

प्रदेश लोक सेवा आयोग,  
कोशी प्रदेश, विराटनगर  
प्रदेश निजामती सेवा तथा स्थानीय सरकारी सेवा अन्तर्गतका स्वास्थ्य सेवा, ज.हे.स. समूह, आठौं तहका  
पदहरूको खुला प्रतियोगितात्मक परीक्षाको पाठ्यक्रम

प्रथम तथा द्वितीय पत्र:- जनरल हेल्थ सर्भिसिज

**Etiology, Symptoms, Signs, Investigations and Curative and Preventive Management of the following Health related problems:**

**Section A ( 1<sup>st</sup> Paper 26 Marks, 2<sup>nd</sup> Paper 30 Marks)**

**1. General Medicine:**

**1.1 Pulmonary diseases:**

Disorders of airways: acute and chronic airway obstructions, tracheal and bronchial obstructions and stenosis  
Obstructive lung diseases: asthma, COPD,  
Bronchiectasis, Allergic bronchopulmonary aspergillosis, cystic fibrosis  
Pulmonary infections: pneumonia, lung abscess,  
Pulmonary neoplasm and mediastinal mass  
Interstitial lung disease  
Sarcoidosis  
Disorders of pulmonary circulation: pulmonary venous thromboembolism, pulmonary hypertension, pulmonary vasculitis  
Environmental and occupational lung disorders  
Medication and radiation induced lung injury  
Pleural diseases: effusion, pneumothorax  
Acute respiratory failure and ARDS  
Indication of Lungs Transplant  
SARS, Bird Flu, Covid-19 and related viral infections.

**1.2 Cardiovascular Diseases:**

Congenital Heart Diseases  
Valvular Heart Diseases, Rheumatic fever, Rheumatic heart diseases  
Infective endocarditis  
Coronary Heart Disease  
Disorders of Rate and Rhythm  
Heart Failure  
Myocarditis and The Cardiomyopathies  
Disease of pericardium  
Hypertension

**1.3 Gastrointestinal Disease:**

Symptoms and sign of Gastrointestinal Disorders: (Dyspepsia, Nausea & vomiting, Hiccups, Constipation, Diarrhea)  
Gastrointestinal Bleeding, Acid peptic diseases, Gastro-esophageal reflux  
Disease of The Peritoneum

Disease of The Intestine (Ulcerative colitis, Crohns disease, Worm Infestation, Gastroenteritis)  
Diseases Of Liver and biliary tract (Alcoholic liver disease, Cirrhosis of liver and complications, Hepatitis, Hepatic encephalopathy)  
Disease of Pancreas (Pancreatitis)

#### **1.4 Blood and Lymphoreticular Diseases:**

Anaemias  
Leukemias and Myeloproliferative Neoplasms  
Lymphomas  
Blood Transfusions  
Platelets Disorders  
Rheumatologic , Immunologic & Allergic Disorders  
Autoimmune Disease(SLE)  
Vasculitis Syndrome

#### **1.5 Neurological Diseases:**

Spina bifida  
Headache  
Epilepsy and seizure disorders, Neurocysticercosis  
Cerebrovascular accident and stroke, Paraplegia, Quadriplegia  
Infections of Brain and spine (Meningitis and encephalitis)  
Multiple Sclerosis  
Parkinsons disease  
Myasthenia gravis  
Gullian Barre syndrome  
Peripheral Neuropathies  
Disorders of Neuromuscular Transmission

#### **1.6 Endocrine and Metabolic Diseases:**

Diseases of The hypothalamus & Pituitary Gland  
Disorders of Thyroid Gland  
Disorders of The Parathyroids  
Disease of Adrenal cortex  
Pheochromocytoma  
Clinical use of corticosteroid  
Diabetes Mellitus, its complications & Hypoglycemia  
Dyslipidemia  
Nutritional and Obesity

#### **1.7 Renal diseases:**

Disorders of the Renal tubules leading to disturbances of Acid -base and potassium  
Acute Kidney Injury  
Chronic Kidney Disease, Dialysis, Renal transplantation  
Nephrotic syndrome  
Glomerulonephritis  
Renal Vasculitis & Lupus Nephritis

