

**निजामती कर्मचारी अस्पताल**  
**प्राविधिक सेवा, सर्जरी समूह, अर्थोपेडिक सर्जरी उपसमूह, सिनीयर रजिष्ट्रार (स्पेसलिष्ट) पद, नवौं तहको खुल्ला**  
**प्रतियोगितात्मक परीक्षाको पाठ्यक्रम**

यस पाठ्यक्रम योजनालाई दुई चरणमा विभाजनगरिएको छ :

**प्रथम चरण :-** लिखित परीक्षा (Written Examination)

पूर्णाङ्क :- २००

**द्वितीय चरण :-** अन्तर्वार्ता (Interview)

पूर्णाङ्क :- ३०

**१. प्रथम चरण (First Phase): परीक्षा योजना (Examination Scheme)**

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

**२. द्वितीय चरण (Second Phase)**

| Subject   | Full Marks | Examination System |
|-----------|------------|--------------------|
| Interview | 30         | Oral               |

**द्रष्टव्य :**

- लिखित परीक्षाको माध्यम भाषा नेपाली वा अंग्रेजी अथवा नेपाली र अंग्रेजी दुवै हुन सक्नेछ ।
- अस्पतालको प्राविधिक सेवा अन्तर्गतका सबै समूह/सबै उपसमूहहरूको लागि प्रथमपत्रको पाठ्यक्रमको विषयवस्तु एउटै हुनेछ । तर द्वितीयपत्र Technical Subject को पाठ्यक्रम समूह/उपसमूह अनुरूप फरक फरक हुनेछ ।
- प्रथम र द्वितीय पत्रको लिखित परीक्षा छुट्टाछुट्टै हुनेछ । परीक्षामा सोधिने **प्रश्नसंख्या र अङ्कभार** यथासम्भव सम्बन्धित पत्र, विषयमा दिईए अनुसार हुनेछ ।
- वस्तुगत बहुवैकल्पिक (Multiple Choice) प्रश्नहरूको गलत उत्तर दिएमा प्रत्येक गलत उत्तर बापत २० प्रतिशत अङ्क कट्टा गरिनेछ । तर उत्तर नदिएमा त्यस बापत अङ्क दिइने छैन र अङ्क कट्टा पनि गरिने छैन ।
- वस्तुगत बहुवैकल्पिक हुने परीक्षामा परीक्षार्थीले उत्तर लेख्दा अंग्रेजी ठूलो अक्षर (Capital letter) A, B, C, D मा लेख्नुपर्नेछ । सानो अक्षर (Small letter) a, b, c, d लेखेको वा अन्य कुनै सङ्केत गरेको भए सबै उत्तरपुस्तिका रद्द हुनेछ ।
- बहुवैकल्पिक प्रश्नहरू हुने परीक्षामा कुनै प्रकारको क्याल्कुलेटर (Calculator) प्रयोग गर्न पाइने छैन ।
- विषयगत प्रश्नहरूको हकमा एउटै प्रश्नका दुई वा दुई भन्दा बढी भाग (Two or more parts of a single question) वा एउटा प्रश्न अन्तर्गत दुई वा बढी टिप्पणीहरू (Short notes) सोध्न सकिने छ ।
- विषयगत प्रश्नमा प्रत्येक पत्र/विषयका प्रत्येक खण्डका लागि छुट्टाछुट्टै उत्तरपुस्तिकाहरू हुनेछन् । परीक्षार्थीले प्रत्येक खण्डका प्रश्नहरूको उत्तर सोही खण्डका उत्तरपुस्तिकामा लेख्नुपर्नेछ ।
- यस पाठ्यक्रम योजना अन्तर्गतका पत्र/विषयका विषयवस्तुमा जेसुकै लेखिएको भएतापनि पाठ्यक्रममा परेका कानून, ऐन, नियम, विनियम तथा नीतिहरू परीक्षाको मितिभन्दा ३ महिना अगाडि (संशोधन भएका वा संशोधन भई हटाईएका वा थप गरी संशोधन भई) कायम रहेकालाई यस पाठ्यक्रममा परेको सम्झनु पर्दछ ।
- प्रथम चरणको परीक्षाबाट छनौट भएका उम्मेदवारहरूलाई मात्र द्वितीय चरणको परीक्षामा सम्मिलित गराइनेछ ।
- पाठ्यक्रम लागू मिति : आ.व.२०७९/०८० देखि

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**Paper I: General Subject**  
**Part I: Management**  
**(6 × 5) + (2 × 10) = 50 Marks**

