APRIL 2001

[KD 1565] Sub. Code : 3108

DIPLOMA IN OPHTHALMOLOGY EXAMINATION

(New Regulations)

Part I

OPHTHALMOLOGY INCLUDING MICROBIOLOGY, ANATOMY, PHYSIOLOGY AND PATHOLOGY OF THE EYE

Time : Three hours Maximum : 100 marks

Answer ALL questions

1. Describe the course of Trochlear nerve with its relations. (25)

2. Discuss factors which maintain corneal transparency (25)

3 Write short notes on (5 x 10 = 50)

(a) Tear film anatomy

(b) Autosomal recessive inheritance

(c) Colour blindness

(d) Ocular Toxoplasmosis

(e) Acyclovir

NOVEMBER 2001

[KE 1565] Sub. Code : 3108

DIPLOMA IN OPHTHALMOLOGY EXAMINATION.

(New Regulations)

Part I

OPHTHALMOLOGY INCLUDING MICROBIOLOGY ANATOMY PHYSIOLOGY AND PATHOLOGY OF THE EYE

Time : Three hours Maximum : 100 marks

Answer ALL questions.

1. Describe the anatomy of visual pathways and visual cortex. Mention localising signs for lesions of visual pathway. (25)

2. Discuss the mechanism of aqueous production and its drainage.

Mention various abnormalities seen in the angle of anterior chamber of Gonioscopy. (25)

3. Write briefly on : (5 × 10 = 50)

(a) Tests for colour vision.

(b) Anti fungal drugs.

(c) Tumours of Lacrymal gland.

(d) Fluorescein Angiography in macular lesions.

(e) Parasites in ophthalmology.

MARCH 2002

[KG 1565] Sub. Code : 3108

DIPLOMA IN OPHTHALMOLOGY EXAMINATION.

(New Regulations)

Part I

OPHTHALMOLOGY INCLUDING MICROBIOLOGY ANATOMY, PHYSIOLOGY AND PATHOLOGY OF THE EYE

Time : Three hours Maximum : 100 marks

Answer ALL questions.

1. Describe the anatomy of the optic nerve. Add a note on ophthalmoscopic features of normal optic disc. (25)

2. Describe the formation and circulation of aqueous humour. Add a note on maintenance of intraocular pressure. (25)

3. Write short notes on : (5 x 10 = 50)

(a) Blood retinal barrier.

(b) Cysticercus.

(c) Histopathology of endothelial graft rejection.

(d) Adeno viruses.

(e) Binocular single vision.

SEPTEMBER 2002

[KH 1565] **Sub. Code : 3108**

DIPLOMA IN OPHTHALMOLOGY EXAMINATION.

(New Regulations)

Part I

OPHTHALMOLOGY INCLUDING MICROBIOLOGY, ANATOMY, PHYSIOLOGY, AND PATHOLOGY OF THE EYE

Time : Three hours Maximum : 100 marks

Answer ALL questions.

1. Describe the anatomy of the retina with the help of a diagram. (25)

2. Describe the theories of colour vision. (25)

3 Write briefly on : (5 × 10 = 50)

(a) Cycloplegics in ophthalmology

(b) Immuno suppressive agents in ophthalmology

(c) Fungal corneal ulcer

(d) Herpes zoster and the eye

(e) Changes in the macula due to diabetes

APRIL 2003

[KI 1565] **Sub. Code : 3108**

DIPLOMA IN OPHTHALMOLOGY EXAMINATION.

(New Regulations)

Part I

OPHTHALMOLOGY INCLUDING MICROBIOLOGY, ANATOMY PHYSIOLOGY AND PATHOLOGY OF EYE

Time : Three hours Maximum : 100 marks

Answer ALL questions.

1. Describe the anatomy of the angle of anterior chamber and developmental anomalies associated with it. (25)

2. Discuss the factors responsible for maintenance of Intra–ocular pressure. (25)

3. Write short notes on : (5 × 10 = 50)

   (a) Orbital cellulitis

   (b) Keratic precipitates

   (c) Rossettes

   (d) Vitreous haemorrage

   (e) Atropine.

OCTOBER 2003

[KJ 1565] **Sub. Code : 3108**

DIPLOMA IN OPHTHALMOLOGY EXAMINATION.

(New Regulations)

Part I

OPHTHALMOLOGY INCLUDING MICROBIOLOGY, ANATOMY PHYSIOLOGY AND PATHOLOGY OF EYE

Time : Three hours — Maximum : 100 marks

Theory : Two hours and forty minutes — Theory : 80 marks

M.C.Q. : Twenty minutes — M.C.Q. : 20 marks

M.C.Q. must be answered **SEPARATELY** on the Answer Sheet provided as per the instructions on the first page of M.C.Q. Booklet.

Answer ALL questions.

Draw suitable diagrams wherever necessary.

Essay : (2 ×15 = 30)

1. Describe the blood supply of visual pathway with suitable diagrams.

2. Discuss the aetiopathology, diagnosis and management of chronic simple glaucoma.

3. Short notes : (10 × 5 = 50)

(1) The Riddoch phenomenon.

(2) Structures passing through superior orbital fissure.

(3) Antifungal drugs.

(4) Goblet cells.

(5) Acanthemoeba.

(6) Cilio–Retinal Artery.

(7) Pathology in Thyroid Myopathy.

(8) Latanoprost.

(9) Panum's Area.

(10) Tests for colour vision.

———

AUGUST 2004

[KL 1565] **Sub. Code : 3108**

DIPLOMA IN OPHTHALMOLOGY EXAMINATION.

(New Regulations)

Part I

OPHTHALMOLOGY INCLUDING MICROBIOLOGY, ANATOMY PHYSIOLOGY AND PATHOLOGY OF EYE

Time : Three hours — Maximum : 100 marks

Theory : Two hours and forty minutes — Theory : 80 marks

M.C.Q. : Twenty minutes — M.C.Q. : 20 marks

Answer ALL questions.

