प्रदेश निजामती सेवा तथा स्थानीय सरकारी सेवा अन्तर्गत प्राविधिक तर्फ स्वास्थ्य सेवा,सवै समूह,सवै उपसमूह नवौं (९) तहको खुला, अन्तर स्थानीय तह र आन्तरिक अन्तर सेवा प्रतियोगितात्मक लिखित परीक्षाको पाठ्यक्रम

यस पाठ्यक्रम योजनालाई दुई चरणमा विभाजन गरिएको छः

प्रथम चरणः- लिखित परीक्षा (Written Examination)

पूर्णाङ्कः- २००

द्वितीय चरणः- अन्तर्वार्ता (Interview)

पूर्णाङ्गः- ३०

परीक्षा योजना (Examination Scheme)

Paper	Subject		Marks	Full Marks	Pass Marks	No. Questions & Weightage	Time Allowed
I	General Subject	Part I: Management Part II: General Health Issues	50	100	40	$6 \times 5 = 30$ (Short Answer) $2 \times 10 = 20$ (Long Answer) $4 \times 5 = 20$ (Short Answer) $3 \times 10 = 30$ (Long Answer)	3.00 hrs
II	Technical Subject			100	40	$4 \times 15 = 60$ (Critical Analysis) $2 \times 20 = 40$ (Problem Solving)	3.00 hrs

द्वितीय चरण (Second Phase)

Paper	Subject		Full		Time
			Marks		Allowed
Interview		30	Oral		

द्रष्टव्यः

- १. लिखित परीक्षाको माध्यम भाषा नेपाली वा अंग्रेजी अथवा नेपाली र अंग्रेजी दुबै हुन सक्नेछ।
- २. प्रदेश निजामती सेवा तथा स्थानीय सरकारी सेवा अन्तर्गत प्राविधिक तर्फ स्वास्थ्य सेवा, सबै समूह/ सबै उपसमूहहरुको लागि प्रथम पत्रको पाठ्यक्रमको विषयवस्तु एउटै हुनेछ। तर द्वितीय पत्र Technical Subject को पाठ्यक्रम समूह/ उपसमूह अनुरुप फरक फरक हुनेछ।
- ३. प्रथम पत्रको Part I को विषयवस्तुको प्रश्नपत्र नेपालीमा भाषामा तथा Part II र द्वितीय पत्र (Technical Subject) को प्रश्नपत्र अंग्रेजी भाषामा सोधिने छ।
- ४. **प्रथम पत्र**को लिखित परीक्षा समूह/उपसमूहका लागि संयुक्त रुपमा एउटै प्रश्नपत्रबाट एकैदिन वा छुट्टाछुट्टै प्रश्नपत्रबाट छुट्टाछुट्टै दिन पनि हुन सक्नेछ।
- ५. द्वितीय पत्रको परीक्षा समूह/उपसमूह अनुसार अलग अलग दिन छुट्टाछुट्टै प्रश्नपत्रबाट हुनेछ ।
- ६. प्रथम पत्रको Part I र Part II को लागि छुट्टाछुट्टै (Part I को लागि एउटा र Part II को लागि एउटा) उत्तरपुस्तिका हुनेछ भने द्वितीय पत्रको लागि प्रत्येक प्रश्नका उत्तरपुस्तिकाहरु छुट्टाछुट्टै हुनेछन् ।
- ७. यस पाठ्यक्रममा जुनसुकै कुरा लेखिएको भएतापनि पाठ्यक्रममा परेका ऐन, नियमहरु परीक्षाको मिति भन्दा ३ महिना अगाडि (संशोधन भएका वा संशोधित भई हटाइएका वा थप गरी संशोधित भई कायम रहेका) लाई यस पाठ्यक्रममा परेको समझनु पर्दछ।
- ८. पाठ्यक्रम लागू मितिः २०८१/०५/१३

प्रदेश निजामती सेवा तथा स्थानीय सरकारी सेवा अन्तर्गत प्राविधिक तर्फ स्वास्थ्य सेवा,सवै समूह,सवै उपसमूह नवौं (९) तहको खुला, अन्तर स्थानीय तह र आन्तरिक अन्तर सेवा प्रतियोगितात्मक लिखित परीक्षाको पाठ्यक्रम