**1. Management**

- 1.1. Health care management system in Nepal and other parts of the world
- 1.2. Fundamental principles of healthcare institution and hospital management.
- 1.3. Effective hospital management principles
- 1.4. Purpose of medical and non-medical data and records
- 1.5. Ethics and responsibility of management
- 1.6. Concept of management and its application in health care including hospital
  - 1.7.1 Management: Concept, principles, functions, scope and role, level and skills of manager
  - 1.7.2 Planning: Concept, principles, nature, types, instruments and steps
  - 1.7.3 Leadership: Concept, function, leadership styles, leadership and management
  - 1.7.4 Coordination: Concept, types, techniques of effective coordination
  - 1.7.5 Communication and counselling: Concept, communication processes and barrier to effective communication, techniques for improving communication
  - 1.7.6 Decision making: Importance, types, rational process of decision making, problem solving techniques, improving decision making
  - 1.7.7 Participative management: Concept, advantage and disadvantage, techniques of participation
  - 1.7.8 Time management: Concept, essential factors and strategies for effective time management
  - 1.7.9 Conflict management: Concept, approaches to conflict, levels of conflict, causes of conflict and strategies for conflict management
  - 1.7.10 Stress management: Concept, causes and sources of stress, techniques of stress management
  - 1.7.11 Change management: Concept, sources of organizational change, resistance to change, management of resistance to change
  - 1.7.12 Appreciative inquiry: Concept, basic principle and management
  - 1.7.13 Human resource management: Concept, functions and different aspects
  - 1.7.14 Health manpower recruitment and development
  - 1.7.15 Financial management: Concept, approaches, budget formulation and implementation, Auditing and topics related to fiscal administration

**Part II: General Health Issues**  
**(6 × 5) + (2 × 10) = 50 Marks**

**2. General Health Issues**

- 2.1. Present constitution of federal republic of Nepal (including health and welfare issues)
- 2.2. Organizational structure of Ministry of Health at national/federal, regional/state, district (if applicable), municipal and village council level
- 2.3. Professional council and related regulations
- 2.4. National Health Policy
- 2.5. Health Service Act and Regulation
- 2.6. Second Long term health plan
- 2.7. Health Management Information System, forms, indicators, annual reports
- 2.8. Human Development Indices, Sustainable Development Goals
- 2.9. Health volunteers in the national health system, its rationale, use and effectiveness

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- 2.10. Local governance and community participation in health service delivery
- 2.11. Health Insurance and financing in health care
- 2.12. Alternative health care system: Ayurveda, homeopathy, Unani, Chinese etc.
- 2.13. Indigenous and traditional faith health and health practices
- 2.14. International Health Agencies: Roles and responsibilities of WHO, UNICEF, UNFPA, Inter-agency relationships, Government-agency coordination: Joint Annual Review meeting
- 2.15. Supervision, types and its usage in health sector
- 2.16. Monitoring and evaluation system in health sector
- 2.17. National Health Training Centre
- 2.18. National and International Disaster Plan, Coordination
- 2.19. General introduction of Civil Service Hospital and its Bylaws

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**Paper II : Technical Subject**  
**Section (A) – 50 Marks**

1. **Applied Basic Sciences**
  - 1.1 Applied anatomy
  - 1.2 Applied Physiology
  - 1.3 Applied Pathology
  - 1.4 Applied Pharmacology
  - 1.5 Applied immunology
  - 1.6 Applied biostatics
  - 1.7 Applied research methods
  - 1.8 Applied Molecular biology and genetics
2. **Recent Advances**
  - 2.1 Arthroscopy
  - 2.2 Endoscopic surgery (Spine, Knee, etc)
  - 2.3 Illizarov external fixator
  - 2.4 Total joint replacement
  - 2.5 Limb sparing surgery
  - 2.6 Bone Banking, Laser surgery, etc.
3. **Emergencies: Orthopedics**
  - 3.1 Acute Osteomyelitis
  - 3.2 Septic Arthritis
  - 3.3 Compartmental Syndrome
  - 3.4 Cauda Equina Syndrome
  - 3.5 Necrotizing fasciitis
4. **Emergencies : Trauma**
  - 4.1 All fractures and dislocations
  - 4.2 Open fractures
  - 4.3 Crush injuries
  - 4.4 Hand injuries
  - 4.5 Spinal injuries

**Section (B) – 50 Marks**

5. **Principles and practice of : Orthopedic Surgery**
  - 5.1 General orthopedics
  - 5.2 Regional Orthopedics
  - 5.3 Pediatric Orthopedics
  - 5.4 Orthopedic Oncology
  - 5.5 Orthopedic Neurology

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5.6 Sports Medicine

5.7 Physical Medicine and Rehabilitation

6. **Principles and practice of : Trauma Surgery**

6.1 General principles of Trauma including Pathophysiology

6.2 General practice of Trauma: Early management of injured, Management of Polytrauma, Disaster, Mass casualty, and management of Neglected trauma

6.3 Definite management of Musculoskeletal injuries; their operative treatment and rehabilitation