I. Essays. (2 × 15 = 30)

(1) Describe bony orbit, add a note on lateral orbitotomy.

(2) Describe the anatomy of the cornea, add a note on maintenance of corneal transparency and pathology of exposure keratitis.

II. Short notes on : (10 × 5 = 50)

(a) Cytomegalo virus

(b) Histopathology of retino blastoma

(c) Congenital optic disc anamoly

(d) Levator palpabrae superiors

(e) Dorzalomide

(f) Anatomy of the angle of the anterior chamber

(g) Rubella syndrome

(h) Cysticercosis

(i) Colobomas

(j) Anatomy of the lacrimal drainage system. Add a note on probing.

FEBRUARY 2005

[KM 1565] **Sub. Code : 3108**

DIPLOMA IN OPTHALMOLOGY EXAMINATION.

(New Regulations)

Part I

OPTHALMOLOGY INCLUDING MICROBIOLOGY, ANATOMY PHYSIOLOGY AND PATHOLOGY OF THE EYE

Time : Three hours — Maximum : 100 marks

Theory : Two hours and forty minutes — Theory : 80 marks

M.C.Q. : Twenty minutes — M.C.Q. : 20 marks

Answer ALL questions.

Draw suitable diagrams wherever necessary.

I. Essay questions : (2 × 15 = 30)

(1) Describe the Gonioscopic anatomy, clinical grading and surgical importance of angle of Anterior Chamber.

(2) What is leucocoria? Describe the aetiopathology, clinical feature of retinoblastoma.

II. Short notes : (10 × 5 = 50)

(a) Tear film.

(b) Cavernous sinus.

(c) MORAX-AXENFIELD BACILLUS.

(d) Scotoma.

(e) Antimetabolite.

(f) Macular function tests.

(g) Levator plapebrac superioris.

(h) Theories of color vision.

(i) E.R.G.

(j) Stemcell.

SEPTEMBER 2006

[KP 1565] **Sub. Code : 3108**

DIPLOMA IN OPHTHALMOLOGY EXAMINATION.

OPHTHALMOLOGY INCLUDING MICROBIOLOGY, ANATOMY, PHYSIOLOGY AND PATHOLOGY OF THE EYE

Time : Three hours Maximum : 100 marks

Theory : Two hours and Forty minutes Theory : 80 marks

M.C.Q. : Twenty minutes M.C.Q. : 20 marks

Answer ALL questions.

I. Essay questions :

(1) Describe the Anatomy of the Lacrimal drainage system. Explain the mechanism of drainage of tears and applied physiology of the tear film. (20)

(2) Discuss the ophthalmic manifestations of Varicella-Zoster Infection. (15)

(3) Describe the anatomy of angle of anterior chamber and its significance in Gonioscopy. (15)

II. Short notes : (6 × 5 = 30)

(a) Marcus—Gunn Jaw winking phenomenon

(b) Diplopia

(c) Histopathology of Retinoblastoma

(d) What are the causes of ptosis? How is it corrected?

(e) What is the physiological role of Blinking? What complications can absence of blinking procedure produce?

(f) Recent Advances in Medical management of Glaucoma.

MARCH 2006

[KO 1565] **Sub. Code : 3108**

DIPLOMA IN OPHTHALMOLOGY EXAMINATION.

OPHTHALMOLOGY INCLUDING MICROBIOLOGY, ANATOMY PHYSIOLOGY AND PATHOLOGY OF THE EYE

Time : Three hours Maximum : 100 marks

Theory : Two hours and forty minutes Theory : 80 marks

M.C.Q. : Twenty minutes M.C.Q. : 20 marks

Answer ALL questions.

Draw suitable diagrams wherever necessary.

I. Essay questions : (2 × 15 = 30)

(1) Describe the course of sixth cranial nerve.

(2) Describe the corneal physiology and mechanism of its transparency.

II. Short notes : (10 × 5 = 50)

(a) Polymerase chain reaction.

(b) Histopathology of malignant melanoma.

(c) Anatomy of angle of anterior chamber.

(d) AIDS virus.

(e) Tests for binocular vision.

(f) Abnormal pupillary reflexes.

(g) Dark adaptation curve.

(h) Blood supply of optic nerve head.

(i) EOG.

(j) Immuno-suppressive drugs.

MARCH 2007

[KQ 1565] **Sub. Code : 3108**

DIPLOMA IN OPHTHALMOLOGY (D.O.) EXAMINATION

OPHTHALMOLOGY INCLUDING MICROBIOLOGY, ANATOMY, PHYSIOLOGY AND PATHOLOGY OF THE EYE

Common to

(Candidates admitted from 1993-94 onwards)

And

(Candidates admitted from 2004-05 onwards)

Time : Three hours Maximum : 100 marks

Theory : Two hours and forty minutes Theory : 80 marks

M.C.Q. : Twenty minutes M.C.Q. : 20 marks

Answer ALL questions.

Draw suitable diagrams wherever necessary.

I. Essay :

1. Cultural characteristics, Morphology, staining properties of the Gonococcus and its ocular lesions. (20)

2. Describe the Anatomy of the apex of the orbit with Diagram. (15)

3. Describe pathology and management of melanoma of the uvea and its clinical significance. (15)

II. Short notes : (6 × 5 = 30)

(a) Corneal Transferrency

(b) Gross and Microscopic Anatomy of uvea

(c) Aqueous Humour Dynamics

(d) Anatomy of Upper eye lid

(e) Origin, incertion and actions of recti, muscles.

(f) Lens Metabolism.

[KR 1565] **Sub. Code : 3108**

DIPLOMA IN OPTHALMOLOGY EXAMINATION.

OPTHALMOLOGY INCLUDING MICROBIOLOGY, ANATOMY, PHYSIOLOGY AND PATHOLOGY OF THE EYE

Common to (Candidates admitted upto 2003-2004)

and

(Candidates admitted From 2004-2005 Onwards)

Time : Three hours Maximum : 100 marks

Theory : Two hours and forty minutes Theory : 80 marks

M.C.Q. : Twenty minutes M.C.Q. : 20 marks

Answer ALL questions.

