

DIPLOMA IN OPTOMETRY 1ST YEAR

GENERAL ANATOMY AND PHYSIOLOGY, OCULAR PHYSICS & ANATOMY

Introduction to Anatomical Terms
Organization of Body Cells, Tissue, Organ, Systems
Cardio Vascular System
Respiratory System
Muscular Skeletal System
Digestive System
Excretory System
Endocrine System
Nervous System
Reproductive System
An Outline of Visual System
Ocular Embryology
Bony Orbit & Adnexa
Extra Ocular Muscles
Coats of Eye Ball
Conjunctiva Structure & Function
Sclera & Episclera
Cornea Structure & Function
Limbus
Uveal Tract
Anterior Chamber & Angle
Pupil
Aqueous Humor
IOP Measurement
Posterior Chamber
Crystalline Lenses
Vitreous
Retina
Vitamin A Cycles
Visual Pathway
Blood Supply to Eye ball
Nerves Supply to Eye ball
Cranial Nerves
Eyelids
Lachrymal System: Structure & Function
Tear Film
Near Vision Reflex
Visual Acuity
Stereo vision

Binocular & Color Vision
Visual Fields & Perimeter

PHYSICAL OPTICS, PRISM & LIENS

Introduction
Light -Definition & Theory
Properties of Light
Reflection & Refraction
Diffraction & Dispersion
Transmission & Absorption
Geometrical Optics
Spherical Lenses
Astigmatic & Tonic Lenses
Prism
Vergence of Light
Magnification of Lenses
Homocentric Lenses System Gauss's Theorem
Optical Aberration of images -Spherical Aberration -Chromatic Aberration
Lasers Fundamental
Schematic & Reduced Eye Angle Alpha
Visual Acuity
VA-Testing
Retinocopy
Cycloplegic Drugs & Mydriatics
Subjective Refraction
Simple & Toxic Transposition
Spherical Equivalent
Accommodation & Convergence

RETAIN & REFERENCE TECH. TRANSFER REFRACTIVE ERROR

Myopia
Hypermetropia
Astigmatism
Aphakia
Prebyopia

DIPLOMA IN OPTOMETRY 2nd YEAR

DISEASES OF EYE, DIAGNOSTIC INSTRUMENT

Eyelids:-Congenital Anomalies, Blepharospasm, Ectropion, Entropion,
Ptosis/ Eyelids Tumor
Conjunctiva: Inflammation, Degeneration

Cornea: Keratitis, Keratoconus, Keratoplasty, Refractive Surgery.

Sclera

Vitreous

Lens: Cataract, Other anomalies, Cataract Surgery.

Uveal Tract: Iridocyclitis, Other anomalies

Primary Glaucoma, Secondary Glaucoma Glaucoma Surgery

Retina: RD, RP, Retina Surgery

Optic Nerve : Optic Neuritis, Papilloedema, Optic Atrophy

Injuries To Eye: Burns

Lacrimal System : Dacrocystitis

Amblyopia

Color Blindness

Vitamin A Deficiency

Dry Eyes

Refractometer

Lensometer

Lens Gauge or Geneva Lens

Keratometer

Ophthalmoscope

Slit Lamp

Corneal Loupe

Operating Microscope

USG Ophthalmology

Perimeter

Tonometer

Gonioscope

Mirror Fundus lens.

Hruby Lens

Placido's Disc

Pachymeter

Reflective Unit

Exophthalmometer

ERG, EOG, VER

PHARMACOLOGY, PATHOLOGY & MICROBIOLOGY, MECHANICAL OPTICS

Routes of Drug Administration

Pharmacokinetics & Pharmacodynamics

Classification of Drugs

Drugs used in Ophthalmology

Tear Substitutes

Local Anesthetics

Dyes Used as Diagnostic Drugs Inflammation, Infection & Transmission

Immunity

Microorganism, Pathogenic & Nonpathogenic Organism Affecting Eye
Degeneration & Repair A Brief History of Ophthalmic Lenses, Spectacles
Terms Used in Lens Workshop
Ophthalmic Lens Material
Lens Standard
Ophthalmic Lens Blank Manufacture-Glass & Plastic
Ophthalmic Prescription Lens Making
Lens Defects
Ophthalmic Lens Designs
Types of Ophthalmic Lenses: Aspheric, High Index, Multifocal, Bifocal & Trifocal
Lenses, Photo Chromatic Lenses, Polaroid Lenses, Tinted Lenses, Protective
Lenses.
Spectacles Frames: History, Nomenclature & Terminology, Classification.
Types of Frame Material
Types of Human Faces, Choice of Frames
Cosmetic & Functional Dispensing of Spectacles
Measurement for Ordering Spectacles: IPD, VD
Special Measurement for Fitting Special Types of Lenses
Fitting of Lenses in Various Types of frames
Spectacles Intolerance
Special types of Spectacles
Dispensing of Prisms, Prismatic effect of lens
Contact Lenses
Low Vision Aids
Magnification by Lenses

PUBLIC HEALTH, COMMUNITY OPHTHALMOLOGY

Introduction
National Programme for Control of Blindness
National Immunization Programme
Blindness : Causes and its Prevention