Paper I: General Subject Part I: Management

A. Management

- 1. Management: concept, principles, functions, level, and role of managers
- 2. Planning: concept, principles, quarterly / annual plan
- 3. Leadership: concept, leadership styles, Qualities of leaders
- 4. Human resource management
- 5. Hospital management
- 6. Conflict management: concept, causes, levels of conflict and strategies for conflict management.
- 7. Supervision, monitoring and evaluation
- 8. Performance appraisal
- 9. Time management
- 10. Stress management
- 11. Motivation and appreciative inquiry
- 12. Quality assurance on health care services
- 13. Co-ordination and communication
- 14. Financial management and budget formulation process
- 15. Inventory management
- 16. Good Governance:-definition, principles, dimensions, preconditions and challenges

B.Relevant Legislations and Cross Cutting Issues

- 1. Nepal Health Service Act, 2053 and Nepal Health Service Regulation, 2055
- 2. प्रदेश निजामती सेवा ऐन, २०७९
- 3. स्थानीय सरकारी सेवा (गठन तथा सञ्चालन) ऐन, २०८०
- 4. The Constitution of Nepal (health and welfare issues)
- 5. Current periodic plan (Federal and Koshi Province)
- 6. The Public Procurement Act, 2063 and Public Procurement regulation, 2064
- 7. Right to Information Act, 2064
- 8. Sustainable Development Goals
- 9. Citizen Charter, Social Audit, Public Hearing, Grievance Handling
- 10. Public Health Service Act, 2075
- 11. Gender and social inclusion

Sample Questions:

- 1. What are the key challenges in Human Resource Management in Nepal. [10]
- 2. Discuss the appreciative inquiry in the context of health. [5]
- 3. Write short note on:
 - A) Stress Management [5]
 - B) Time Management [5]

प्रदेश निजामती सेवा तथा स्थानीय सरकारी सेवा अन्तर्गत प्राविधिक तर्फ स्वास्थ्य सेवा,सवै समूह,सवै उपसमूह नवौं (९) तहको खुला, अन्तर स्थानीय तह र आन्तरिक अन्तर सेवा प्रतियोगितात्मक लिखित परीक्षाको पाठ्यक्रम

Part II: General Health Issues

- 1. National Health Policy, 2076
- 2. Sector wide approach (SWAp)
- 3. Professional Councils and related Acts and Regulations
- 4. Roles and responsibilities of Bilateral and multilateral organization: UKAID, USAID, WHO, UNFPA, UNICEF, UNFPA, etc.
- 5. Code of Ethics and Professional Conducts of Health Professional
- 6. Health insurance and financing in health care
- 7. National health account
- 8. Disaster preparedness and disaster management and rapid response team
- 9. Community engagement
- 10. Impact of pandemics
- 11. Health in all policies
- 12. One health concept
- 13. Health Issues of current five years Plan (federal and provincial)
- 14. Nepal Health Sector Strategic Plan 2023-2030
- 15. Antimicrobial resistance
- 16. International health regulations
- 17. Climate change and health impacts

Sample Questions:

- 1. Discuss the antimicrobial resistance problem in Nepal. [5]
- 2. Why national health account is important in the National context. [5]
- 3. What are the health issues associated with climate change in Nepal. Please suggest the preventive measures. [5+5]

प्रदेश निजामती सेवा तथा स्थानीय सरकारी सेवा अन्तर्गत प्राविधिक तर्फ स्वास्थ्य सेवा, पेडियाट्रिक मेडिसिन उपसमूह नवौ (९) तह खुला,अन्तर स्थानीय तह र आन्तरिक अन्तर सेवा प्रतियोगितात्मक परीक्षाको पाठ्यक्रम

Paper II: Technical Subject

पूर्णाङ्क १००

1. Growth and development

- 1.1. Principles of growth and development
- 1.2. Normal growth and development in childhood, Puberty and adolescence
- 1.3. Sexual maturation and its disturbances
- 1.4. Failure to thrive and short stature

2. Nutrition:

- 2.1. Maternal and childhood nutritional disorders
- 2.2. Nutrition for the low birth weight; impact on fetal outcome
- 2.3. Breast feeding; infant feeding
- 2.4. Vitamin and micronutrient deficiencies
- 2.5. Complementary feeding
- 2.6. Protein energy malnutrition
- 2.7. Obesity
- 2.8. Adolescent nutrition
- 2.9. Parenteral and enteral nutrition in nutritional management of systemic neonates and children illness (celiac disease, hepatobiliary disorders, nephrotic syndrome)

