

(1) SYLLABUS

5.1 Anatomy & Physiology of the eye, Orbit, – 3 Lectures

- 5.1.1 Introduction to eye
- 5.1.2 Anatomy of the eye
- 5.1.3 Physiology of the eye
- 5.1.4 Neurology of the eye 26

5.2 Conjunctiva- 4 lectures

- 5.2.1 Symptomatic conditions
 - (a) Hyperemia, subconjunctival haemorrhage
- 5.2.2 Diseases
 - (a) Classification of conjunctivitis
 - (b) Mucopurulent Conjunctivitis
 - (c) Trachoma
 - (d) Membranous Conjunctivitis, spring catarrh
 - (e) Degenerations: -Pinguecula and Pterygium
 - (f) ophthalmia neonatorum
(resolution no. BM-04-(i)-15 dated 15/5/2015)

5.3 Cornea - 5 lectures

- 5.3.1 Corneal ulcers: Bacterial, fungal, viral
- 5.3.2 Hypopyon ulcer
- 5.3.3 Complication of corneal ulcer
- 5.3.4 Management of complication of corneal ulcer
- 5.3.5 Fascicular ulcer
- 5.3.6 Interstitial keratitis
- 5.3.7 Herpes zoster ophthalmicus
- 5.3.8 Keratoconus
- 5.3.9 Corneal opacities
 - 5.3.1 Keratomalacia (Vit A deficiency)
0
 - 5.3.1 Pannus
1

5.3.1 Keratoplasty-eye donation

2

5.3.1 Eye banking

3

5.4 Scler – 1 lecture

a Episcleritis

5.4.1

5.4.2 Scleritis

5.4.3 Staphyloma

5.5 Uvea 3 lectures

- Classification of uveitis

5.5.1

5.5.2 Gen.Etiology, investigation and principle management of uveitis

5.5.3 Acute & chronic iridocyclitis

5.5.4 Panophthalmitis

5.5.5 Endophthalmitis

5.5.6 Choroiditis

5.5.7 Chorioretinitis

5.5.8 D/D of Red eye (resolution no. BM-04-(i)-15 Dated 15/5/2015)

5.6 Lens – 5 lectures

5.6.1 Cataract- Aetiological classification

5.6.2 Senile mature cataract

5.6.3 Management of cataract 1) Medical 2) Surgical

5.6.4 Anaesthesia

5.6.5 Treatment of aphakia

5.6.6 IOL implant (Phacoemulsification)

5.6.7 Recent advances in cataract management

5.6.8 Role of eye camp (resolution no. BM-04-(i)-15Dated 15/5/2015)

5.7 Glaucoma – 4 lectures

5.7.1 Aqueous Humor Dynamics

5.7.2 Factors Controlling Normal IOP

- 5.7.3 Tonometry, Automated perimetry
- 5.7.4 Provocative tests
- 5.7.5 Classification of Glaucoma
- 5.7.6 Congenital Glaucoma
- 5.7.7 Angle Closure Glaucoma
- 5.7.8 Open Angle Glaucoma
- 5.7.9 Secondary Glaucoma
- 5.7.10 Recent advances in treatment of glaucoma

5.8 Vitreous – 1 lecture

- 5.8.1 Vitreous Haemorrhage & Opacities
- 5.8.2 PVD
- 5.8.3 Proliferative vitreo – retinopathy

5.9 Intraocular Tumors – 2 lectures

- 5.9.1 Retinoblastoma
- 5.9.2 Malignant Melanoma

5.10 Retina – 3 lectures

- 5.10.1 Vascular Retinopathies: Diabetic, Hypertensive, Toxemia of pregnancy
- 5.10.2 Retinal Detachment – classification, aetiology & management
- 5.10.3 Retinitis Pigmentosa

5.11 Optic nerve – 2 lectures

- 5.11.1 Optic Neuritis
- 5.11.2 Papilloedema
- 5.11.3 Optic Atrophy

5.12 Optics - 5 lectures

- 5.12.1 Basic Optics
- 5.12.2 Principles: V.A. testing, Retinoscopy, Ophthalmoscopy (distant direct, direct, indirect)
- 5.12.3 Refractive errors – Myopia, Hypermetropia, Astigmatism
- 5.12.4 Accommodation & Presbyopia

