

प्रदेश निजामती सेवा तथा स्थानीय सरकारी सेवा अन्तर्गत प्राविधिक तर्फ स्वास्थ्य सेवा, सबै समूह, सबै 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 चरण:- लिखित परीक्षा (Written Examination)

पूर्णाङ्क:- २००

द्वितीय चरण:- अन्तर्वार्ता (Interview)

पूर्णाङ्क:- ३०

परीक्षा योजना (Examination Scheme)

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

द्वितीय चरण (Second Phase)

Paper	Subject		Full Marks			Time Allowed
Interview			30		Oral	

द्रष्टव्यः

- लिखित परीक्षाको माध्यम भाषा नेपाली वा अंग्रेजी अथवा नेपाली र अंग्रेजी दुबै हुन सक्नेछ।
- प्रदेश निजामती सेवा तथा स्थानीय सरकारी सेवा अन्तर्गत प्राविधिक तर्फ स्वास्थ्य सेवा, सबै समूह/ सबै उपसमूहहरूको लागि प्रथम पत्रको पाठ्यक्रमको विषयवस्तु एउटै हुनेछ। तर द्वितीय पत्र Technical Subject को पाठ्यक्रम समूह/ उपसमूह अनुरूप फरक फरक हुनेछ।
- प्रथम पत्रको Part I को विषयवस्तुको प्रश्नपत्र नेपालीमा भाषामा तथा Part II र द्वितीय पत्र (Technical Subject) को प्रश्नपत्र अंग्रेजी भाषामा सोधिने छ।
- प्रथम पत्रको लिखित परीक्षा समूह/उपसमूहका लागि संयुक्त रूपमा एउटै प्रश्नपत्रबाट एकैदिन वा छुट्टाछुट्टै प्रश्नपत्रबाट छुट्टाछुट्टै दिन पनि हुन सक्नेछ।
- द्वितीय पत्रको परीक्षा समूह/उपसमूह अनुसार अलग अलग दिन छुट्टाछुट्टै प्रश्नपत्रबाट हुनेछ।
- 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 उत्तरपुस्तिकाहरू छुट्टाछुट्टै हुनेछन्।
- यस पाठ्यक्रममा जुनसुकै कुरा लेखिएको भएतापनि पाठ्यक्रममा परेका ऐन, नियमहरू परीक्षाको मिति भन्दा ३ महिना अगाडि (संशोधन भएका वा संशोधित भई हटाइएका वा थप गरी संशोधित भई कायम रहेका) लाई यस पाठ्यक्रममा परेको सम्झनु पर्दछ।
- पाठ्यक्रम लागू मिति: 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 लोक सेवा आयोग
कोशी प्रदेश, विराटनगर
प्रदेश निजामती सेवा तथा स्थानीय सरकारी सेवा अन्तर्गत प्राविधिक तर्फ स्वास्थ्य सेवा, एनेस्थेसियोलोजी समूह, नवौं (९) तह
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Paper II: Technical Subject

पूर्णाङ्क १००

A. BASIC SCIENCES

- History of Anaesthesia: Global/Nepal
- Operating room environment- electrical safety, occupational hazard
- Anatomy and physiology of : respiratory system, cardiovascular system, genitourinary system, gastrointestinal system, nervous system, endocrine system
- Pharmacology: pharmacokinetics and pharmacodynamics -iv anaesthetics, inhalational agents, opioids, local anaesthetics, antihypertensives, vasopressors, inotropes, oral hypoglycaemic agents, insulin, anticholinergics, antagonist of neuromuscular blocking agents, analgesic agents, adrenergic agonist and antagonist, bronchodilators, antipsychotics, anticonvulsants, antiemetics, diuretics, antihistamines, antithyroid, corticosteroids
- Physics in anaesthesia: Gas laws, measurement of resistance, viscosity, flow, density
- Oxygen therapy and toxicity
- Equipments: humidifier, defibrillator, O2 delivery devices, ventilator, nerve stimulators, infusion/syringe pumps, ET tube, tracheostomy tube, laryngeal mask airways, sterilization and disinfection of equipments
- Anaesthesia workstation and circuits, vaporizers
- Biostatistics: sampling methods, RCT, study design, inferential statistics
- Intravenous fluids and blood transfusion
- Arterial blood gases
- Monitoring in anaesthesia

