OPJS UNIVERSITY, CHURU
(RAJASTHAN)

SYLLABUS

FOR

DIPLOMA IN OPHTHALMIC TECHNOLOGY

(D.O.T.)

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SCHOOL OF PARA MEDICAL SCIENCE

OPJS UNIVERSITY, CHURU (RAJASTHAN)

2015-16

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DIPLOMA IN OPHTHALMIC TECHNOLOGY (D.O.T.)

Ist Year

S.No.	PAPER CODE	NAME OF PAPER	M.M.(T-S-P)
1	DOT-1001	Human Anatomy & Physiology	70+30
2	DOT-1002	Ocular Anatomy & Physiology	70+30
3	DOT-1003	General & Ocular Biochemistry	70+30
4	DOT-1004	Physical & Visual Optics	70+30
5	DOT-1005	General Principle of Hospital Practice & Patient Care	70+30
6	DOT-1006 (P)	Human Anatomy & Physiology	35+15
7	DOT-1007(P)	Physical & Visual Optics	35+15

IInd Year

S.No.	PAPER CODE	NAME OF PAPER	M.M.(T-S-P)
1	DOT-2001	Optometric Optics	70+30
2	DOT-2002	Ocular Microbiology & Ocular Pathology	70+30
3	DOT-2003	Ocular Diseases & Pharmacology	70+30
4	DOT-2004	Geriatric & Pediatric Optometry	70+30
5	DOT-2005	Contact Lenses & Low Vision Aids	70+30
6	DOT-2006 (P)	Optometric Optics	35+15
7	DOT-2007(P)	Ocular Microbiology & Ocular Pathology	35+15
8	DOT-2008 (P)	Geriatric & Pediatric Optometry	35+15
9	DOT-2009 (P)	Contact Lenses & Low Vision Aids	35+15
10	DOT-2010 (T)	Hospital Training	100

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Detailed Syllabus

(Ist Year)

DOT-1001- HUMAN ANATOMY & PHYSIOLOGY

I- Human Anatomy & Physiology : a general view : (i) Organization of Organism : Cell-structure & function, Tissue – classification and function; microscopic structure of each type; (ii) Human Anatomy – Introduction, Subdivisions of anatomy, Anatomical nomenclature –Terms of position, location an fundamental planes, Clinical terms; Introduction, Definition, Difference between human anatomy and Physiology, Homeostasis, Body fluid, Transport through cell membrane – Passive Processes, The Principle of Diffusion, Simple diffusion, Facilitated diffusion Osmosis, Active Processes – Active Transport, Transport in Vesicles, The primary Tissue, Organs and systems.

II-The Skeleto- Muscular System : Brief discussion over skeletal system – Classification of skeleton – Axial and Appendicular ; Major components of skeleton system (a) Bone – definition, Synonym; Composition; Special features & Function: Classification; bone marrow, bone growth & ossification; features of a long bone; (b) Cartilage-definition; Components and classification; Overview of Osteology of bone of –(i) Upper limb (ii) Lower limb . Joints – Definition of joints, functions, Classification of joints based on Structure and Function.
Muscular system – Brief introduction of muscular system muscle tissue types, General discussion of skeletal muscles.

III- The Circulatory System : Brief discussion about basics of circulatory system – components circulatory system – structure of artery , vein, capillaries sinusoids, The Heart – Brief discussion about – General features of Heart; Shape and Size of Heart; Position of Heart- general overview on – Mediastinum and relation of heart; Pericardium; Layers of heart- epicardium etc.
Lymphatic system – Introduction to lymphatic system, brief overview of

regional lymph nodes & lymphatic organs. Lymph, lymphatic circulation, function of the body.

IV-The Gastro-intestinal System : General introduction of digestive system; Brief discussion over anatomy of – (i) The alimentary canal or GI tract (gastrointestinal tract) : Mouth, Pharynx, Esophagus, Stomach, Small intestine, Large intestine & Anus; (ii) The accessory digestive organs – brief discussion over – Teeth, tongue, Salivary glands, Gallbladder, Liver and Pancreas.

V- The Urinary System : General concept of Urinary system; Brief discussion over anatomy of – (a) Kidney – anatomical position, general features & structure of nephron, (b) Ureter – general features and constrictions, (c) Urinary bladder – anatomical positin, general features & relations, (d) Urethra – general features in males & females; Renal System Phystem Physiology – Function of Kidney, Urine formation (filtration, re-absorption and secretion), Anomalies in urine concentration.