3. Preventive pediatrics

- 3.1. Immunizations
- 3.2. Prevention and management of common disorders of childhood
- 3.3. Prevention and management of poisonings and accidents

4. Social pediatrics:

- 4.1. School health services
- 4.2. Adolescent health and problems
- 4.3. National health programs related to maternal and child health
- 4.4. Community health services for the maternal and childhood
- 4.5. Organizing health care delivery and referral systems for children

5. Genetics:

- 5.1. Principles of inheritance & pedigree drawing
- 5.2. Single gene defect & chromosomal disorders
- 5.3. Multifactorial and polygenic disorders
- 5.4. Genetic diagnosis & prenatal diagnosis
- 5.5. Inborn error of metabolism
- 5.6. Gene therapy

6. Neonatology:

- 6.1. Ethical, social and legal issues in perinatal medicine
- 6.2. Care of baby in labor room: Latest NRP guideline for neonatal resuscitation
- 6.3. Management of normal, high risk and sick neonates
- 6.4. Monitoring and ventilatory support of the sick neonates

प्रदेश निजामती सेवा तथा स्थानीय सरकारी सेवा अन्तर्गत प्राविधिक तर्फ स्वास्थ्य सेवा, पेडियाट्रिक मेडिसिन उपसमह नवौ (९) तह खुला,अन्तर स्थानीय तह र आन्तरिक अन्तर सेवा प्रतियोगितात्मक परीक्षाको पाठ्यक्रम

- 6.5. Newborn examination and
- 6.6. Thermoregulation in neonates
- 6.7. Perinatal infections
- 6.8. Disorders of gestation and weight
- 6.9. Neonatal hyperbilirubinemia
- 6.10. Feeding and nutrition of newborn
- 6.11. Metabolic disorders of newborn
- 6.12. Neonatal surgical conditions
- 6.13. Systemic disorders in newborn

7. Infectious diseases:

- 7.1. Diagnosis of common infectious diseases in the pediatric age group: Bacterial; viral; fungal; parasitic; rickettssial; mycoplasma; protozoal infection; tuberculosis; Malaria, Kalaazar, Dengue, Scrub Typhus, Chikungunya, HIV; protozoal and parasitic
- 7.2. Nosocomial infections; monitoring for nosocomial infections
- 7.3. Control of epidemics and infection prevention
- 7.4. Safe disposal of infective material

8. Immunology & Rheumatology

Arthritis (acute and chronic); connective tissue disorders; T and B cell disorders; immunodeficiency syndromes. Hypersensitive disorder. HSP.

9. System based pediatrics:

Diagnosis and management of common disorders affecting digestive, hepatobiliary, cardiovascular, respiratory, endocrine system, blood and lymphoreticular system including malignancies, genitourinary, nervous, musculoskeletal system

10. Eye, ear, nose and throat:

Diagnosis and management of common disorders of eye, ear, nose and throat in thepediatric age group

11. Orthopedics:

Major congenital orthopedic deformities; bone and joint infections: pyogenic; tubercular; common bone tumors. Limping child. Osteogenesis imperfect

12. **Pediatric surgery:**

Diagnosis and supportive management of common surgical disorders of neonates, infantsand children and appropriate referral

13. Pediatric emergencies/ Critical Care Pediatrics

Fluid abnormalities; Electrolyte abnormalities; problems of thermoregulation; Acute Kidney Injury, chronic renal, disease; Hypertensive crisis; Congestive Cardiac failure; Diarrhea;

GI Bleeds - Hematemesis, Melena, Hematochezia; Adrenal Crisis; Metabolic problems – hyperammonemia, lactic acidosis, acid base abnormalities, Hypoglycemia; Septicemic shock, Viral infections and shock; Pneumothorax, empyema, pleural effusion, ascites; Severe Anemia, Bleeding child, Neutropenia; Pain management, Drug therapy; ARDS; Respiratory Failure; Burns/ electrocution; Animal Bites; Preanesthetic check up PAC;

प्रदेश निजामती सेवा तथा स्थानीय सरकारी सेवा अन्तर्गत प्राविधिक तर्फ स्वास्थ्य सेवा, पेडियाट्रिकस समूह, पेडियाट्रिक मेडिसिन उपसमूह नवौ (९) तह खुला,अन्तर स्थानीय तह र आन्तरिक अन्तर सेवा प्रतियोगितात्मक परीक्षाको पाठ्यक्रम

Sickle cell crisis, severe complicated malaria; Acute severe asthma, Bronchiolitis; Status epilepticus; Febrile seizure; Coma, Increased intra-cranial pressure; DKA, Cardiopulmonary resuscitation; Shock; Sepsis; Upper airway obstruction; Near drowning; hanging. Burn. SIDS. Snake bite; Scorpion sting; Physical abuse; Sexual abuse. Battered baby syndrome/non accidental injuries/ shaken baby syndrome.