Draw suitable diagrams wherever necessary.

I. Essay :

(1) Describe the anatomy of visual pathway and its blood supply. (20)

(2) Discuss Binocular Vision. (15)

(3) Discuss the factors maintaining Intra ocular pressure. (15)

II. Short notes : (6 × 5 = 30)

(a) Sex linked Diseases – Genetic Counseling.

(b) Theories of Color Vision.

(c) Morax – Axenfeld Bacillus.

(d) Dalen Fuch's Nodules.

(e) Pathology of Retinoblastoma.

(f) Development of Vitreous.

MARCH 2008

[KS 1565] **Sub. Code : 3108**

DIPLOMA IN OPTHALMOLOGY EXAMINATION.

Paper I — OPTHALMOLOGY INCLUDING MICROBIOLOGY, ANATOMY, PHYSIOLOGY AND PATHOLOGY OF THE EYE

Common to all Regulations

Q.P.Code : 353108

Time : Three hours Maximum : 100 marks

Answer ALL questions.

Draw diagrams wherever necessary.

I. Essay : ($2 \times 20 = 40$)

1. Describe in brief the development of the eye. (20)

2. Describe the maintenance of corneal transparency. (20)

II. Write short notes on : ($10 \times 6 = 60$)

1. Tear film.

2. Binacular vision.

3. Photochemistry of vision.

4. Parasympatholitic drugs.

5. Moraxella axenfeld bacilli.

6. AIDS viruses.

7. Trachoma.

8. Antifungal drugs.

9. Cysticercus.

10. Lens metabolism.

———————

MARCH -2009

[KU 1565] **Sub. Code: 3108**

DIPLOMA IN OPTHALMOLOGY EXAMINATION.

Paper I – OPTHALMOLOGY INCLUDING MICROBIOLOGY, ANATOMY, PHYSIOLOGY AND PATHOLOGY OF THE EYE

(Common to all Regulations)

Q.P. Code : 353108

Time : Three hours **Maximum : 100 marks**

Draw suitable diagram wherever necessary.

Answer ALL questions.

I. Essay questions : (2 X 20 = 40)

1. Describe the course of III cranial nerve.

2. Describe the development and anatomy of vitreous.

II. Write short notes on : (10 X 6 = 60)

1. Limbus.
2. Corneal transparency.
3. Binocular vision.
4. Atropine in Ophthalmology.
5. Staphylococcus.
6. AIDS virus.
7. Grams staining.
8. Anti viral drugs.
9. Acanthamoeba.
10. Pathology of malignant melanoma.

*****

September - 2009

[KV 1565] **Sub. Code: 3108**

DIPLOMA IN OPTHALMOLOGY EXAMINATION.

Paper I – OPTHALMOLOGY INCLUDING MICROBIOLOGY, ANATOMY, PHYSIOLOGY AND PATHOLOGY OF THE EYE

(Common to all Regulations)

Q.P. Code : 353108

Time : Three hours **Maximum : 100 marks**

Draw suitable diagram wherever necessary.
Answer ALL questions.

I. Essay questions : **(2 X 20 = 40)**

1. Describe the anatomy of angle of anterior chamber and the gonioscopic appearance.

2. Discuss physiology of accommodation.

II. Write short notes on : **(10 X 6 = 60)**

1. Visual pigments and rhodopsin cycle.
2. Histopathology of retinoblastoma.
3. Biochemistry of tears.
4. Development of lens.
5. Human leucocytic antigen (HLA) in eye diseases.
6. Laboratory diagnosis of Chlamydia trachomatis.
7. Anatomy of 6^{th} cranial nerve.
8. Abnormal papillary reflexes.
9. Hypersensitivity in eye.
10. Herpes zoster virus.

*****

March 2010

[KW 1565] Sub. Code: 3108

DIPLOMA IN OPTHALMOLOGY EXAMINATION

OPTHALMOLOGY INCLUDING MICROBIOLOGY, ANATOMY, PHYSIOLOGY AND PATHOLOGY OF THE EYE

(Common to all candidates)

Q.P. Code : 353108

Time : Three hours **Maximum : 100 marks**

Draw suitable diagram wherever necessary

Answer ALL questions

I. Essay questions : **(2 x 20 = 40)**

1. Write in detail about the formation and circulation of intra ocular fluids and maintenance of intra ocular tension.
2. Discuss the anatomy of bony orbit. Add a note on blow-out fracture of orbital floor.

II. Write short notes on : **(10 x 6 = 60)**

1. Anatomy of eye lids.
2. Angle of anterior chamber.
3. Theories of colour vision.
4. Blood-aqueous barrier.
5. Metabolism of cornea.
6. Drugs used in glaucoma.
7. Parasympatholytic drugs.
8. Benign and malignant tumours of the eye and adnexa.
9. Cysticercosis.
10. Orbital mucormycosis.

*****

September 2010

[KX 1565] **Sub. Code: 3108**

DIPLOMA IN OPTHALMOLOGY (D.O.) EXAMINATION.

Part I for Candidates admitted upto 2003-04 & Candidates admitted from 2008-09 onwards
And
Paper I for Candidates admitted from 2004-05 to 2007-08

OPTHALMOLOGY INCLUDING MICROBIOLOGY, ANATOMY, PHYSIOLOGY AND PATHOLOGY OF THE EYE

Q.P. Code : 353108

Time : Three hours **Maximum : 100 marks**

Draw suitable diagram wherever necessary.
Answer ALL questions.