B. CLINICAL PRACTICES OF ANAESTHESIA

- Pre-anaesthetic evaluation, ASA-PS classification, preoperative optimization and preparation, NPO guidelines, premedication.
- Airway evaluation, difficult airway algorithm
- Basics of spinal, epidural, caudal and general anaesthesia
- Peripheral nerve block: brachial plexus, lumbar plexus, lower limb blocks
- Anaesthesia for patient with cardiovascular diseases, hypertension, respiratory disease, diabetes mellitus, thyroid disorder, neuromuscular disorder, psychiatric illness, obesity, OSA, pacemaker ICD
- Anaesthesia for cardiovascular surgery, anaesthesia for genitourinary surgery, anaesthesia for hepatobiliary surgery, anaesthesia for thoracic surgery, anaesthesia for pediatric surgery, anaesthesia for orthopaedic and trauma surgery, anaesthesia for transplant surgery (kidney, liver, lung), anaesthesia for obstetric surgery, anaesthesia for geriatric patient, anaesthesia for burn and plastic surgery, anaesthesia for head & neck (maxillofacial)
- Non-operating room anaesthesia

प्रदेश लोक सेवा आयोग

कोशी प्रदेश, विराटनगर

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- Anaesthesia for laparoscopic and robotic surgery
- Acute and chronic pain management: multimodal analgesia, labor analgesia, CRPS, cancer pain, fibromyalgia etc
- Day care anaesthesia
- Post anaesthesia care unit
- Enhanced recovery after surgery

C. CRITICAL CARE

- Procedures in ICU: A-LINE, CVP, tracheostomy, CPR, ECMO
- Nutrition in ICU
- Shock: diagnosis and management
- ARDS
- Pneumonia, VAP
- Mechanical ventilation
- Thromboprophylaxis
- Sedation in ICU
- COPD, asthma
- Heart failure
- Antibiotic stewardship
- Glycaemic control
- Infection prevention
- Coma & brain death
- Fluid and electrolyte disturbances

Model Questions

1. A 22-year-old, previously healthy, man is brought to the emergency department (ED) at 9 am by his mother after fainting at home earlier that morning. The previous evening, he was involved in an altercation in a bar during which he was kicked repeatedly in the stomach. The patient is pale, tachycardic, and lethargic. His pulse is 140 beats/min, and his blood pressure is 60/34 mm Hg. A FAST examination in the ED reveals free fluid in the abdomen. The patient is brought to the operating room within 16 min of his arrival in the ED.
 - a. What measures should be taken prior to induction of anesthesia? What are the priorities of anesthetic induction and hemodynamic monitoring? (5)
 - b. What are the implications of damage control surgery (DCS) and damage control resuscitation (DCR)? (5)
 - c. Are there guidelines for the use of blood versus vasopressors? Explain how massive blood transfusion protocol is initiated? (5)
2. A 31-year-old woman with a 24-week gestation is admitted for an open appendectomy.
 - a. Is this patient still at increased risk for pulmonary aspiration? What are the other physiological changes that occur at this period of gestation which may influence your anaesthetic management? (5)
 - b. What are the potentially detrimental effects of surgery and anesthesia on the fetus? When is the fetus most sensitive to teratogenic influences? (5)
 - c. What would be the ideal anesthetic technique for this patient? Are any special monitors indicated perioperatively? When should elective operations be performed during pregnancy and why? (5)
3. A 28-year-old woman, primigravida at 31 weeks of gestation, presented to district hospital with complains of headache, blurring of vision, and bilateral lower limb swelling. On examination BP recorded was 186/112 mm of Hg and albuminuria on routine urinary examination.
 - a. What is your provisional diagnosis? (2)
 - b. What further investigation do you need to know the severity of the case ? (4)

On further examination and investigation, the case was diagnosed as preeclampsia with severe features

 - c. Discuss the pathogenesis of preeclampsia (3)
 - d. Discuss obstetric management of preeclampsia with severe features (2)
 - e. What type of anaesthesia will you prefer for caesarean delivery of pre eclamptic patients? Explain considering the advantages and disadvantages of spinal/epidural anaesthesia over general anaesthesia. (5)
 - f. Discuss the postpartum management of preeclamptic patients. (4)