VI-The Genital System : Brief discussion over anatomy of – (a) Male reproductive system – General features of primary & secondary reproductive organs; Reproductive system Physiology – Physiological anatomy of male and female and female reproductive organs; Brief overview of the formation of semen and spermatogenesis; Brief account of the menstrual cycle.

VII- Fluids, Electrolytes & Acid-base Balance : Regulation of extracellular fluid osmolartity and sodium concentration; Integration of renal mechanisms for control of blood volume and ECF, renal regulation of potassium, calcium, phosphate, and magnesium; Regulation of acid base balance.

DOT-1002- OCULAR ANATOMY & PHYSIOLOGY

I- Orbit & its Immediate Relation : Spaces of orbit, orbit apertures, orbital fat & reticular tissue, contents of the orbit, bony orbit- shape, size walls of the orbit, base and apex of the orbit; Orbital fascia bulbi, fascial sheaths of extraocular muscles, intramuscular septa; Orbital nerve – Occulomotor, Trochlear, Abducent,

Trigeminal; Fascial nerves – their functional components and clinical aspects; Ocular Muscles- Extraocular muscles, nerve supply, motor nuclei, supra nuclear motor centers.

II- Lids & Eyelid Glands : Lids-structures of lids, skin, subcutaneous, areolar layer, layer of striated muscle, submuscular areolar tissue, fibrous layer; Eyelid glands - Mebibomain glands, Glands of Zeis, and Glands of Moll; never supply, blood supply and lymphatic drainage of lids.

III- Conjunctiva cornea & sclera : Conjunctiva – Brief discussion, parts of conjunctiva – Palpebral, Bullar; conjuntival fornix, Microscopic structure of conjunctiva- Epithelium, Substantia propria, conjunctival glands, Henley's glands, Manz glands, blood and nerve supply of conjunctiva, caruncle, Plia Semilunaris; Cornea – Structural layers of corneas, Corneal Transparency and nerve supply of the cornea; Sclera – Episclera, Sclera proper, Lamina fusca, Blood and nerve supply of the sclera.

IV-Lens and Zonule : Structure of the lens – capsule, Ant epithelium, lens fibers, Ciliaryzonules – structure gross appearance, Arrangement of zonules fibers.

V- Retina : Anatomical structure of retina, fovea centralis, optic nerve optic chaisma potic tracts, Lateral Geniculate body, optic radiation, Arrangement of nerve fibers.

VI- Embryology of the Eye in General : Formation of optic cup, optic vesicle & optic stalk, lens vesicle; changes in associated mesoderm, development of various structure of eye ball – sclera, cornea, iris, lens, ciliary body, vitreous, retina, optic nerve, choroide Growth and development of other structures of eyeball – eyelids, lacrimal apparatus, extra- ocular muscles & orbit.

VII- General Physiology of the Eye –An Introduction : Maintenance of Transparency of the Cornea; Physiology of corneal transparency & hydration, Maurice theory and Goldman's theory; Maintenance of Transparency of the Lens; Function of lens, Lens transparency, Changes in ageing lens, Process of Cataract.

VIII- Protective Mechanism of the Eye : Blinking – muscles od lid closer & lid opening; Lacrimimation – Lacrimal glands, Pre corneal tear film, Lachrymal

secretion of tear film, Tear, film dynamics (secretion of tear, formation of tear, retention & redistribution of tear, displacement phenomena, evaporation from tear film, drying & breakup of tear film, dynamic events during blinking, elimination of tear) .

IX- Color Vision : Physiological, Photochemical & neurological basis of color vision; Electrophysiology of color vision, Granit's modulator and dominator theory, Purkinje phenomenon Young- Helmholtz, Color blindness, Neural analysis; Geneculate cortex : Structure of geneculate cortex, Electrophysiology, retinal projection, function of visual cortex; VISUAL PERCEPTION : Binocular perception, stereoscopic depth perception; Neurophysiology of Geniculate body, non-geniculate targets for retinofugal input, visual center).

DOT-1003- GENERAL & OCULAR BIOCHEMISTRY

I- Amino Acids & Protein Structure : Amino Acids, Protein Structure, amino acids- Functions, classification, properties; protens- primary, secondary, tertiary & quaternary Structures & the bond involves.