5.12.5 Spectacles , Contact Lens

5.12.6 Surgical treatment of Refractive Errors

1) RK 2) PRK 3) LASIK

5.13 Orbit – 2 lectures

5.13.1 Proptosis- Aetiology, Clinical Evaluation, Investigations & Principles of Management

5.13.2 Endocrinal Exophthalmos

5.13.3 Orbital Haemorrhage

5.14 Lids – 3 lectures

5.14.1 Inflammation of various lid glands

5.14.2 Blepharitis

5.14.3 Trichiasis, Entropion

5.14.4 Ectropion

5.14.5 Symblepheron

5.14.6 Ptosis

5.15 Lacrimal System – 3 lectures

5.15.1 Epiphora

5.15.2 Dry Eye – etiology & treatment

5.15.3 Nasolacrimal Duct Obstruction

5.15.4 Dacrocystitis – Acute & Chronic

5.15.5 Lacrimal gland tumors 29

5.16 Ocular Mobility – 4 lectures

5.16.1 Extraocular muscles-Basic anatomy & actions

5.16.2 Squint: Gen. Etiology, Diagnosis and principles of management

5.16.3 Paralytic and Non Paralytic Squint

5.16.4 Heterophoria

5.16.5 Nystagmus

5.17 Miscellaneous – 3 lectures

5.17.1 Colour Blindness

5.17.2 Lasers in Ophthalmology- Principles

5.17.3 Recent advances in ophthalmology

5.18 Ocular trauma – 3 lectures

5.18.1 Blunt Trauma

5.18.2 Perforating Trauma

5.18.3 Chemical Burns

5.18.4 Sympathetic Ophthalmitis

5.19 Principles of Management of Major Ophthalmic Emergencies – 2lectures

5.19.1 Acute Congestive Glaucoma

5.19.2 Corneal Ulcer

5.19.3 Intraocular Trauma

5.19.4 Chemical Burns

5.19.5 Sudden Loss of Vision

5.19.6 Acute Iridocyclitis

5.19.7 Secondary Glaucoma

5.19.8 Endophthalmitis

5.20 Systemic Diseases Affecting the Eye – 2 lectures

5.20.1 Tuberculosis

5.20.2 Syphilis

5.20.3 Leprosy

5.20.4 AIDS

5.20.5 Diabetes

5.20.6 Hypertension 30

**5.21 Drugs – 2
 lectures**

5.21.1 Antibiotics

5.21.2 Steroids

5.21.3 Anti Glaucoma Drugs

5.21.4 Mydriatics&Cycloplegics

5.21.5 Viscoelastics

5.21.6 Fluoroscein dye

5.21.7 Adverse reactions affecting the eye

5.22 Community Ophthalmology – 2 lectures

5.22.1 Blindness: Definition, causes & Magnitude

5.22.2 N.P.C.B- Vision 2020

5.22.3 Preventable Blindness – causes & treatment

5.22.4 Role of PHCs in Eye Care

5.22.5 Nutritional deficiencies

5.22.6 Role of camp in vision 2020

6.1 TUTORIALS (Total 30 Hours) Surgical Techniques Cataract - ECCE

- ICCE
- IOL Implantation
- Phaco-emulsification.
- Pterygium
- Chalazion
- Glaucoma
- Foreign Body Removal
- Enucleation
- Keratoplasty
- Basic of squint, L 10

6.2 Instruments

- OPD
- Operative
- Basic Examination and Diagnostic instruments Tonometer, SacSyringing, Slit Lamp.

6.3 Optics - Lenses – Spherical, Cylindrical, Prisms,

- Pinhole, Slit, Maddox Rod & Maddox wing,
- Red & Green Glasses.
- IOLs
- Ophthalmoscopy 31
- Retinoscopy
- Contact Lenses
- Colour Vision

6.4 Drugs

Miotics, Antibiotics, Antiglaucoma, Mydriatics, Steroids, Anti virals, NSAIDS, Anti Fungals Viscoelastics Pre-Op. & Post – Op.

(2) Brief Summary of theory lectures held in 6th & 7th Terms

- 7.1 Anatomy & Physiology 3
- 7.2 Optics 5
- 7.3 Conjunctiva 4
- 7.4 Cornea 5
- 7.5 Sclera 1
- 7.6 Uvea 3
- 7.7 Cataract 5
- 7.8 Glaucoma 4
- 7.9. Optic Nerve 2
- 7.10 Retina 3
- 7.11 Vitreous 1
- 7.12 Squint 4
- 7.13 Community Ophthalmology 2
- 7.14 Lids 3
- 7.15 Orbit 2
- 7.16 Lacrimal Apparatus and Dry Eye 3
- 7.17 Miscellaneous & Others 20

Total Lectures	70
Tutorials	30
	100
	32

**MAPPING OF PROGRAMME OUTCOMES [POs] AND
COURSEOUTCOMES [COs] OF MBBS
PROGRAMMES**

Year III / I	
Course Code	Course Title
01010301	Community Medicine
01010302	ENT
01010303	Ophthalmology

Ophthalmology: (01010303)		
CO No.	At the end of the course, the learners should be able to:	Mapped Programme Outcomes
CO 1	Possess knowledge & skill to the student that shall enable him/ her to diagnose common eye problems.	PO1,PO2,PO3, PO5,PO7,PO9
CO 2	Should be able to manage major Ophthalmic emergencies including first aid and basic diagnostic and therapeutic procedures	PO1,PO2,PO3, PO5,PO7,PO9
CO 3	Able to deal with local & systematic disease which affects vision and take necessary action required to minimize the sequence of such disease.	PO1,PO2,PO3, PO5,PO7,PO8,PO9
CO 4	Be aware of adverse drug reaction with special reference to Ophthalmic manifestations.	PO1,PO2,PO3, PO5,PO7,PO8, PO9
CO 5	Be aware about National programme of blindness and be able to implement it for prevention of blindness	PO1,PO2,PO3, PO5,PO6,PO7,PO8,PO9
CO 6	Able to organise community based survey and motivate for cataract surgery and eye donation.	PO1,PO2,PO3, PO5,PO6,PO7, PO8,PO9
CO 7	Should be able to establish rapport with seniors, colleagues and paramedical workers so as to function as an effective team leader	PO1,PO2,PO3, PO5,PO6,PO7,PO8,PO9