Hereditary and Familial Renal Disease  
Hepatorenal Syndrome  
Infections of Kidney

### **1.8 Infectious and Tropical Diseases:**

Cholera, Enteric Fever, Malaria, Filariasis, Kala-azar, Leprosy, Chickenpox, Amoebiasis, Measles, Mumps, Snakebite, Rabies, Insect bite, Scrub typhus, Tuberculosis(Pulmonary and extra pulmonary), Food Poisoning, Tetanus, Scorpion Bite, HIV, UTI, Poliomyelitis, Dengue, Neglected tropical diseases.

### **2. Emergency Medicine:**

Resuscitation and BLS (Basic life support), PTC (Principle of trauma care), Management of acute poisoning, Coma, Acute abdomen & chest pain, Status Epilepticus, Acute severe asthma, multiple traumas including head injury, Catheterization, NG Tube Insertion, IV-line opening, Disaster management

### **3. Psychiatry:**

Schizophrenia and psychotic disorders  
Mood disorders( Depression, Mania, BPAD)  
Neurotic, Stress related and somatoform disorders( Anxiety, OCD)  
Substance related and addictive disorders  
Organic mental disorders( Dementia, Delirium)  
Sleep Disorders  
Eating disorders( Anorexia nervosa, Bulimia)  
Personality disorders  
Child psychiatry( ADHD, Autism)

### **4. Dermatology and STD:**

Hansen's disease, Fungal infections, Viral infections  
Protozoal, Arthropods and Parasitic infections  
Sexually transmitted infections and Venereal diseases  
Papulosquamous disorders( Psoriasis, Lichen Planus)  
Vesicobullous disorders  
Drug Eruptions  
Dermatitis, Urticaria

### **5. Pharmacology:**

Poison and Toxicology including Organophosphorus, Barbiturates, Corrosives, Heavy metals, Mushroom poisoning, Organochlorine poisoning.  
Drugs in pregnancy and lactation, prescribing in children and elderly.  
Dosage, Preparation, Mode of action and side effects of drugs acting on different systems of body  
Rational drug use, antimicrobial resistance, pharmacokinetics, pharmacodynamics, pharmacovigilance.

## Section B (1<sup>st</sup> Paper 26 Marks, 2<sup>nd</sup> Paper 20 Marks)

### 6. Surgery and Allied

#### 6.1 General:

Sinus, Fistula, Ulcer, Wounds, Surgical nutrition, Shock  
Basics of trauma management: abdominal, thoracic, head trauma  
Thermal injuries, Burn management, Hernia

**6.2 Breast:** abscess, benign lesions and carcinoma

**6.3 Endocrine:** Thyroid benign lesions and carcinoma

**6.4 Gastrointestinal:** Diseases of esophagus, Upper GI bleeding, Acute abdomen Diseases of stomach( PUD, carcinoma, GOO), Intestinal obstruction, Small and large intestine(benign and malignant conditions, Diseases of rectum and anal canal(haemorrhoids, fissure, prolapse, carcinoma), Appendicitis and its complications, Diseases of liver( hydatid cyst, abscess), Pancreas( pancreatitis and its complications, malignant conditions), Gall bladder and biliary tree( gall stone disease, carcinoma gall bladder, cholangiocarcinoma)

**6.5 Urosurgery:** Testicular disorders(undescended testis, torsion, epididymo-orchitis, hydrocele, varicocele), Acute retention of urine, Urethral and penile disorders(phimosis, paraphimosis, stricture, hypospadias), Bladder(carcinoma, suprapubic cystostomy), Kidney( Polycystic kidney disease, hydronephrosis, renal calculi, pyelonephritis, renal cell cancer, Wilms tumor), Prostate(BPH, carcinoma)

**6.6 Vascular surgery:** Thrombo angitis obliterans, DVT, Varicose veins

### 7. Anaesthesiology:

Principles of administering safe general anaesthesia, Local Anaesthesia, Principle and types of regional anaesthesia, Muscle relaxants, Postanaesthetic complications, ACLS and cardiopulmonary resuscitation including airway management, Lumbar Puncture, Endotracheal Intubation, PAC.