I. Essay questions : **(2 X 20 = 40)**

1. Discuss the maintenance of Corneal Transparency.

2. Describe the Anatomy of the lid with a neat diagram. Discuss the evaluation and management of ptosis.

II. Write short notes on : **(10 X 6 = 60)**

1. Formation of Aqueous humour.
2. Histopathology of malignant melanoma of the uveal tract.
3. Theories of colour vision.
4. Development of Vitreous.
5. Pathology of Pseudotumour of orbit.
6. Ophthalmia Neonatorum.
7. Tear Substitutes.
8. Histopathology of Retinoblastoma.
9. Ocular Toxoplasmosis.
10. Argyl Robertson Pupil.

*****

APRIL 2011

[KY 1565] **Sub. Code: 3108**

DIPLOMA IN OPTHALMOLOGY (DO) EXAMINATION

OPTHALMOLOGY INCLUDING MICROBIOLOGY, ANATOMY, PHYSIOLOGY AND PATHOLOGY OF THE EYE

Q.P. Code : 353108

Time : 3 hours (180 Min) **Maximum : 100 marks**

Answer ALL questions in the same order.

I. Elaborate on :	**Pages (Max.)**	**Time (Max.)**	**Marks (Max.)**
1. Write about the formation and circulation of Intra ocular fluids and maintenance of intraocular tension.	11	35	15
2. Describe the anatomy of crystalline lens and discuss the biochemical changes in the lens leading to cataract formation.	11	35	15
II. Write notes on :			
1. Anatomy of Retina.	4	10	7
2. Theories of Accommodation.	4	10	7
3. Fluorescein dye in ophthalmology.	4	10	7
4. Histopathology of Rhabdomyosarcoma of the eye.	4	10	7
5. Toxigenicity and hypersensitivity reaction.	4	10	7
6. AIDS viruses.	4	10	7
7. Anti fungal agents.	4	10	7
8. Hydatid cyst.	4	10	7
9. Vitreous substitutes.	4	10	7
10. Visual cortex.	4	10	7

****

October 2011

[KZ 1565] **Sub. Code: 3108**

DIPLOMA IN OPTHALMOLOGY (DO) EXAMINATION

OPTHALMOLOGY INCLUDING MICROBIOLOGY, ANATOMY, PHYSIOLOGY AND PATHOLOGY OF THE EYE

Q.P. Code : 353108

Time : 3 hours (180 Min) **Maximum : 100 marks**

Answer ALL questions in the same order.

I. Elaborate on :	**Pages (Max.)**	**Time (Max.)**	**Marks (Max.)**
1. Describe the anatomy of Oculomotor nerve.	11	35 min.	15
2. Write in detail pupillary reflexes and its anomalies.	11	35 min.	15
II. Write notes on :			
1. Blood supply of Optic Nerve.	4	10 min.	7
2. Corneal transparency.	4	10 min.	7
3. Metabolism of Vitreous.	4	10 min.	7
4. Use of fluorescin dye in ophthalmology.	4	10 min.	7
5. Antifungal agents.	4	10 min.	7
6. Fusarium.	4	10 min.	7
7. Malignant melanoma – histopathological examination.	4	10 min.	7
8. Blood aqueous barrier.	4	10 min.	7
9. Newer drugs in glaucoma.	4	10 min.	7
10. Cysticercosis.	4	10 min.	7

****

[LA 1565] **Sub. Code: 3108**

DIPLOMA IN OPTHALMOLOGY (DO) EXAMINATION

OPTHALMOLOGY INCLUDING MICROBIOLOGY, ANATOMY, PHYSIOLOGY AND PATHOLOGY OF THE EYE

Q.P. Code : 353108

Time : 3 hours (180 Min) **Maximum : 100 marks**

Answer ALL questions in the same order.

I. Elaborate on :	**Pages (Max.)**	**Time (Max.)**	**Marks (Max.)**
1. Discuss the boundaries of superior orbital fissure and structure it transmits.	16	35	15
2. Discuss physiology of accommodation and anomalies of accommodation.	16	35	15
II. Write notes on :			
1. Factors involved in maintenance of IOP.	4	10	7
2. Microbiology, laboratory diagnosis of Varicella zoster virus.	4	10	7
3. Blood supply of Optic Chiasma.	4	10	7
4. Carbonic anhydrase inhibitors- Mode of Action, dosage and side effects.	4	10	7
5. Steriods in ophthalmology-Indications and side effects.	4	10	7
6. Tests and importance of Binocular vision.	4	10	7
7. Test and its clinical importance of Electro oculogram.	4	10	7
8. Pathology and causes of Bullous Keratopathy.	4	10	7
9. Origin, insertion and Nerve supply of Levator Palpebrae superioris.	4	10	7
10. Types of charts used in Vision tests in children and problems.	4	10	7

****

[LB 1565] OCTOBER 2012 Sub. Code: 3108

DIPLOMA IN OPTHALMOLOGY (D.O) EXAMINATION
OPHTHALMOLOGY INCLUDING MICROBIOLOGY, ANATOMY, PHYSIOLOGY AND PATHOLOGY OF THE EYE
Q.P. Code: 353108

Time: 3 hours (180 Min) **Maximum: 100 marks**

Answer ALL questions in the same order.

I. Elaborate on:	**Pages (Max.)**	**Time (Max.)**	**Marks (Max.)**
1. Discuss the Pupillary reaction and its pathway.	16	35	15
2. Discuss the anatomy of uveal tract along with its development.	16	35	15
II. Write notes on:			
1. Binocular vision	4	10	7
2. Describe the metabolism of cornea.	4	10	7
3. What are the different tear substitutes?	4	10	7
4. Draw the diagram for blood supply to optic nerve head.	4	10	7
5. Describe a few filamentous fungi.	4	10	7
6. Describe the pathology of lacrimal gland tumors.	4	10	7
7. How does the bacteria develop resistance to antibiotics?	4	10	7
8. Describe the life cycle of Echinococcus granulosa	4	10	7
9. Kaposis Sarcoma	4	10	7
10. Imidazoles	4	10	7

