

OPHTHALMIC ASSISTANT:-

DURATION :- 2 YEAR , ELIGIBILITY:-12 PASS

I ST YEAR:-

Applied Basic Sciences in -
Ophthalmology

Anatomy and Physiology a) Anatomy of the eye and ocular adnexa b) Embryology of the eye and adnexa c) The visual pathways d) Anatomy and Physiology of motor mechanism e) Physiology of vision, colour vision, accommodation f) Binocular vision and its development g) Maintenance of intraocular pressure h) The Neurology of vision (Visual pathway, papillary pathways and reaction) dark Adaptation. i) Optics – elementary Physiological optics, optics of radiology and other dark Room procedures and ophthalmic equipments. j) Physiology of aqueous humour and its circulation and maintenance of intraocular Pressure. k) Maintenance of corneal transparency. l) Tear circulation m) Blood aqueous barrier.

Pathology and Microbiology a) Pathology of ocular and adnexal lesions (Inflammatory, neoplastic, lens specification etc) b) Microbiology of common organism affecting the eye – Bacteria Staph. Strepto – pneumococci, gonococci diphtheria, Morax axenfield bacillus, AFB, Lepra bacilli, pseudomonas etc. c) Virus – Herpes Zoster, Simplex, adenovirus, trachoma etc. d) Parasites, protozoa and fungi causing ocular lesion e.g., toxoplasma amoebiasis, toxocariasis, treponema, cysticercus, hydatid, microfilaria aspergillus, penicillium, candida etc.



Biochemistry a) Vitamin A and its metabolism b) Glucose metabolism c) Aqueous composition d) Biochemical aspects of cataract (Senile and diabetic) e) Thyroid function tests f) Tear film and its composition.

Pharmacology Pharmacology of drugs used in Ophthalmology-- a) Autonomic drugs – Sympathomimetic, Sympatholytics, cholinergic, anticholinergic agents etc. b) Antibiotics and chemotherapeutic agents used in ophthalmology c) Anti-inflammatory agent – steroid and non-steroidal agents d) Anti virals and antifungals used in ophthalmology e) Local anaesthetics f) Dyes used in ophthalmology – fluorescein, rose Bengal etc. g) Tear Substitutes h) Drugs used to reduce intra ocular pressure (systemic and topical agents) i) Ocular penetration of systemically administered drugs and topical agents. j) Anti-mitotic agents and immunosuppressives

Optics

II YEAR

Clinical Ophthalmology including Refraction

Recent Advances including investigative therapeutic procedure,

Community Ophthalmology including national programme, rehabilitation of blind.