### 8. Ear, Nose, Throat and Oral Cavity

**8.1 Ear:** Foreign bodies and wax, Otitis externa, Otitis media and complications, Meniere's disease, Otosclerosis, Facial nerve lesions, Glomus tumor, Hearing loss

**8.2 Nose and paranasal sinus:** Foreign body nose, Nasal polyps, Rhinosporidiosis, Epistaxis, Rhinitis, Sinusitis, Septal abscess

**8.3 Pharynx:** Tonsillitis, Peritonsillar abscess, Pharyngitis, Nasopharyngeal angiofibroma, nasopharyngeal carcinoma

**8.4 Larynx:** Laryngeal obstruction, laryngotracheobronchitis, epiglottitis, vocal cord paralysis, carcinoma larynx, tracheostomy

**8.5 Oral cavity:** Parotid( parotitis, benign swellings), Ludwig's angina, submucosal fibrosis, leukoplakia, dental caries, dentigerous cyst, TMJ dislocation, Le Fort's fracture

## 9. Orthopedics and Trauma:

Infection of bone and joints( osteomyelitis, septic arthritis, tuberculosis spine and hip)  
Bone tumors  
Fracture( management, complications), Dislocations, RTA management,  
Crush Injury, compartment syndrome, Amputation  
Prosthesis and Orthotics, Physiotherapy, Traction and splintage  
Low backpain, Spine Injury, Peripheral nerve injuries  
Metabolic bone diseases( Rickets, osteomalacia, scurvy, osteoporosis, Pagets disease)  
Joint disorders( Osteoarthritis, Rheumatoid arthritis, seronegative spondyloarthropathies,  
Gout)  
Pediatric orthopedics( DDH, CTEV)  
Sports injuries

## 10. Ophthalmology:

Injuries of Eye, Foreign Body in Eye  
Conjunctivitis, Trachoma, Corneal ulcer, Scleritis, Episcleritis  
Lens: Cataract  
Retina: Retinal detachment, Diabetic and hypertensive retinopathy, Retinoblastoma  
Uvea: Uveitis, iridocyclitis  
Refractive errors: Myopia, hypermetropia, astigmatism, presbyopia  
Strabismus  
Glaucoma  
Optic neuritis  
Adnexae and orbit: epiphora, dacryocystitis, sty, chalazion, blepharitis, ptosis, proptosis,  
Orbital cellulitis  
Blindness: Definition, causes

### Section C (1<sup>st</sup> Paper 16 Marks, 2<sup>nd</sup> Paper 20 marks)

## 11. Obstetrics and Gynecology:

### 11.1 Obstetrics:

Antenatal, Natal and Postnatal care, Diagnosis in obstetrics and fetal monitoring  
Pregnancy Induced Hypertension, Eclampsia, Anemia in pregnancy, Diabetes Mellitus in  
Pregnancy, Hyperemesis Gravidarum, Antepartum/postpartum hemorrhage, Abortion,  
Multifetal pregnancy, Oligo/polyhydramnios, Rh negative pregnancy, Molar pregnancy,  
Ectopic pregnancy  
Normal and abnormal labour, Preterm labour, PROM, Stages of labor and management,  
Rupture Uterus, Obstructed Labor  
Intrauterine death

### 11.2 Gynaecology:

Disorders of menstruation, Menopause, HRT  
PCOD  
Congenital malformations  
Genital tract infections  
Urogynaecology: pelvic organ prolapse, fistula  
Infertility  
Contraception  
Uterine fibroid, endometriosis and dysmenorrhea  
Uterine cancer, Cervical cancer and CIN, ovarian tumors

### **11.3 National programs:**

Safe motherhood and newborn programme, Safe abortion services and Measures to decrease MMR (maternal mortality rate).

