

लोक सेवा आयोग
नेपाल स्वास्थ्य सेवा, विविध समूह, सहायक पाँचौं तह, अष्टिसियन सहायक वा सो सरह पदको खुला
प्रतियोगितात्मक परीक्षाको पाठ्यक्रम

भाग (Part II) :-

सेवा सम्बन्धित कार्य-ज्ञान (Job Based - Knowledge)

~~१०~~ प्रश्न × १ अङ्क = ~~१०~~ अङ्क (२० × १ = २० अङ्क)

1. **Ocular Anatomy and Physiology**
 - 1.1 Ocular Embryology
 - 1.2 Anatomy of Eyeball & Ocular Adnexa
 - 1.3 Dynamics of Tear Film & Aqueous Humor
 - 1.4 Physiology of Vision: Visual acuity, Colour Vision, Contrast Sensitivity
 - 1.5 Physiology of Pupillary Light Reflex & Visual Pathway
2. **Optics and Refraction**
 - 2.1 Properties of Light: Reflection, Refraction, Diffraction and Total Internal Reflection
 - 2.2 Refraction: Static & Dynamic Refraction, Cross Cylinders, Schematic Eye
 - 2.3 Refractive Errors: Hypermetropia, Myopia, Astigmatism, Presbyopia
 - 2.4 Lenses & Contact Lens: Types and Dispensing, Power Verification
 - 2.5 Spectacle Dispensing Types: Material & Fitting
 - 2.6 Lens and Frame Markings, Interpupillary Distance, edging, Cutting and Fitting lenses used in refraction
3. **Binocular Single Vision and Orthoptics Evaluation**
 - 3.1 Binocular Single Vision Evaluation: Fusion, Stereopsis
 - 3.2 Orthoptic Evaluation: Cover Test, Prism Test, Test of Convergence & Accommodation, Test for Suppression, Test for Stereopsis, Test for Fusion Range
 - 3.3 Extraocular Motility: Evaluation, Disorders and Management. Ocular Muscles Insufficiencies
 - 3.4 Strabismus: Latent & Manifest Strabismus, Esotropia & Exotropia
 - 3.5 Synaptophore and Vision Therapy
4. **Ocular Pharmacology and Pathology**
 - 4.1 Common Ophthalmic Drugs: Route of Administration, Absorption & Ocular Penetration
 - 4.2 Ophthalmic Antibiotics, Anti-inflammatory/ Corticosteroids Drugs, Anti-allergic Drugs, Antiglaucoma Agents, Artificial Tear Substitutes: Mechanism of actions, Indications, Doses & its Contraindications
 - 4.3 Mydriatics, Cycloplegics and Miotic agents
 - 4.4 Ocular Anesthesia & Anaesthetic Drugs
 - 4.5 Ocular Microbiology : Ocular Flora, Pathogens, Stains, Growth & Culture of Microorganisms
5. **Investigative Ophthalmology**
 - 5.1 Visual Acuity Assessment in verbal & non-verbal Children and Adults
 - 5.2 Visual Field Assessment: Goldman Visual Field Test and Automated Visual Field Test
 - 5.3 Tear Film Assessment: Schirmer test & Tear Break Up Time (TBUT), Syringing
 - 5.4 Ocular Tonometry, Keratometry, Pachymetry, Biometry, Visiometry, Ocular Ultrasonography, Ophthalmic Photography, Corneal Topography and Optical Coherence Tomography (OCT)
 - 5.5 Screening of Blood Pressure and Sugar Level in Ophthalmic patients

लोक सेवा आयोग
नेपाल स्वास्थ्य सेवा, विविध समूह, सहायक पाँचौं तह, अष्टिसियन सहायक वा सो सरह पदको खुला
प्रतियोगितात्मक परीक्षाको पाठ्यक्रम

- 6. Common Eye Diseases and Systemic Associations**
 - 6.1 Causes of Gradual Loss of Vision: Cataract, Glaucoma, Age Related Macular Degeneration (ARMD)
 - 6.2 Causes of Sudden Loss of Vision: Endophthalmitis, Vitreous Hemorrhage, Retinal Detachment, Retinal Artery/Vein Occlusion, Optic Neuritis
 - 6.3 Causes of Red Eye: Conjunctivitis, Episcleritis, Scleritis, Corneal Ulcer, Endophthalmitis, Seasonal Hyperacute Panuveitis (SHAPU)
 - 6.4 Diabetes Mellitus, Hypertension, Thyroid Eye Disease, Collagen Vascular Diseases Haematological Disorders
 - 6.5 Infective diseases: Tuberculosis, Toxoplasmosis, Syphilis, Leprosy, HIV/AIDS
- 7. Pediatric Ophthalmology**
 - 7.1 Common Causes of Childhood Blindness & Visual Impairment: Cataract, Glaucoma, Retinopathy of Prematurity, Proptosis & Ptosis
 - 7.2 Ophthalmia Neonatorum, Vernal Keratoconjunctivitis, Congenital Nasolacrimal Duct Obstruction (CNDO), Viral Keratitis
 - 7.3 Differential Diagnosis of Leukocoria, Retinoblastoma: Diagnosis & Management
 - 7.4 Amblyopia: Pathophysiology, Types and Management
 - 7.5 Anesthopia & Digital Eye Strains
- 8. Ocular Emergencies and Injuries**
 - 8.1 Common Ophthalmic Emergency Conditions
 - 8.2 Chemical Eye Injuries: Acid & Alkali Burn
 - 8.3 Mechanical Eye Injuries: Closed globe & Open globe Injuries
 - 8.4 Ocular Foreign Body & Treatment
 - 8.5 Occupational Hazards
- 9. Community Ophthalmology**
 - 9.1 Common Causes & Burden of Blindness, Vision Impairment & Low Vision Global & National Scenario of Blindness; Nepal Blindness survey (1981)
 - 9.2 Prevention of Blindness Program Vision 2020: The Right to Sight; Trachoma Prevention: SAFE Strategy, National Vitamin A Program
 - 9.3 Eye Health Camps: Organization & Management
 - 9.4 Community Cataract Screening, School Eye Screening & Diabetic Eye Screening Camps
 - 9.5 Fundamentals of Ophthalmic/Clinical Research : Types, Design, Methodology, Analysis & Dissemination
- 10. Miscellaneous**
 - 10.1 Asepsis, Antiseptic, Sterilization and Disinfection
 - 10.2 Sterilization of Ophthalmic Instruments and Accessories
 - 10.3 Preparation of the Patients before Ophthalmic Surgeries
 - 10.4 Registration and Reporting
 - 10.5 Counselling and Documentation