.
2. Discuss briefly INTACS (Intra stromal corneal ring fragments) in management of keratoconus.
3. **Write short notes on:**
  - 3A. Travoprost
  - 3B. Difluprednate
4. How do you calculate IOL power after refractive surgery?
5. Indications for use of botulinum toxin in Ophthalmology.
6. Discuss briefly Trans conjunctival vitrectomy.
7. Write a brief note on stem cells.
8. Discuss indications and technique of ICL (implantable collamer lens or implantable contact lens)
9. What is aqueous misdirection syndrome?
10. Principles of management of a blow out fracture of the orbit.

(10×10 = 100 marks)