### **12 Paediatrics and Childhood diseases:**

**12.1** Vaccine preventable diseases, Acute Flaccid Paralysis  
Genetic diseases(Downs syndrome, Turners syndrome)  
Infectious diseases: diarrheal diseases and dehydration, pneumonia, bronchiolitis, meningitis, congenital infections  
Cyanotic and Acyanotic Congenital Heart Disease  
Protein-energy Malnutrition and Vitamin Deficiencies  
Growth and development, Mental Retardation  
Neonatology: Essential newborn care, Neonatal resuscitation, Breastfeeding, Neonatal sepsis, Hypothermia, Low birth weight, Physiological versus pathological jaundice.

**12.2** National programs/guidelines/acts and regulations related to decrease the neonatal and under-5 mortality rate, CB and FB IMNCI (Integrated management of childhood illness), National nutrition program, National Immunization Programme(NIP).

### **Section D (1<sup>st</sup> Paper 32 marks, 2<sup>nd</sup> Paper 30 marks)**

### **13 Community Medicine**

**13.1** Concept of health and disease: Health indicators, different levels of prevention

Epidemiology: Types of epidemiological studies, investigation of an epidemic, problem solving on epidemic of infectious disease

Screening of disease

Demography and reproductive health

Environment and health: Safe water and sanitation, Climate change, Biomedical waste management, Insects and Vector Control, Housing

Health Education and communication methods (Doctor Patient Relationship)

Bio Statistics

Management and administrative Requirement of the Job Description as drawn up by the Ministry for Medical Officers

**13.2 Priority National and Provincial health programs :**

Female Community Health volunteer Program, Primary Health Care Outreach, Malaria control program, Kalazar elimination program, Dengue control program Lymphatic Filariasis program, National TB control program, Leprosy control program, HIV/AIDS/STD control program, Other

**13.3** Structural organization of MOHP, DoHS, Provincial Ministry of health and local levels.

Health Information System (ELMIS, DHIS, HMIS)

Sustainable development goals, Current Five Year National plan

Periodic plan of Koshi province

Inter Governmental Management in Health Administration

**14. Forensic Medicine and Jurisprudence:**

Role and Duties of Medical Practitioner, Post-mortem and its Legal Implication, Medical Ethics, Death, Rigor Mortis, Putrefaction, Mummification, Saponification, Wounds, Rape, Infanticide, Abortion, Homicide, Suicide, Procedure for Identification

## **15. Acts related to Health and Medical Profession:**

National and Provincial Health Policy, Nepal Medical Council Act, Mother's Milk Substitute Act, Abortion act nepal, Organ Transplant Act, Social Service unit, One-stop Crisis Management Centre (OCMC), Health professional and health institutions protection Act, 2079, Health insurance policy.

## **16. Basic Knowledge on Management, Applicable Legislations and Recent advances**

### **16.1 Recent advances**

Palliative care, Critical care management

### **16.2 Management aspects and Governance**

#### **16.2.1 Management concepts:**

Planning, Organizing, Staffing, Directing, Controlling, Coordinating, Budgeting, Motivation  
Leadership  
Decision making  
Conflict management  
Supervision, Monitoring, Evaluation

#### **16.2.2 Project cycle**

#### **16.2.3 Good governance**

### **16.3 Applicable Legislations**

नेपालको संविधान: भाग ३ (मौलिक हक तथा कर्तव्य), भाग ४ (राज्यका निर्देशक सिद्धान्त, नीति तथा दायित्व) र स्वास्थ्य सम्बन्धी प्रावधानहरू

सार्वजनिक खरिद ऐन, २०६३ तथा सो को नियमावली, २०६४

सूचनाको हक सम्बन्धी ऐन, २०६४

संघीय निजामती सेवा, प्रदेश निजामती सेवा तथा स्थानीय सरकारी सेवा सम्बन्धी कानूनहरू

स्थानीय सरकार संचालन ऐन, २०७४

प्रदेश सुशासन (व्यवस्थापन तथा सञ्चालन) ऐन, २०७६ र सो को नियमावली, २०७९

कोशी प्रदेशको जनस्वास्थ्य सेवा ऐन, २०७७

स्वास्थ्य सेवासँग सम्बन्धित अन्य नीतिगत व्यवस्थाहरू