****

(LC 1565) **APRIL 2013** **Sub. Code: 3108**

DIPLOMA IN OPHTHALMOLOGY (DO) EXAMINATION

OPHTHALMOLOGY INCLUDING MICROBIOLOGY, ANATOMY, PHYSIOLOGY AND PATHOLOGY OF THE EYE

Q.P. Code : 353108

Time: Three Hours **Maximum: 100 marks**

I. Elaborate on: **(2X15=30)**

1. Discuss in detail the anatomy and development of ciliary body. Describe the theories of accommodation.

2. Describe in detail the anatomy and blood supply of visual pathway.

II. Write notes on: **(10X7=70)**

1. Corneal transparency
2. Colour blindness
3. Anti-fungal drugs used in keratomycosis
4. Corneal graft rejection
5. Blood retinal barrier
6. Cysticercus
7. Binocular single vision
8. Cycloplegic drugs
9. Histopathology of retinoblastoma
10. Herpes zoster virus

****

(LD 1565) OCTOBER 2013 Sub. Code: 3108

DIPLOMA IN OPHTHALMOLOGY (DO) EXAMINATION

APPLIED BASIC SCIENCES IN RELATION TO OPHTHALMOLOGY INCLUDING MICROBIOLOGY, ANATOMY, PHYSIOLOGY AND PATHOLOGY OF THE EYE

Q.P. Code : 353108

Time: Three Hours **Maximum: 100 marks**

I. Elaborate on: **(2X15=30)**

1. Discuss in detail the anatomy of the third cranial nerve. Add a note on localization of the level of lesion.

2. Discuss the formation and circulation of aqueous humour. Add a note on maintenance of intraocular pressure.

II. Write notes on: **(10X7=70)**

1. The components of Tear film and their importance in eye. Add a note on the management of Dry eye.
2. Discuss about Autosomal recessive inheritance and enumerate ophthalmic problems with such inheritance.
3. Enumerate Anti-Fungal Drugs, their dosage and side effects.
4. Discuss the Theories of Accommodation.
5. Histopathology of Malignant Melanoma and its importance in prognosis.
6. Discuss about Amsler's Grid. Where is it used?
7. Discuss the pathophysiology of Iridocyclitis.
8. Write about Electroretinogram and how it is useful.
9. Anatomy of Levator Palpebrae Superioris, its nerve supply and functions.
10. Discuss about Gonococcus. Add a note on the ocular lesions caused by it.

****

(LE 1565) **APRIL 2014** **Sub. Code:3108**

DIPLOMA IN OPHTHALMOLOGY (DO) EXAMINATION

OPHTHALMOLOGY INCLUDING MICROBIOLOGY, ANATOMY, PHYSIOLOGY AND PATHOLOGY OF THE EYE

Q.P.Code: 353108

Time: Three Hours **Maximum: 100 marks**

I. Elaborate on: **(2X15=30)**

1. Describe the anatomy of the crystalline lens. Discuss the biochemical changes in the lens leading to Cataract formation.

2. Describe the maintenance of Corneal Transparency.

II. Write notes on: **(10X7=70)**

1. Anatomy of Retina.
2. AIDS Viruses.
3. Theories of Accomodation.
4. Microbiological Laboratory Diagnosis of Varicilla Zoster Virus.
5. Steroids in Ophthalmology-Indications and Side effects.
6. Electrooculogram.
7. Rhabdomyosarcoma of the eye.
8. Vitreous Substitutes.
9. Corneal graft rejections.
10. Cysticercus.

****

(LF 1565) **OCTOBER 2014** **Sub. Code:3108**

DIPLOMA IN OPHTHALMOLOGY (DO) EXAMINATION

APPLIED BASIC SCIENCES IN OPHTHALMOLOGY INCLUDING MICROBIOLOGY, ANATOMY, PHYSIOLOGY AND PATHOLOGY OF THE EYE

Q.P.Code: 353108

Time: Three Hours **Maximum: 100 marks**

I. Elaborate on: **(2 x 15 = 30)**

1. Discuss the anatomy of the pupillary pathways including applied anatomy.
2. Describe in detail the rhodopsin cycle and the manifestations due to defects in the cycle.

II. Write notes on: **(10 x 7 = 70)**

1. Microscopic anatomy of visual cortex.
2. Na-ATPase pump.
3. Anti-vascular endothelial growth factor.
4. Pharmacokinetics of sodium fluorescin and its uses in ophthalmology.
5. Histopathology of Retinoblastoma.
6. Pathology of sympathetic ophthalmitis.
7. Polymerase chain reaction.
8. Laboratory diagnosis in fungal infections.
9. Biochemistry of aqueous humor.
10. Homocystinuria.

****

[LG 1565] **APRIL 2015** **Sub. Code: 3108**

DIPLOMA IN OPHTHALMOLOGY (D.O.) EXAMINATION

APPLIED BASIC SCIENCES IN RELATION TO OPHTHALMOLOGY INCLUDING MICROBIOLOGY, ANATOMY, PHYSIOLOGY AND PATHOLOGY OF THE EYE

Q.P. Code : 353108

Time: Three Hours **Maximum: 100 marks**

Answer ALL questions

I. Elaborate on: **(2 x 15 = 30)**

1. Anatomy of Optic chiasma and applied anatomy.

2. Explain the physiology of convergence mechanism.

II. Write notes on: **(10 x 7 = 70)**

1. Orbital apex Syndrome.

2. Visual Field defects in occipital cortex

3. Antimetabolites.

4. Acanthamoeba.

5. Viscoelastic agents.

6. Cysticercosis.

7. Sorbitol pathway.

8. Pathology of Basal cell carcinoma.

9. Pathology of malignant melanoma.

10. Biochemistry of vitreous.

****

[LH 1565] **OCTOBER 2015** **Sub. Code: 3108**

DIPLOMA IN OPHTHALMOLOGY (D.O.) EXAMINATION

APPLIED BASIC SCIENCES IN RELATION TO OPHTHALMOLOGY

INCLUDING MICROBIOLOGY, ANATOMY, PHYSIOLOGY

AND PATHOLOGY OF THE EYE

Q.P. Code : 353108

Time: Three Hours **Maximum: 100 marks**

Answer ALL questions

I. Elaborate on: **(2 x 15 = 30)**

1. Anatomy of the bony orbit.
2. Theories of colour vision. Testing and anomalies of colour vision.

II. Write notes on: **(10 x 7 = 70)**

1. Blood supply of Optic nerve head.
2. Dark adaptation.
3. Anti-glaucoma medications.
4. Corynebacterium diphtheriae.
5. Herpes simplex virus.
6. Trypan blue dye.
7. Corneal Transparency.
8. Trachoma micro organism.
9. Dalen Fuchs nodule.
10. Binocular single vision.

