# प्राविधिक (स्वास्थ्य) सेवा, मेडिकल (चिकित्सक) समुह, सर्जिकल अंकोलोजी (युरोसर्जरी) उपसमुह, अधिकृत नवौँ तह, रजिष्टार पदको खुला र आन्तरिक 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

## परीक्षा योजना (Examination Scheme)

## प्रथम चरण (First Phase): लिखित परीक्षा

Paper	Subject	Full Marks	Pass Marks	No. Questions & Weightage	Time Allowed
I	General Subject	100	40	$10 \times 5 = 50$ (Short answer) $5 \times 10 = 50$ (Long answer)	3.00 hrs
II	Technical Subject	100	40	$6 \times 10 = 60$ (Long answer) $2 \times 20 = 40$ (Problem Solving)	3.00 hrs

## द्वितीय चरण (Second Phase)

Subject	Full Marks	Examination
Interview	30	Oral

#### द्रष्टव्य :

- थो परीक्षा योजनालाई प्रथम चरण (लिखित परीक्षा) र द्वितीय चरण (अन्तर्वार्ता) गरी दुई चरणमा विभाजन गरिएको छ ।
- २. लिखित परीक्षाको माध्यम भाषा नेपाली वा अंग्रेजी अथवा नेपाली र अंग्रेजी दुवै हुनेछ ।
- ३. प्रथम र द्वितीय पत्रको लिखित परीक्षा छुट्टाछुट्टै हुनेछ ।
- ४. परीक्षामा सोधिने प्रश्नसंख्या, अङ्क र अङ्कभार यथासम्भव सम्बन्धित पत्र /विषयमा तोकिए अनुसार हुनेछ ।
- ५. विषयगत प्रश्नमा प्रत्येक खण्डका लागि छुट्टाछुट्टै उत्तरपुस्तिकाहरु हुनेछन् । परीक्षार्थीले प्रत्येक खण्डका प्रश्नहरुको उत्तर सोही खण्डका उत्तरप्स्तिकामा लेख्नुपर्नेछ ।
- ६. यस पाठ्यक्रममा जे सुकै लेखिएको भएतापिन पाठ्यक्रममा परेका ऐन, नियमहरु, परीक्षाको मिति भन्दा ३ मिहना अगाडी (संशोधन भएका वा संशोधित भई हटाईएका वा थप गरी संशोधित भई कायम रहेका) लाई यस पाठ्यक्रममा परेको सम्भन् पर्दछ ।
- ७. प्रथम चरणको परीक्षाबाट छनौट भएका उम्मेदवारहरुलाई मात्र द्वितीय चरणको परीक्षामा सिम्मलित गराइनेछ।
- s. पाठ्यक्रम लागू मिति :- २०७८/०३/०४

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# Paper I: General Subject Section (A): 40% Marks (4×5 marks, 2×10 marks)

### 1. Administration and Management

- 1.1. Public Administration: concept, scope, functions and challenges
- 1.2. Management: concept, scope, functions, principles, and its practices
- 1.3. Contemporary management issues and challenges
- 1.4. Hospital Management : concept, scope, function, principle and its practices
- 1.5. Human resource management: concept, functions and different aspects
- 1.6. Basic managerial skills: coordination and public relation, communication and counselling, problem solving and decision making, leadership, team building, rapport building, planning, organizing, monitoring and evaluation
- 1.7. Emerging management concepts and their application in the Nepalese Public Management: Time management, Resource management (human, financial and physical), Technology management, Performance management, Stress management, Conflict management, Risk management and Participative management
- 1.8. Planning: concept, principles, nature, types, instrument and steps
- 1.9. Motivation, appreciative inquiry and social responsibility
- 1.10. Positive attitude and self-development
- 1.11. Group dynamic and organizational behavior
- 1.12. Grievance redressal and settlement
- 1.13. Financial Management: Concept, Approaches, Budget Formulation and Implementation, Auditing and topics related to Fiscal administration

#### Section (B): 40% Marks ( $4 \times 5$ marks, $2 \times 10$ marks)

#### 2. General Health Issues

- 2.1. Present Constitution of Nepal (health and welfare issues)
- 2.2. National Health Policy
- 2.3. Health sector in current periodical plan
- 2.4. Health Service Act, 2053 and Health Service Regulation, 2055
- 2.5. Professional council related acts and regulations
- 2.6. Act Regulating Narcotics
- 2.7. NMC and National Health Agencies
- 2.8. Indigenous and traditional faith healing and health practices
- 2.9. International health agencies: Role and responsibilities of WHO, UNICEF, UNFPA and interagency relationships
- 2.10. Health and Human Right including Women's Right, Children's Right, Professional's Right, Client Right and Informed consent
- 2.11. Gender issues and health
- 2.12. Urbanization and health impacts
- 2.13. National health training system
- 2.14. Supervision, types and its usage in Health Sector

