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**MANIPAL ACADEMY OF HIGHER EDUCATION**  
**MS (OPHTHALMOLOGY) DEGREE EXAMINATION – APRIL 2018**  
**SUBJECT: PAPER I: BASIC SCIENCES RELATED TO OPHTHALMOLOGY**

Monday, April 02, 2018

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

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✍ **Answer ALL the questions with the help of diagrams wherever necessary.**

✍ **Essay Questions.**

1. Write in detail about the anatomy of retina.

(15 marks)

2. Discuss accommodation reflex.

(15 marks)

3. **Write briefly on:**

3A. Blood supply of the visual pathway

3B. Role of antihistamines in ophthalmology

3C. Galactosemia

3D. Histopathology of trachoma

3E. Wald's visual cycle

3F. Streak retinoscope

3G. Snellen's chart

3H. Vitreous substitutes

3I. Dendritic keratitis

3J. Elisa test

(7 marks × 10 = 70 marks)



Reg. No.

**MANIPAL ACADEMY OF HIGHER EDUCATION**  
**MS (OPHTHALMOLOGY) DEGREE EXAMINATION – APRIL 2018**  
**SUBJECT: PAPER II: CLINICAL OPHTHALMOLOGY**

Tuesday, April 03, 2018

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

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

✍ **Long Essay:**

1. Discuss the clinical features and management of Herpes zoster ophthalmicus. (15 marks)
2. Discuss the management of chemical burns of the eye. (15 marks)

3. **Short Essay questions:**

- 3A. Deep anterior lamellar keratoplasty  
3B. Toxocara retino choroiditis  
3C. Posterior scleritis  
3D. Glaucomatocyclitic crisis  
3E. Intermittent exotropia  
3F. Prostaglandin analogues in ophthalmology  
3G. Management of central retinal vein occlusion  
3H. Orbital mucormycosis  
3I. Siderosis bulbi  
3J. Brown's syndrome

(7 marks × 10 = 70 marks)



**MANIPAL ACADEMY OF HIGHER EDUCATION**  
**MS (OPHTHALMOLOGY) DEGREE EXAMINATION – APRIL 2018**

**SUBJECT: PAPER III: PRINCIPLES AND PRACTICE OF SURGERY OF EYE AND RELATED TOPICS**

Wednesday, April 04, 2018

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

✍ **Answer ALL the questions.**

✍ **Draw neat and labeled diagram wherever necessary.**

✍ **Essay Questions:**

1. Discuss the causes, clinical features and management of subluxated cataractous lens.  
(15 marks)

2. Discuss the causes and management of shallow anterior chamber following trabeculectomy.  
(15 marks)

3. **Short answer questions:**

3A. Discuss the indication, types and steps of exenteration.

3B. Discuss briefly the intracameral drugs used during cataract surgery.

3C. Describe Microphacoemulsification (microphaco).

3D. Discuss technique, indications and advantages of toric Intra ocular lens (IOL).

3E. Discuss the indications for penetrating keratoplasty. Add a note on use of femtosecond laser in keratoplasty.

3F. Discuss the international classification of retinoblastoma.

3G. Discuss the surgical correction of severe ptosis.

3H. Describe your approach to a patient with binocular diplopia.

3I. Discuss the ocular features of systemic lupus erythematosus (SLE).

3J. Discuss the causes of ring scotoma.

(7 marks × 10 = 70 marks)



**MANIPAL ACADEMY OF HIGHER EDUCATION**  
**MS (OPHTHALMOLOGY) DEGREE EXAMINATION – APRIL 2018**  
**SUBJECT: PAPER IV: RECENT ADVANCES IN OPHTHALMOLOGY**

Thursday, April 05, 2018

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

✍ **Answer ALL the questions.**

✍ **Essay Questions:**

1. What is the principle of Optical Coherence Tomography? What are the types of OCTs available? What are the diagnostic and therapeutic uses of OCT in management of macula lesions?

(15 marks)

2. What are femtosecond LASERS? What are the current indications of femtosecond lasers?

(15 marks)

3. **Short answer questions:**

3A. Discuss role of anti VEGF (Vascular Endothelial growth factor) in ocular diseases.

3B. Discuss newer treatment options in keratoconus.

3C. Discuss the newer intra ocular lenses.

3D. Discuss the recent advances in the management of paediatric cataract.

3E. Discuss the newer concepts in the treatment of dry eye syndrome.

3F. Discuss releasable sutures.

3G. Discuss treatment modalities for congenital ptosis.

3H. Discuss Indocyanine Green Angiography.

3I. Discuss complications in endothelial keratoplasty.

3J. Discuss newer concepts in the treatment of open angle glaucoma.

(7 marks × 10 = 70 marks)