****

(LI 1565) APRIL 2016 **Sub. Code:3108**

DIPLOMA IN OPHTHALMOLOGY (DO) EXAMINATION

APPLIED BASIC SCIENCES IN OPHTHALMOLOGY INCLUDING MICROBIOLOGY, ANATOMY, PHYSIOLOGY AND PATHOLOGY OF THE EYE

Q.P.Code: 353108

Time: Three Hours **Maximum: 100 Marks**

I. Elaborate on: **(2 x 15 = 30)**

1. Discuss the embryology of the lens, vitreous and lids.
2. Anatomy of Abducent nerve? Add note on lesions occurring in various level.

II. Write notes on: **(10 x 7 = 70)**

1. Dyes used in ophthalmology and its uses.
2. Vascular Tumours of the eye.
3. Retinal degenerations.
4. Glands in the lid.
5. Metabolism in the cornea.
6. Fungal infections in the cornea.
7. Culture Media used in Ophthalmology.
8. Vitreous substitutes.
9. Chlamydial infections in the eye.
10. Anatomy of uveal Tract.

****

(LJ 1565) OCTOBER 2016 **Sub. Code:3108**

DIPLOMA IN OPHTHALMOLOGY (DO) EXAMINATION

APPLIED BASIC SCIENCES IN OPHTHALMOLOGY INCLUDING MICROBIOLOGY, ANATOMY, PHYSIOLOGY AND PATHOLOGY OF THE EYE

Q.P.Code: 353108

Time: Three Hours **Maximum: 100 Marks**

I. Elaborate on: **(2 x 15 = 30)**

1. Describe the Anatomy of Retina and add a note on the applied anatomy.

2. Discuss the Sterilization steps to be taken to prevent endophthalmitis in Intra Ocular procedures.

II. Write notes on: **(10 x 7 = 70)**

1. Pathology of Lid Tumours.
2. Drugs used in glaucoma.
3. Occipital cortex.
4. Hydatid cyst – infestation in the eye.
5. Antimetabolities in Ophthalmology.
6. Genetic counseling in eye disease.
7. Superior orbital fissure.
8. Microorganisms causing membranous conjunctivitis.
9. Pathology of follicles and causes for follicular conjunctivitis.
10. Mydriatic Drugs and cycloplegic drugs.

****

(LK 1565) MAY 2017 **Sub. Code:3108**

DIPLOMA IN OPHTHALMOLOGY (DO) EXAMINATION

APPLIED BASIC SCIENCES IN OPHTHALMOLOGY INCLUDING MICROBIOLOGY, ANATOMY, PHYSIOLOGY AND PATHOLOGY OF THE EYE

Q.P.Code: 353108

Time: Three Hours **Maximum: 100 Marks**

I. Elaborate on: **(2 x 15 = 30)**

1. The anatomy and functions of the extra ocular muscles of the eye and applied anatomy.

2. Discuss the lens metabolism.

II. Write notes on: **(10 x 7 = 70)**

1. Pathology of retinoblastoma.
2. Rhodopsin cycle.
3. Antiviral drugs.
4. Anatomy of the cornea.
5. Blood supply to the optic nerve.
6. Light reflex and its pathway.
7. Parasitic infestation in the eye.
8. Antiviral drugs.
9. Drugs used in cataract surgery and its action.
10. Binocular single vision.

****

(LL 1565) OCTOBER 2017 **Sub. Code:3108**

DIPLOMA IN OPHTHALMOLOGY (DO) EXAMINATION

APPLIED BASIC SCIENCES IN OPHTHALMOLOGY INCLUDING MICROBIOLOGY, ANATOMY, PHYSIOLOGY AND PATHOLOGY OF THE EYE

Q.P.Code: 353108

Time: Three Hours **Maximum: 100 Marks**

I. Elaborate on: **(2 x 15 = 30)**

1. Binocular Single Vision and describe various methods to evaluate it.
2. Anatomy of the third cranial nerve and describe the clinical features of its lesion at various levels.

II. Write notes on: **(10 x 7 = 70)**

1. Corneal graft rejection.
2. Superior orbital fissure.
3. Visually evoked potential.
4. Metabolism of lens.
5. Operation theatre sterilization.
6. Gonococcus.
7. Dynamics of aqueous formation.
8. Pathology of Retinoblastoma
9. Acanthamoeba.
10. Mucormycosis.

****

(LM 1565) MAY 2018 **Sub. Code: 3108**

DIPLOMA IN OPHTHALMOLOGY (DO) EXAMINATION

APPLIED BASIC SCIENCES IN OPHTHALMOLOGY INCLUDING MICROBIOLOGY, ANATOMY, PHYSIOLOGY AND PATHOLOGY OF THE EYE

Q.P.Code: 353108

Time: Three Hours **Maximum: 100 Marks**

I. Elaborate on: **(2 x 15 = 30)**

1. Discuss in detail the anatomy and blood supply of the visual pathway.
2. Discuss the formation and circulation of aqueous humour. Add a note on the maintenance of intraocular pressure.

II. Write notes on: **(10 x 7 = 70)**

1. Pathology of lacrimal gland tumours.
2. Anatomy of the limbus.
3. Vascular Endothelial Growth Factors and Anti VEGF drugs.
4. Acyclovir.
5. Toxoplasma gondii - Lifecycle and ocular manifestations.
6. Acanthamoeba.
7. Visually Evoked Potential and its uses.
8. Metabolism of the lens.
9. Viscoelastic agents.
10. Nasociliary nerve.