II- General Metabolism: Basic concept & metabolism of carbohydrate, protein & fat; process of glycol sis; TCA cycle- significance, Non protein Nitrogen balance, Metabolism of acid acids, Transamination, Deamination.

III- Brife Outline: Enzyme and Vitamins: General characteristics; Factors affecting enzymatic activity; Kinetics; Michaelis Menten equation; Linne We Water & fat soluble Vitamins, vitamins- A,D,E,K,P,C,B Complex- source, daily requirement, metabolism, functions & deficiency aver Burk plot; Enzyme inhibition- Reversible & irreversible.

IV- Oxygen Transporting Protein: Hemoglobin and Myoglobin- structure & their characteristics comparison between hemoglobin & myoglobin; oxygen transporiting of hemoglobin affinity for oxygen.

V-Basic Outline of Hormone Action : Physical & Chemical Characteristics of Hormone; Types of hormone; General mechanism of hormone action; Source &

importance of different hormones- STH, ACTH, GTH, T4, parathyroid hormone, INSULIN, Glucagon, Glicocorticoid, Mineralocorticoid, Melatonin, Estrogen, Progesteron, Testosterone & HC.

VI- Cornea & Lens : Biochemical composition of cornea; Sources of nutrients – Oxygen, Glucose, Amino acid, Metabolic pathway in cornea – Glycolysis, HMP shunt; Biochemical composition of lens; Lens protein – their types & characteristics; Lens metabolism – carbohydrate metabolism, protein metabolism; Cataract – due to biochemical defects of lens antioxidant mechanism in the lens.

VII- Tear Film : Function of Tear film; Different layers of tear film; Chemical composition of tears, Tear film abnormalities tests for adequacy.

DOT-1004- PHYSICAL & VISUAL OPTICS

I- Nature of Light : Properties of light, principles of reflection of light, refraction of light; Snell's Law – relationship between angles of incidence and refraction of rays, critical angle, total internal reflection, refraction by plane parallel slab of glass; Quantum theory – dual nature of light; Ray and wave velocity, Wave nature of light – short comings of wave theory, Scattering of light –Rayleigh's and Raman's scattering Principles; of LASER –concept and use.

II- Spectrum & Diffraction : Spectrum; Sources of spectrum; Emission & absorption spectra; Classification of visible, ultra violet, infrared, electromagnetic spectrum; Diffraction, Single slit, qualitative and quantitative; Circular aperture; Double slit pattern; Multiple slit grating.

III- Polarization : Basic principles of holography; Circular & elliptic polarization production, detection and its behavior; Double refraction, principal plans, Nicol prism – plane polarization; Polarization by selective absorption – dichorism; Polarization of transverse waves.

IV- Optics of Ocular Structure : Tears; Cornea; Aqueous; Crystalline lens; Vitreous; Schematic & reduced rye.

Refractive Conditions of Eye : Emmetropia; Myopia; Hyperopia; Astigmatism.

V- Refractive Anomalies & Their Cause : Aetiology of refractive anomalies; Contributing variability and their ranges; Populating distributions of anomalies; Optical component measurements; Growth of the eye in relation to refractive errors.

VI- Objective & Subjective Refraction : Radioscopy – speed of reflex and optimum condition; Retinoscopy – design consideration; Review of objective refractive methods; Subjective Refraction – finding Best vision Sphere, determine axis and power of cylinder by JCC, refine sphere, duochrome test, binocular balancing, Fogging method; Difficulties in subjective tests; Transposition of lenses; Spherical equivalent.

DOT-1005- GENERAL PRINCIPLE OF HOSPITAL PRACTICE & PATIENT CARE

I- Hospital Structure & Organization : Overview of hospital structure, hospital procedure, professional qualities; Communication and relational skills – development of appropriate communication skills with patients, verbal and non verbal communication, appearance and behavior; Professional attitude of the technologist to patients and other members of the staff; Record and reports – records relating to patients and departmental statistics; Minimizing waiting time out – patient and follow- up clinics, stock-taking and stock keeping; Administrative policies and disciplinary procedures; Importance of reporting.

II- Care of Patient : Contact with the patient and family members in the respective department; Communication with the patient and family members; Patient transfer technique; Restraint techniques – consideration to be taken for the geriatric, pediatric, trauma, emotionally disturbed, and anaesthetized

patients; Specific patient conditions- essentials of care of patients on ventilator, tracheotomy, tubes and catheters etc.