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- 2.15. Monitoring and Evaluation System in Health
- 2.16. Health Management Information System
- 2.17. Health economics basic terms, health insurance and financing in Health Care
- 2.18. Federal governance and decentralization in health
- 2.19. Evidence Based Medicine / Critical Appraisal of Scientific Literature
- 2.20. Principles of Research Methodology and Scientific paper writing/publication
- 2.21. Professional and medical ethics
- 2.22. Informed Consent and Medico legal Issues
- 2.23. Medical Audit and Quality Assurance
- 2.24. Information technology and Tele medicine
- 2.25. Drug act and regulation
- 2.26. Rational use of drugs, national drug policy and importance of essential drug list
- 2.27. Ethics, Integrity and Accountability of health professionals
- 2.28. Private sector health institution its regulation and management
- 2.29. Health institution development and management
- 2.30. Patient safety & Breaking Bad News
- 2.31. Cancer Registry: Hospital and Community Based Cancer Registry
- 2.32. Preventive Oncology
  - 2.32.1. Epidemiology
  - 2.32.2. Primary prevention (Cancer Awareness, Cancer Education, Vaccination)
  - 2.32.3. Secondary Prevention (Screening, Screening Methods)
- 2.33. Multidisciplinary Approach in Cancer Management

# Section (C): 20% Marks (2×5 marks, 1×10 marks)

#### 3. Organizational Knowledge

- 3.1. B.P.Koirala Memorial Cancer Hospital : History, organizational structure, functions, roles, services, possibilities, problems and challenges
- 3.2. Service provided by B.P.Koirala Memorial Cancer Hospital-service types, quality, technology, citizen engagement in service design
- 3.3. Relations between Government and other national and international related organizations
- 3.4. Health manpower recruitment and development in B.P.Koirala Memorial Cancer Hospital
- 3.5. B.P.Koirala Memorial Cancer Hospital related act and regulations

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

#### 1. Embryology and surgical anatomy of following:

- 1.1 Kidney
- 1.2 Ureter
- 1.3 Adrenal gland
- 1.4 Other retroperitoneal structures
- 1.5 General human anatomy
- 2. Embryology and surgical anatomy of lower urinary tract and prostate with congenital anomalies
- 3. Development of testes and congenital defects
- 4. Congenital defects in urology with special reference to hypospadias, epispadias
- 5. Symptoms and signs of disorders of genitor-uninary tract
- 6. Urological laboratory investigations
- 7. Radiological investigation of urinary tract and retroperitoneal structures

# 8. Renal physiology and pathophysiology of:

- 8.1 Reno-vascular hypertension
- 8.2 Ischemic nephropathy
- 8.3 Obstructive uropathy
- 8.4 Acute and chronic renal failures
- 9. Basic principles of immunology in urology and renal transplantation
- 10. Pathophysiology and management of urinary tract obstruction: obstructive uropathy including benign prostatic hyperplasia and prostatic cancer

#### 11. Genito-urinary trauma and the basic principles and management of :

- 11.1 Renal trauma
- 11.2 Ureteric trauma
- 11.3 Bladder trauma
- 11.4 Urethral trauma
- 11.5 Penile trauma
- 11.6 Scrotal trauma
- 12. Infection and Inflammation of uninary tract
- 13. Physiology and pharmacology in urinary bladder and urethra

#### Section (B) -50 % Marks

- 14. Neurourological evaluation
- 15. Neuromuscular dysfunction of lower urinary tract
- 16. Reproductive function and dysfunction
- 17. Concept of endourology

#### 18. Concept of common urological problem and their approaches in:

- 18.1 Hematuria
- 18.2 Obstructive uropathy
- 18.3 Retention of urine

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19. Urolithiasis and modern trend in their management

# 20. Neoplasm of genitor-urinary system

- 20.1 Renal cell carcinoma
- 20.2 Transitional cell carcinoma of urinary bladder and renal pelvis
- 20.3 Cancer penis
- 20.4 Testicular tumors
- 20.5 Adrenal tumors
- 20.6 Prostate cancer

### 21. Cancer Diagnostics

- 21.1 Role of radiological interventions
- 21.2 Molecular and cytogenetics
- 21.3 Tumor markers, IHC (Immunohistochemistry), Flowcytometry
- 21.4 Nuclear and radionuclear imaging
- 21.5 Interventional radiology
- 21.6 Basics of radiation oncology
- 21.7 Basics of surgical oncology
- 21.8 Basics of medical oncology

## 22. Recent advances in cancer management

- 22.1 Essentials of molecular biology
- 22.2 Molecular biology of cancer
- 22.3 Newer approaches in cancer; Immunotherapy, Biotherapy, Genetherapy

### 23. General Surgical Principles

- 23.1 Shock
- 23.2 Surgical infection
- 23.3 Fluid and electrolyte imbalance
- 23.4 Preoperative and post operative patient care
- 23.5 TNM classification of cancers