14. Pediatric dermatology:

Structure and function of skin, examination of skin, Infective dermatosis (bacterial, fungal, viral, parastitic), Non-infective dermatoses (congenital, eczema, immunological, nutritional and miscellaneous), Sexually transmitted diseases, AIDS.

15. Neoplastic disorders and tumors:

Epidemiology, principles of diagnosis and treatment, leukaemias, lymphomas, neuroblastoma, renal neoplasms, soft tissue sarcoma, retinoblastoma, benign tumors

16. Behavioral & developmental disorders

Rumination; pica; enuresis; encopresis; sleep disorders; habit disorders; breath holding spells; anxiety disorders; mood disorders; temper tantrums; attention deficit hyperactivity disorders; autism, juvenile delinquency, substance abuse (alcohol, drugs, etc).

17. Radiodiagnosis:

- a. Interpretation of
 - i. Basic chest and abdominal and abdominal radiography in different views
 - ii. Contrast radiography of different organs like IVP, MCU, Ba-series and myelogram
 - iii. Radiology of bones and joints
 - iv. Ultrasonography of brain, abdomen and other organs
 - v. Echocardiography
- b. Recent advances in radiology like CT, MRI, USG, radioisotope scanning and PET

18. Research method

- 18.1. Bio-statistics
- 18.2. Basic in research methodology including search and critical review of medical literature, selection of appropriate study design, analysis of findings etc.
- 18.3. Problem oriented medical record
- 18.4. Management of information system

19. Medical education:

- 19.1. Curricular components, teaching learning strategies, lesson plan methods of evaluation
- 19.2. Identification of learning resources to meet the learning objectives
- 19.3. Use of overhead projectors, slides, models etc in the teaching learning objectives.

20. Medical ethics:

- 20.1. Introduction to ethical theories
- 20.2. Medical ethics
- 20.3. Professional ethics
- 20.4. Ethics in research

प्रदेश निजामती सेवा तथा स्थानीय सरकारी सेवा अन्तर्गत प्राविधिक तर्फ स्वास्थ्य सेवा, पेडियाट्रिक मेडिसिन उपसमह नवौ (९) तह खुला,अन्तर स्थानीय तह र आन्तरिक अन्तर सेवा प्रतियोगितात्मक परीक्षाको पाठ्यक्रम

- 20.5. Ethics in health policy
- 21. Recent advance in pediatric physiology, molecular biology and genetics as well in the different diagnostic and therapeutic approaches in child health.

Model Questions

- A 3-week-old neonate presented with poor feeding, vomiting, and tachypnea with profound depression of the central nervous system, associated with alternating hypotonia and hypertonia, opisthotonos, and seizures. Laboratory investigations reveal hypoglycemia and high anion gap metabolic acidosis.
 - a) What is your diagnosis? Which category of illness is this condition? [1+2]
 - b) How will you diagnose this condition prenatally? [3]
 - c) What are your differential diagnoses? [3]
 - d) How will you treat the condition? What are the principles of treatment of this condition? [3+3]
- 2) A 4-year-old boy is asked to stand up; he arises from lying on the floor by using his arms to climb up his legs and body.
 - a) What is this sign called and this sign is due to which muscle weakness? [1+1]
 - b) What is your diagnosis and what is the mode of inheritance of this condition? [1+1]
 - c) How will you investigate this case ? [5]
 - d) What are the treatment modalities ? [6]
- A 8-year-old male child presented with failing to pay close attention to details, appearing to not listen when spoken to directly, and failing to follow through on instructions or finish assigned work, he also appears restless, leaving a seat when expected to remain seated, and running excessively in inappropriate situation.
 - a) What is your diagnosis? Which criterion is used for the diagnosis of this condition?[1+2]
 - b) What are your differential diagnoses? [3]
 - c) What are the associations with this diagnosis? [4]
 - d) How will you treat this condition? [5]
 - e) What are its associations and is there any genetic basis for the condition? [2+3]