

## MANIPAL UNIVERSITY

## MS (OPHTHALMOLOGY) DEGREE EXAMINATION – APRIL 2014

## SUBJECT: PAPER I: BASIC SCIENCES RELATED TO OPHTHALMOLOGY

Tuesday, April 01, 2014

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

✍ Answer ALL the questions.

✍ Draw neat, labeled diagrams wherever necessary.

Health Sciences Library

✍ Long Essay.

1. Describe the Anatomy and Development of Angle of Anterior chamber. Add a note on the different methods of grading of Anterior Chamber Angle by Gonioscopy.

(15 marks)

2. Discuss the factors responsible for Corneal transparency. Add a note on Corneal wound healing.

(15 marks)

3. Write short notes on :

3A. Tests for Retinal Correspondence

3B. Olopatadine hydrochloride

3C. Prisms in Ophthalmology

3D. Development of the Lens and Rubella cataract

3E. Rod Phototransduction

3F. Genetics of Retinoblastoma

3G. Jackson Cross-Cylinder

3H. Panum's Area

3I. Gram Stain

3J. Histopathology of Choroidal Melanoma and its significance

(7×10 = 70 marks)



# MANIPAL UNIVERSITY

## MS (OPHTHALMOLOGY) DEGREE EXAMINATION – APRIL 2014

### SUBJECT: PAPER II: CLINICAL OPHTHALMOLOGY

Wednesday, April 02, 2014

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

✍ Answer ALL the questions.

✍ Draw neat, labeled diagrams wherever necessary.

Health Sciences Library

✍ Long Essays.

1. Discuss the predisposing factors, clinical features and management of an acute Rhegmatogenous Retinal Detachment.

(15 marks)

2. Discuss the patho-physiology, clinical features and management of acute Primary Angle Closure Glaucoma.

(15 marks)

3. Write short notes on:

3A. Discuss the clinical features and the management of Acanthamoeba Keratitis

3B. Discuss the grading and management of Alkali Burns to the eye

3C. Discuss the clinical features and management of Orbital Compartment Syndrome

3D. Ocular Toxoplasmosis

3E. Brown Syndrome (Superior Oblique tendon sheath syndrome)

3F. What is Amblyopia? Discuss the management principles of Strabismic Amblyopia

3G. Discuss the evaluation and management of Congenital Ptosis

3H. Eye Banking

3I. Vision 2020

3J. Ophthalmia Neonatorum

(7×10 = 70 marks)



**MANIPAL UNIVERSITY****MS (OPHTHALMOLOGY) DEGREE EXAMINATION – APRIL 2014****SUBJECT: PAPER III: PRINCIPLES AND PRACTICE OF SURGERY OF EYE AND RELATED TOPICS**

Thursday, April 03, 2014

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

✍ Answer ALL the questions.

✍ Draw neat and labeled diagram wherever necessary.

**Health Sciences Library**

✍ Long Essays.

1. Discuss the stages and management of proliferative vitreoretinopathy. Write a note on complications of using silicone oil in eye.

(15 marks)

2. Discuss the ocular manifestations of Acquired Immuno Deficiency Syndrome.

(15 marks)

3. Write short notes on :

3A. Discuss the various types of Intra ocular lenses and their advantages and disadvantages.

3B. Discuss briefly the indications and the steps of enucleation.

3C. Discuss the clinical features and management of subluxated lens.

3D. Discuss the management of hyphaema.

3E. Discuss the clinical features and management of pleomorphic adenoma of the lacrimal gland.

3F. Discuss the various surgical approaches to the orbit.

3G. Describe the various techniques of nucleo- fractis during phacoemulsification.

3H. Discuss the inheritance pattern, clinical features and management of retinitis pigmentosa.

3I. Discuss the uses of intra-operative Mitomycin-C in ocular surgeries.

3J. Discuss the cyclodestructive procedures.

(7×10 = 70 marks)



## MANIPAL UNIVERSITY

## MS (OPHTHALMOLOGY) DEGREE EXAMINATION – APRIL 2014

## SUBJECT: PAPER IV: RECENT ADVANCES IN OPHTHALMOLOGY

Friday, April 04, 2014

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

✍ Answer ALL the questions.

✍ Draw neat and labeled diagram wherever necessary.

Health Sciences Library

✍ Long Essays.

1. Discuss the recent advances in pars plana vitrectomy. Add a note on various dyes used in retinal surgeries.

(15 marks)

2. Discuss the various imaging modalities used in the management of glaucoma.

(15 marks)

✍ Write short notes on:

3A. Discuss the recent advances in the management of keratoconus.

3B. Discuss the recent advances in the management of dry eye.

3C. Discuss the principle and advantages of Dynamic contour tonometry.

3D. Discuss the various intra ocular lens (IOL) calculation formulae used in patients following refractive corneal surgeries.

3E. Discuss the recent advances in fundus angiography. Add a note on retcam.

3F. Discuss the role of Anti-Vascular Endothelial Growth Factor (VEGF) in posterior segment diseases.

3G. Discuss the use of femto second laser in various ocular surgeries.

3H. Discuss the principle and uses of pachymetry.

3I. Discuss the techniques and uses of intravitreal implants.

3J. Discuss the recent advances in the management of retinopathy of prematurity (ROP).

(7×10 = 70 marks)