III- First Aid & Basic Life Support : Aims and objectives of first aid; wounds and bleeding, dressing and bandages; pressure and splints, supports etc. shock; insensibility; asphyxia; convulsion; resuscitation, use of suction apparatus, drug reactions; prophylactic measures; administration of oxygen; electric shock; burns; scalds; hemorrhage; pressure points; compression band. Fractures; splints; splints, bandaging; dressing, foreign bodies; poison.

IV- Infection Control Practices : Definition – introduction to the types of micro organisms – Bacteria – their nature and appearance – spread of infections – auto-infection or cross infection; asepsis and antisepsis; Infection pathogens; Communicable diseases cross infection and prevention, patient hygiene, personal hygiene, departmental hygiene etc.

V- Medico – Legal Issues : Medico-Legal consideration – clinical and ethical responsibilities, ethical law and professional etiquettes applied to members of profession associated with medicine, misconduct and malpractice; Handling female patients, practice in pregnancy- decision making.

VI-Principle of Asepsis : Sterilization – methods of sterilization; use of central sterile supply department of instruments, surgical dressing in common use including filamented swabs. Elementary operating theatre procedure, general abdominal preparation, clothing of a patient.

DOT-1006- HUMAN ANATOMY & PHYSIOLOGY(P)

I- Histology : (a) Histotechniques (b) Microscope (c) Histology of Skeletal muscle

(d) Histology of Cardiac muscle (e) Histology of Smooth Muscle (f) Histology of Bone

(g) Histology of Hyaline cartilage (h) Histology of Elastic cartilage (i) Histology of Fibro cartilage (j) Histology of artery (k) Histology of Vein (l) Histology of Lung (m) Histology of Trachea (n) Histology of Eye (o) Cornea (p) Retina (q) Optic nerve.

II- Osteology : (a) Appendicular skeleton (b) Axial skeleton.

III- Specimen : (a) Heart (b)Lung (c)Stomach (d)Kidney (e)Liver

(f)Eye (g)Brain

IV- Study and Care of Microscope

V- Hemocytometer

VI- Determination of Erythrocyte Sedimentation Rate (ESR) Packed Call Volume (PCV)

VII- Estimation of Hemoglobin Concentration.

VIII- Total RBC Count.

IX- Determination of Red Blood Cell Indices.

X- Total Leukocyte Counts.

XI- Preparation and Examination of Blood Smear & Differential Leukocyte (DLC).

XII- Blood Pressure Measurement.

XIII- Determination of Blood Group.

DOT-1007- PHYSICAL & VISUAL OPTICS(P)

I- To determine the wavelength of a monochromatic light source with the help of Fresnel's Biprism.

II- To determine the radius of curvature of convex surface of a lens by Newton's ring method.

III- To study the diffraction through a single slit & to determine its width.

IV- Determination of the wavelength of monochromatic light using diffraction grating.

V- Measurement of Near Point of Convergence.

VI- Measurement of Near Point of Accommodation .

VII- Measurement of Amplitude of Accommodation.

VIII- Determining objective value of Refraction by Retinoscopy.

(IInd Year)

DOT-2001- OPTOMETRIC OPTICS

I- Introduction of Optometric Optics : Introduction and brief discussion –Light, Mirror, Reflection, refraction and absorption.

II- Ophthalmic Lenses : Definition of prisms, Units of prism power; Thickness difference and Base apex notation; Dividing, Compounding and Resolving prisms; Rotary prisms and effective prism power in near in near vision; Prismatic effect, decentration, Prentice Rule; Lens Thickness in High Powers; Affectivity, Vertex Powers and Accurate Transposition of lenses.

III- Types of Lenses : Aspheric lenses; Sphero-cylinderical lenses; High index lenses; Bifocal and Multifocal lenses; Photochromic lenses; Tinted lenses; Toric lenses; Anti reflection coating, Field of view of lenses; Size, shape and mounting of ophthalmic lenses.

IV- Special Purpose Lenses : Describe and explain the principles of (a) Lenses for use under water, (b) Recumbent prisms (c) Fresnel lenses, (d) Fresnel prisms (e) Chavasse lenses (f) Frosted lenses, (g) Occliders.

V- Lens Power Determination : Trial lens method; Manual focimeter; Automated focimeter; Projection focimeter.

VI- Optical Appliances : Types, making of spectacles; Manufacture of glass – describe the important physical properties of the various materials from which specific lenses are made; Lens surfacing; Principle of surface generation and glass cements.