****

(LN 1565) OCTOBER 2018 **Sub. Code: 3108**

DIPLOMA IN OPHTHALMOLOGY (DO) EXAMINATION

APPLIED BASIC SCIENCES IN OPHTHALMOLOGY INCLUDING MICROBIOLOGY, ANATOMY, PHYSIOLOGY AND PATHOLOGY OF THE EYE

Q.P. Code: 353108

Time: Three Hours **Maximum: 100 Marks**

I. Elaborate on: **(2 x 15 = 30)**

1. Visual pathways and describe the lesions at various levels.
2. Anatomy of the extraocular muscles and describe their nerve supply and different actions on the eyeballs.

II. Write notes on: **(10 x 7 = 70)**

1. Worth four dot test and its uses in ophthalmology.
2. Course and branches of seventh cranial nerve.
3. Anatomical peculiarities of lens.
4. Marcus gunn pupil.
5. Flash autoclave and its advantages.
6. Sympathetic ophthalmia.
7. Aqueous outflow facility.
8. Pathology of recurrent pterygium.
9. Collagen cross linking.
10. Gonococcus.

****

(LO 1565) MAY 2019 **Sub. Code: 3108**

DIPLOMA IN OPHTHALMOLOGY (DO) EXAMINATION

APPLIED BASIC SCIENCES IN OPHTHALMOLOGY INCLUDING MICROBIOLOGY, ANATOMY, PHYSIOLOGY AND PATHOLOGY OF THE EYE

Q.P. Code: 353108

Time: Three Hours **Maximum: 100 Marks**

I. Elaborate on: **(2 x 15 = 30)**

1. Write in detail the pupillary reflexes and its anomalies.
2. Discuss the corneal physiology and mechanism of its transparency.

II. Write notes on: **(10 x 7 = 70)**

1. Pseudomonas.
2. Cysticercosis.
3. Electro Retinogram.
4. Atropine in Ophthalmology.
5. Origin, insertion, Nerve supply of Levator palpebrae superioris.
6. Histopathology of Rhabdomyosarcoma of the eye.
7. Microbiology, Laboratory Diagnosis of varicella zoster virus.
8. Antifungal agents.
9. Photochemistry of vision.
10. Dalen Fuch's nodules.

****

(LP 1565) OCTOBER 2019 **Sub. Code: 3108**

DIPLOMA IN OPHTHALMOLOGY (DO) EXAMINATION

APPLIED BASIC SCIENCES IN OPHTHALMOLOGY INCLUDING MICROBIOLOGY, ANATOMY, PHYSIOLOGY AND PATHOLOGY OF THE EYE

Q.P. Code: 353108

Time: Three Hours **Maximum: 100 Marks**

I. Elaborate on: **(2 x 15 = 30)**

1. Discuss the physiology of accommodation and anomalies of accommodation.
2. Discuss the anatomy of bony orbit. Add a note on blow-out fracture of orbital floor.

II. Write notes on: **(10 x 7 = 70)**

1. Angle of anterior chamber.
2. Parasympatholytic drugs.
3. Polymerase chain reaction.
4. Theories of colour vision.
5. Biochemistry of tears.
6. Hypersensitivity in the Eye.
7. Gram's Staining.
8. Imidazoles.
9. Types of charts used in children for vision test.
10. Pathology of Retinoblastoma.

****

[LQ 1565] AUGUST 2020 **Sub. Code: 3108**

(MAY 2020 SESSION)

DIPLOMA IN OPHTHALMOLOGY (DO) EXAMINATION

APPLIED BASIC SCIENCES IN OPHTHALMOLOGY INCLUDING MICROBIOLOGY, ANATOMY, PHYSIOLOGY AND PATHOLOGY OF THE EYE

Q.P. Code: 353108

Time: Three Hours **Maximum: 100 Marks**

I. Elaborate on: **(2 x 15 = 30)**

1. Describe in detail the physiology of aqueous humor formation and its outflow.

2. Write in detail about the anatomy of visual pathway, its blood supply and lesions of visual pathway

II. Write notes on: **(10 x 7 = 70)**

1. Schirmer's test
2. Blood retinal barrier
3. Circle of Willis
4. Acanthamoeba.
5. Contrast sensitivity.
6. Visual cycle.
7. Dyes in ophthalmology
8. Metabolism of cornea
9. Recent drugs in treatment of glaucoma
10. Pathology of thyroid orbitopathy.

*****

[LS 1565] NOVEMBER 2020 **Sub. Code: 3108**

(OCTOBER 2020 SESSION)

DIPLOMA IN OPHTHALMOLOGY (DO) EXAMINATION

APPLIED BASIC SCIENCES IN OPHTHALMOLOGY INCLUDING MICROBIOLOGY, ANATOMY, PHYSIOLOGY AND PATHOLOGY OF THE EYE

Q.P. Code: 353108

Time: Three Hours **Maximum: 100 Marks**

I. Elaborate on: **(2 x 15 = 30)**

1. Write in detail about anatomy of optic nerve, its blood supply and arrangement of nerve fibres.

2. Define binocular single vision. Write in detail about the grades of BSV and tests of BSV.

II. Write notes on: **(10 x 7 = 70)**

1. Antiviral drugs.
2. Gram negative bacteria.
3. Electro oculogram
4. Carbonic anhydrase Inhibitors.
5. Lacrimal pump mechanism.
6. Levator palpebrae superioris
7. Mydriatics in ophthalmology
8. Blood supply and nerve supply of extra ocular muscles
9. Biochemical composition of vitreous
10. Pathology of malignant melanoma.

