### Syllabus

#### **Course contents:**

These are only broad guidelines and are illustrative, there may be overlap betweensections.

#### I. Basic Sciences:

- 1. Orbital and ocular anatomy
  - i. Gross anatomy
  - ii. Histology
  - iii. Embryology
- 2. Ocular Physiology
- 3. Ocular Pathology
- 4. Ocular Biochemistry

General biochemistry, biochemistry applicable to ocular function

5. Ocular Microbiology

General Microbiology, specific microbiology applicable to the eye

- 6. Immunology with particular reference to ocular immunology
- 7. Genetics in ophthalmology
- 8. Community Eye Health

#### II. Optics

- a. Basic physics of optics
- b. Applied ophthalmic optics
- c. Applied optics including optical devices
- d. Disorders of Refraction

## III. Clinical Ophthalmology

- i. Disorders of the lids
- ii. Disorders of the lacrimal system
- iii. Disorders of the Conjunctiva

- iv. Disorders of the Sclera
- v. Disorders of the Cornea
- vi. Disorders of the Uveal Tract
- vii. Disorders of the Lens
- viii. Disorders of the Retina
- ix. Disorders of the Optic Nerve and Visual Pathway
- x. Disorders of the Orbit
- xi. Glaucoma
- xii. Neuro-ophthalmology
- xiii. Paediatric ophthalmology
- xiv. Ocular involvement in systemic disease
- xv. Immune ocular disorders
- xvi. Strabismus and Amblyopia
- xvii. Ocular oncology

## MAPPING OF PROGRAMME OUTCOMES [POs] AND COURSE OUTCOMES [COs] OF PG PROGRAMMES

### MS (SURGERY) PROGRAMME OUTCOMES

Sr	By the end of the programme, the Medical Postgraduate
•	Willhave
No	
PO 1	Knowledge and Skills
PO 2	Planning and problem solving abilities
PO 3	Communication
PO 4	Research Aptitude
PO 5	Professionalism and Ethics
PO 6	Leadership
PO 7	Societal Responsibilities
PO 8	Environment and Sustainability
PO 9	Lifelong Learner

# SURGERY COURSE OUTCOME – PGSUBJECT CODE –01340301

Sr.No	By the end the Course, the student will be able to		
1	Recognize the importance to the concerned surgery in the context		
	of the health needs of the community and the national priorities in		
	the health section.		
2	Practice the surgery concerned ethically and in step with the		
	principles of primary health care.		
3	Demonstrate sufficient understanding of the basic sciences		
	relevant to the surgery specialty.		
4	Identify social, economic, environmental, biological and emotional		
	determinants of health in a given case, and take them into account		
	while planning therapeutic, rehabilitative, preventive		
	and primitive measure/strategies.		
5	Diagnose and manage majority of the conditions in the surgery		
	concerned on the basis of clinical assessment, and appropriately		
	selected and conducted investigations.		
6	Plan and advise measures for the prevention and rehabilitation of		
	patients suffering from disease and disability related to the		
	surgery specialty.		
7	Demonstrate skills in documentation of individual case details as		
	well as morbidity and mortality rate relevant to the assigned situation.		
8	Demonstrate empathy and humane approach towards patients and		
0	their families and exhibit interpersonal behavior in accordance with		
	the societal norms and expectations.		
9	Play the assigned role in the implementation of national health		
	programme, effectively and responsibly.		
10	Organize and supervise the chosen/assigned health care services		
	demonstrating adequate managerial skills in the clinic/hospital or		
	the field situation		
11	Develop skills as a self-directed learner, recognize continuing		
	education needs; select and use appropriate learning resources		
12	Demonstrate competence in basic concepts of research		
	methodology and epidemiology and be able to critically analyze		
	relevant published research literature.		
13	Develop skills in using educational methods and techniques as		
	applicable to the teaching of medical/nursing students, general		
	physicians and paramedical health workers.		
14	Function as an effective leader of a health team engaged in health		
	care, research or training.		

## MS OPHTHALMOLOGY PROGRAMME

Course Code	Course Title
01340301	MS Ophthalmology

CO No.	At the end of the course, the learner should be able to:	Mapped Programme Outcomes
CO 1	At the end of course should be able to	PO1,PO2,PO3,
	diagnose and manage all types of	PO4,PO5,PO7,
	ophthalmic cases.	PO8,PO9
CO 2	At the end of course should be able to	PO1,PO2,PO3,
	provide management of all ocular	PO5,PO6,PO7,
	emergencies efficiently	PO8,PO9
CO 3	At the end of course should be able to	PO1,PO2,PO3,
	recognize the need for referral to higher	PO5, PO7,
	centres for specific diseases and disorders	PO8,PO9
GO 4	for further management.	DO1 DO2 DO2
CO 4	At the end of the course should be able to	PO1,PO2, PO3,
	organize eye camps to understand the need	PO4, PO5, PO6,
	for eye care in the society and about the	PO7, PO8,
	need for early intervention, advice and	PO9
	offer suitable management to the needy,	
CO 5	and spread awareness about eye donation.	DO1 DO2 DO2
CO 3	At the end of course should be able to	PO1,PO2,PO3,
	educate medical and paramedical staff	PO4, PO5, PO6,
	regarding basic diagnosis of eye diseases	PO7, PO8,
	and procedures to promote objectives of	PO9
	NPCB programme and decrease	
	preventable blindness in the society.(e.g.	
	ROP screening, cataract screening,	
	refractive error estimation, DR screening	
GO (	and corneal blindness).	201204204
CO 6	At the end of the course student should be	PO1,PO2,PO3,
	familiar with patient counseling and	PO5, PO6, PO7,
	demonstrate empathy towards patients and	PO8, PO9
	their families and convey in detail about	
	the diagnosis and plan of management for	
00.7	the patient's eye condition.	PO1 PO2 PO2
CO 7	At the end of the course student should	PO1, PO2, PO3,
	have knowledge of medico legal aspects	PO5, PO7, PO9

CO No.	At the end of the course, the learner should be able to:	Mapped Programme Outcomes
	of Ophthalmology and know the importance of meticulous documentation including proper consent taking for various procedures.	
01340301.8	At the end of the course should be able to conduct epidemiological surveys in the community to analyze morbidity of common eye disorders prevalent in the society.	PO1,PO2,PO3, PO4, PO5, PO6, PO7, PO8, PO9
01340301.9	At the end of course the student should beable to demonstrate competence in basic concepts of research methodology and epidemiology and be able to critically analyze relevant published research literature.	PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO8, PO9
01340301.10	At the end of course student should keep himself/herself updated in the subject by attending various CME's, workshops and national and international level conferences and take keen interest in research in the field of ophthalmology.	PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO8, PO9
01340301.11	At the end of course student should be aware about various investigative modalities and their interpretations and toapply the knowledge for the management of various diseases.	PO1, PO2, PO3, PO4, PO5, PO7, PO8, PO9