

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

यस पाठ्यक्रम योजनालाई दुई चरणमा विभाजन गरिएको 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 (Short answer) 2 × 10 = 20 (Long answer)	3.00 hrs
		Part II: General Health Issues	50			6 × 5 = 30 (Short answer) 2 × 10 = 20 (Long answer)	
II	Technical Subject			100	40	4 × 15 = 60 (Critical Analysis) 2 × 20 = 40 (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. Basic & Applied

1.1 Applied Surgical Anatomy

- 1.1.1 Required to have acknowledge of the structure and function of all system of the body (where applicable to common clinical conditions in surgery)
- 1.1.2 Knowledge of histology to understand the function to tissue and organs as well as growth, degeneration and repair
- 1.1.3 Embryological basis of common congenital anomalies

1.2 System

- 1.2.1 Nervous system
- 1.2.2 Respiratory system
- 1.2.3 Cardiovascular system
- 1.2.4 Digestive system
- 1.2.5 Endocrine system
- 1.2.6 Musculoskeletal system
- 1.2.7 General – e.g. Acid-base balance, fluid and electrolyte balance, nutrition, metabolic response to trauma and sepsis, etc.

2. Applied Physiology

3. Surgical Pathology

- 3.1 Knowledge of the surgical pathology and microbiology in the context of surgery including inflammation, infection, neoplasm, response on the tissues to injury, disturbance of growth, degeneration processes, repair and regulation
- 3.2 Immunology and Genetics
- 3.3 Neoplastic diseases
- 3.4 Gross and histopathology of common surgical conditions
- 3.5 Nervous system
- 3.6 Respiratory system
- 3.7 Cardiovascular system
- 3.8 Genito-urinary system
- 3.9 Gastrointestinal system
- 3.10 Muscleskeletal system

4. Critical Care

- 4.1 Basics of pathophysiology, approach and management of critical surgical situation e.g. Trauma, shock, sepsis, organfailure
 - 4.1.1 Clinical pictures
 - 4.1.2 Investigation
 - 4.1.3 Diagnosis confirmation
 - 4.1.4 Management–use of equipments
 - 4.1.5 Monitoring–complications
 - 4.1.6 Counseling – communication
 - 4.1.7 Follow-up

5. Recent advance

- 4.2 Research-inside country
- 4.3 Recent advance–international

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- 4.4 Not published research work
- 4.5 Future national vision

Section (B) – 50 Marks

6. Surgical Management

- 6.1 Principle of management of common general surgical conditions
 - 6.1.1 Clinical practice (History and examinations)
 - 6.1.2 Investigation
 - 6.1.3 Provisional Diagnosis and differentials
 - 6.1.4 Treatment-Conservative, operative, palliative
 - 6.1.5 Monitoring
 - 6.1.6 Follow-up—of the patients with general surgical condition of following systems
 - 6.1.6.1 Nervous system
 - 6.1.6.2 Respiratory system
 - 6.1.6.3 Cardiovascular system
 - 6.1.6.4 Gastrointestinal system
 - 6.1.6.5 Genitourinary system
 - 6.1.6.6 Endocrine and breast
 - 6.1.6.7 Musculo-skeletal system and soft tissue
 - 6.1.6.8 Trauma/Polytrauma

7. Principles of Surgery

- 7.1 Knowledge of the General principle and practice of Surgery
 - 7.1.1 Imaging techniques/interventional Radiology
 - 7.1.2 Endoscopy/Laparoscopy
 - 7.1.3 Surgery at extremes of life
 - 7.1.4 Theatre techniques
 - 7.1.4.1 Aseptic techniques—sterilization
 - 7.1.4.2 Anesthesia in general, maintenance of homeostasis
 - 7.1.4.3 Basic techniques—suturing material dressing plaster
 - 7.1.4.4 Diathermy and electrosurgical devices
 - 7.1.4.5 Tourniquet
 - 7.1.5 Wound healing, dehiscence, scar, contractures
 - 7.1.6 Post operative complication and management
 - 7.1.7 Sepsis's surgery
 - 7.1.7.1 Acute and Chronic, inflammation
 - 7.1.7.2 Wound infection and septicemia
 - 7.1.7.3 TB, Leprosy, AIDS, Bacterial infection
 - 7.1.7.4 Antiseptic, Antibiotic policies

8. Operation Surgery

- 8.1 **Nervous System**
 - 8.1.1 Exposure to extradural haematoma
 - 8.1.2 Skull traction
 - 8.1.3 Nerve repair and transplant
 - 8.1.4 Trauma—skull, strive
- 8.2 **Respiratory System**
 - 8.2.1 F.B. in respiratory tract
 - 8.2.2 Tracheostomy, cricothyroidotomy

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- 8.2.3 Chest Drainage
- 8.2.4 Thoractomy
- 8.2.5 Chesttrauma (variety of injuries)
- 8.3 **Cardiovascular**
 - 8.3.1 Cardiac Tamponade
 - 8.3.2 Exposure to artery and vein, embolectomy
 - 8.3.3 Amputations
- 8.4 **Gastrointestinal System**
 - 8.4.1 All type of GI Surgery of all magnitude and types
 - 8.4.2 Different combination of operation
 - 8.4.3 Except-transplantation
- 8.5 **Genitourinary system**
 - 8.5.1 Suprapubic bladder drainage
 - 8.5.2 Cystoscopy
 - 8.5.3 Exposure of kidney, calculus, obstructive uropathy
 - 8.5.4 Perinephric abscess
 - 8.5.5 Scrotal/testicular operation
 - 8.5.6 Ectopic pregnancy/other pelvic surgery
- 8.6 **Endocrine and breast**
 - 8.6.1 Thyroid/parathyroid
 - 8.6.2 Breast surgery (no reconstruction)
- 8.7 **Musculoskeletal and soft tissue**
 - 8.7.1 Simple skeletal traction
 - 8.7.2 Compartmental syndrome
 - 8.7.3 Bone infection
- 8.8 **Plastic**
 - 8.8.1 Simple cleft lip repair
 - 8.8.2 Skin grafting /flaps
 - 8.8.3 Skin lesion
 - 8.8.4 Lymph node and biopsy
- 8.9 **Other**
 - 8.9.1 Venesection centralline
 - 8.9.2 Laryngoscope, E Tintubation
 - 8.9.3 FNAC /tru-cut needle biopsy
 - 8.9.4 Defibrillation