VII- Dispensing Optics/Spectacles: Measurements for ordering spectacles- IPD, marking center, vertex distance, calculations; Measurements for fitting special lenses-bifocals, Multifocals, prism, lenses, etc.

VIII- Aberrations : Spherical aberration; Chromatic aberration; Coma; Oblique astigmatism, Curvature of field; Distortion.

DOT-2002- OCULAR MICROBIOLOGY & OCULAR PATHOLOGY

I- Introduction to Ocular Microbiology : Bacterial Cell structure – Elementary idea about classification and morphological basis; Staining reactions – Gram Staining, Spore Staining, and Acid Fast Staining; Microbial growth & death – Laboratory culture; Host pathogen interactions; Antimicrobial chemotherapy; pathogenic mechanisms common to external ocular infections process; Bacterial growth – Nutritional requirements, media classification and bacterial nutritional requirements, physical factor affecting culture media and Growth curve.

II- Microbial Infections of the Eye : Bacterial Infection – Homophiles Influenzas, Neiserria Gonorrhea, Chlamydia Trachomatis, and Pseudomonas; Virus – Adenoviruses, Herpes Simplex Type I, Protozoa; Bacterial Infections of the eye – Conjunctivitis (pink eye), Neonatal Gonorrheal Ophthalmia, Inclusion Conjunctivitis, Trachoma, Acanthamoeba Keratitis, Herpes simplex Keratitis.

III- Viral infection of the Eye : Elementary Knowledge of viral-morphology – Viral genome and classification, Viral replication, Herpes viruses, Hepatitis viruses, Human immunodeficiency viruses; Infections diseases caused by bacteria, virus and fungi; Infectious eye diseases in hot climate as in India.

IV- Immunology : Antigen; Antibody; Structure and function of immune system – Organs of immune system, cells of immune system functions of immune system; Routine serological tests; Hypersensitivity; Autoimmune diseases affecting the eye.

V- Neoplasia : Introduction to Neoplasia – Definitions of Neoplasia, Behaviour of benign and Malignant; Neoplasm; Eteopathogenis; Diagnostic methods.

VI- Clinical Pathology : Introduction to Clinical Pathology – Functioning of Laboratory, Collection of blood sample, Hematology Technique – Blood Cells and blood collection techniques; Hemoglobin estimation – Total leukocyte count, Differential leukocyte count, Erythrocyte sedimentation rate, Peripheral blood film – staining, significance of a peripheral smear- Bleeding time, clotting time, Examination of Urine.

VII- Ocular Pathology: Infection; Degenerative, conditions, Ocular manifestation in systemic disease; Cataract; Tumors.

DOT-2003- OCULAR DISEASES & PHARMACOLOGY

I- Diseases of the Eyelids and Lachrymal System : Congenital and developmental anomalies of the eyelids; Blepharospasm, Entropion and ectropion, Trichiasis and symblepharon, Eyelid inflammations; Ptosis; Lacrimal System; Method of Lacrimal evaluation; Congenital and developmental anomalies of the Lacrimal system; Lacrimal obstruction; Lacrimal sac tumors; Lacrimal trauma.

II- Diseases of the Orbit-Sclera : Staphyloma; Scleritis; Episcleritis; Orbital abnormalities; Congenital and developmental anomalies of the orbit; Congenital tumors; Orbital inflammations; Sinus disorders affecting the orbit; Orbital trauma.

III- Diseases of the Conjunctive, Cornea, Uvea : Inflammation; Therapeutic principles; Specific inflammatory diseases.

IV- Cataract : Abnormalities; Acquired lenticular defects; Cataract.

V- Retina :Macular degeneration; Hypertensive retinopathy; Peripheral retinal degenerations; Hereditary macular disorder; Retinal detachment; Intraocular foreign bodies; Photocoagulation; Retinal vascular disease; Retinal tumors and retinoblastoma; Retinal inflammations.

VI- Trauma & Blindness : Anterior segment trauma; Posterior segment trauma; Glaucoma –types : Open angle glaucoma; Narrow angle glaucoma.

VII- General Pharmacology : Pharmacokinetics; pharmacodynamics; Drugs acting on the autonomic nervous system; Analgesics and local anesthetics; Antipyretics and anti-inflammatory drugs; antibiotics; Antiviral drugs; Anti-allergic drugs; Drugs affecting respiratory and cardiovascular system; Antiseptics disinfectants, Preservatives; Common systemic side effects of medications, and general health.