*****

(DO 0721) JULY 2021 **Sub. Code: 3108**

(MAY 2021 SESSION)

DIPLOMA IN OPHTHALMOLOGY (DO) EXAMINATION

APPLIED BASIC SCIENCES IN OPHTHALMOLOGY INCLUDING MICROBIOLOGY, ANATOMY, PHYSIOLOGY AND PATHOLOGY OF THE EYE

Q.P. Code: 353108

Time: Three Hours **Maximum: 100 Marks**

I. Elaborate on: **(2 x 15 = 30)**

1. Describe in detail about the anatomy of cornea and the mechanism of corneal transparency.

2. Discuss in detail about the theories of colour vision.

II. Write notes on: **(10 x 7 = 70)**

1. Blood supply of visual cortex and its importance.
2. Tear film.
3. Diplococci.
4. Role of antifungals in corneal ulcer.
5. Pseudotumour.
6. Role of viscoelastics in ocular surgery.
7. Indocyanine green.
8. Metabolism of lens.
9. Role of prostaglandins in treatment of glaucoma.
10. Histopathology of retinoblastoma.

*****

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[DO 1121] NOVEMBER 2021 **Sub. Code: 3108**

(OCTOBER 2021 SESSION)

DIPLOMA IN OPHTHALMOLOGY (DO) EXAMINATION

APPLIED BASIC SCIENCES IN OPHTHALMOLOGY INCLUDING MICROBIOLOGY, ANATOMY, PHYSIOLOGY AND PATHOLOGY OF THE EYE

Q.P. Code: 353108

Time: Three Hours **Maximum: 100 Marks**

I. Elaborate on: **(2 x 15 = 30)**

1. Describe the Various Spaces in Orbit and their Clinical Significance.

2. Describe the Pupillary Reflex and the Pupillary Pathway. Brief about Abnormal Pupils.

II. Write notes on: **(10 x 7 = 70)**

1. Amsler's Grid.
2. Electroretinogram.
3. Functions of Aqueous Humour.
4. Anatomy of Superior Orbital Fissure.
5. Pannum's Area.
6. Tests for Stereopsis.
7. Fine Needle Aspiration Biopsy.
8. Cherry Red Spot.
9. Tear Substitutes.
10. Carbonic Anhydrase Inhibitors.

*****

THE TAMIL NADU DR.M.G.R. MEDICAL UNIVERSITY

(DO 0522) **MAY 2022** **Sub. Code: 3108**

DIPLOMA IN OPHTHALMOLOGY (DO) EXAMINATION

APPLIED BASIC SCIENCES IN OPHTHALMOLOGY INCLUDING MICROBIOLOGY, ANATOMY, PHYSIOLOGY AND PATHOLOGY OF THE EYE

Q.P. Code: 353108

Time: Three Hours **Maximum: 100 Marks**

I. Elaborate on: **(2 x 15 = 30)**

1. Describe in detail the corneal structure and how transparency maintained? Factors contributing its transparency?

2. Write in detail about electro retinogram and electro oculogram and its uses.

II. Write notes on: **(10 x 7 = 70)**

1. Test for Chronic Dacryocystitis.
2. Vonicorazole – MOA, routes and uses.
3. Dalen fich's NODULE.
4. Topical NSAID.
5. Morax axen balillus.
6. Retro virus.
7. Anatomy of ciliary body.
8. Physiology of binocular vision.
9. Central retinal artery.
10. Siderosis bulbi.

*****

THE TAMIL NADU DR.M.G.R. MEDICAL UNIVERSITY

(DO 1022) **OCTOBER 2022** **Sub. Code: 3108**

DIPLOMA IN OPHTHALMOLOGY (DO) EXAMINATION

APPLIED BASIC SCIENCES IN OPHTHALMOLOGY INCLUDING MICROBIOLOGY, ANATOMY, PHYSIOLOGY AND PATHOLOGY OF THE EYE

Q.P. Code: 353108

Time: Three Hours **Maximum: 100 Marks**

I. Elaborate on: **(2 x 15 = 30)**

1. Describe in detail about the anatomy of Angle of anterior chamber and mechanism of maintenance of Intraocular pressure.

2. Explain the structure of crystalline lens and etiopathogenesis of cataract.

II. Write notes on: **(10 x 7 = 70)**

1. Optic chiasma and its blood supply.
2. Acanthamoeba.
3. Antivirals used in corneal ulcer.
4. Sodium Fluorescein.
5. Histopathology of Malignant Melanoma.
6. Role of Betablockers in treatment of Glaucoma.
7. Role of Anti VEGF agents in Retinopathy.
8. Superior Oblique muscle and its features.
9. Lacrimal Drainage Apparatus.
10. Binocular vision and stereopsis.

****

THE TAMIL NADU DR.M.G.R. MEDICAL UNIVERSITY

(DO 0723) **JULY 2023** **Sub. Code: 3108**

(MAY 2023EXAM SESSION)

DIPLOMA IN OPHTHALMOLOGY (DO) EXAMINATION

APPLIED BASIC SCIENCES IN OPHTHALMOLOGY INCLUDING MICROBIOLOGY, ANATOMY, PHYSIOLOGY AND PATHOLOGY OF THE EYE

Q.P. Code: 353108

Time: Three Hours **Maximum: 100 Marks**

I. Elaborate on: **(2 x 15 = 30)**

1. Discuss the anatomy of Optic nerve and its blood supply.
2. Discuss the structure and functions of pre-corneal tear film. Describe about physiological lacrimal pump.

II. Write notes on: **(10 x 7 = 70)**

1. Describe the anatomy of Eye lid.
2. Describe the theories of Accommodation and its Anomalies.
3. Polymerase Chain Reaction and its uses in Ophthalmology.
4. Botulinum toxin in Ophthalmology.
5. Gram stain.
6. Anti-vascular Endothelial growth factor.
7. What are Macular Function Tests?
8. Sterilization of instruments in Ophthalmology
9. Draw a labelled diagram of Pupillary Reflex pathway. Discuss approach to diagnosis of Anisocoria.
10. Histopathology of Malignant Melanoma.

****