VIII- Ocular Pharmacology : Anti-microbials; Anti-inflammatory drugs; Autonomic drugs and anti-glaucoma agents; Drugs for dry eye and diagnostic agents; Ocular anesthetics ; Ophthalmic prescriptions.

DOT-2004- GERIATRIC & PEDIATRIC OPTOMETRY

I- History : Genetic factors; Perinatal Factors; Prenatal factors; Postnatal factors; Measurement of visual acuity.

II- Normal Appearance, Pathology & Structural Anomalies : Orbit Eyelids; Lacrimal system; Conjunctiva; Cornea; Sclera; Anterior chamber, uveal tract, pupils; Lens, vitreous, fundus; Oculomotor system.

III- Refractive Status Measurement : Measurement of refractive status.

IV- Binocular Status Determination : Determining binocular status.

V- Sensory & Motor adaptability Determination : Determining sensory motor adaptability.

VI- Compensatory Treatment & Remedial Therapy : Myopia; Pseudomyopia; Hyperopia; Astigmatism; Anisometropis; Amblyopia; Remedial & compensatory treatment for strabismus & nystagmus; Vergence and accommodation.

VII- Geriatric Optometry : Structural change in eye; Physiological change in eye; Optical and refractive changes in eye; Aphakia, Pseudophakia –its correction.

VIII- Ocular Diseases Common in Old Eye : Cataract, glaucoma, macular disorders, vascular diseases of the eye; Special consideration in ophthalmic dispensing to the elderly.

DOT-2005- CONTACT LENSES & LOW VISION AIDS

I- Contact Lenses : Brief introduction; Lens types and materials :Hard lenses, Haptics, Lathe cut, Moulded, and Spin cast soft lenses.

II- Optics of Contact Lenses : Curves; Zones; Widths and tear lens effects; Sagittal depth Centre and edge thickness; Flex; Asphericity and toric design; Quadratic specific designs; Obligue geometries with reverse curves.

III- Lens Selection : Patient's History; Analysis of primary care data; Correlations of data; Facial physiognomy; Contraindications; Anterior segment examination; Measurement of anterior segment; Patient handling and control.

IV- Care of Lenses : Handling; Cleaning; Preservatives available; Disinfection methods & Solutions.

V- Bifocal & Astigmatic Contact Lenses : Brief discussion; Types; Basis of selection and adaptation; Techniques of fitting.

VI- Low Vision : Defining low vision; Disorder, impairment disability and handicap; WHO definitions; Incidence and causes; Prevalence; Causes; Visual impairment in children.

VII- Measuring Visual Performance : Acuity; Contrast; Glair and its effect; Reading, Quality of life.

VIII- Non-optical Visual Aids : Reading rectangle (typoscope); Yellow filter; Larger, illuminated watches and clocks; Writing guides; Instruments that provide voice instruction (i.e., computers); Instruments that provide voice information ect.

DOT-2006- OPTOMETRIC OPTICS (P)

I- Hand neutralization of the lenses.

II- Keratometry.

III- Lensometry

IV- Measurement of IPD.

V- Measuring heights for Single vision, Bifocal and Multifocal lenses.

VI- Marking of single vision and bifocal lenses.

DOT-2007- OCULAR MICROBIOLOGY & OCULAR PATHOLOGY(P)

I- Sterilization

II- Gram staining

III- Collection of blood

IV- A peripheral blood smears preparation

V- Estimation of Hb.

VI- Detection of Hepatitis C Virus (Hcv) Antibodies

VII- Differential count of white blood cell.

VIII- Determination of ESR.

DOT-2008- GERIATRIC & PEDIATRIC OPTOMETRY (P)

I- Cover test

II- Hirschberg corneal reflex test

III- Ocular motility test

IV- Assessment of pupil

V- Assessment of corneal sensitivity

VI- Syringing of lacrimal passage.

DOT-2009- CONTACT LENSES & LOW VISION AIDS (P)

I- Brightness acuity testing.

II- Color vision testing by D15 color vision plates.

III- Recording of Visual Acuity in Low Vision patient.

IV- Identification of a telescope

V- RGP contact lens insertion and removal

VI- Soft contact lens insertion and removal.

DOT-2010- HOSPITAL TRAINING

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