# बी.पी. कोइराला मेमोरियल क्यान्सर अस्पताल प्राविधिक (स्वास्थ्य) सेवा, मेडिकल (चिकित्सक) समुह, सर्जिकलअंकोलोजी (इएनटी/हेड एण्ड नेक) उपसमुह, अधिकृत नवौं तह, रजिष्ट्रार पदको खुला प्रतियोगितात्मक परीक्षाको पाट्यक्रम

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 ।
- प्रश्नमा प्रत्येक खण्डका लागि छुट्टाछुट्टै उत्तरपुस्तिकाहरु हुनेछन् । परीक्षार्थीले प्रत्येक खण्डका
  प्रश्नहरुको उत्तर सोही खण्डका उत्तरपुस्तिकामा 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 सम्भनु पर्दछ ।
- ७. प्रथम चरणको परीक्षाबाट छनौट भएका उम्मेदवारहरुलाई मात्र द्वितीय चरणको परीक्षामा सम्मिलित गराइनेछ ।
- पाठ्यक्रम लागु मिति :- २०७८/०२/२१

# प्राविधिक (स्वास्थ्य) सेवा, मेडिकल (चिकित्सक) समुह, सर्जिकलअंकोलोजी (इएनटी/हेड एण्ड नेक) उपसमुह, अधिकृत नवौं तह, रिजष्ट्रार पदको खुला प्रतियोगितात्मक परीक्षाको पाठ्यक्रम

# 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 ( $4\times5$ marks, $2\times10$ 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 ( $2\times5$ marks, $1\times10$ 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. Principles of Surgery

- 1.1 Knowledge of the General principle of the practice of Surgery
  - 1.1.1 Imaging techniques/interventional Radiology
  - 1.1.2 Endoscopy/Laproscopy
  - 1.1.3 Surgery at extremes of life
  - 1.1.4 Theatre techniques
    - 1.1.4.1 Aseptic techniques sterilization
    - 1.1.4.2 Anaesthesia in general, maintenance of homeostasis
    - 1.1.4.3 Basic techniques suturing material dressing plaster
    - 1.1.4.4 Diathermy
  - 1.1.5 Wound healing, dehiscence, scar, contractures
  - 1.1.6 Post-operative complication and management
  - 1.1.7 Sepsis is surgery
    - 1.1.7.1 Acute and Chronic, inflammation
    - 1.1.7.2 Wound infliction and septicemia
    - 1.1.7.3 Antiseptic, Antibiotic policies

#### 2. Ear

- 2.1 Anatomy and Physiology of Ear
- 2.2 Otitis Externa
- 2.3 CSOM
- 2.4 Ototoxicity
- 2.5 Tumors of the Ear
- 2.6 TNM classification of ear cancer

## 3. Nose

- 3.1 Anatomy and Physiology of Nose
- 3.2 Rhinitis
- 3.3 Sinusites
- 3.4 Epistaxis
- 3.5 Nasal Polyp
- 3.6 Tumours of the Nose and Paranasal Sinuses
- 3.7 TNM classification of PNS Cancer

## 4. Throat

- 4.1 Anatomy & Physiology of Throat
- 4.2 Tonsillitis
- 4.3 Laryngitis
- 4.4 Ca Larynx
- 4.5 Ca Thyroid
- 4.6 TNM Classification of Head and Neck cancer

# 5. Head and Neck

5.1 Functional Anatomy of cerebellum and brainstem

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- 5.2 Raised intracranial tension-causes, diagnosis, management with particular reference to otitis hydrocephalus
- 5.3 Pituitary gland, anatomy, physiology hypo and hyper pituitarism, new growths
- 5.4 Intracranial venous sinuses and their affections

## 6. Investigations

- 6.1 Radiographic anatomy of the ear, nose, throat and imaging
- 6.2 Bacteriology in relation to Otorhinolaryngology
- 6.3 The principles of cancer immunology with particular reference to head and neck cancer
- 6.4 Principles of chemotherapy in head and neck cancer
- 6.5 Anaesthesia for Head and Neck cancer surgery

# Section (B) – 50 % Marks

# 7. Surgical Oncology

- 7.1 History of Surgery
- 7.2 Principles of Surgical Oncology
- 7.3 Vascular Access in Cancer Patients
- 7.4 Basics of surgical techniques head and neck
- 7.5 Combined treatments: with radiotherapy, chemotherapy, and hormone therapy.
- 7.6 Pathology, clinical features, diagnosis and principles of management of common Head and Neck cancers
- 7.7 Principles of cancer treatment by surgery
- 7.8 Psychological effects of surgery and bereavement
- 7.9 Medical/legal ethics and medico-legal aspects of surgery
- 7.10 Health service management and economic aspects of surgical care

## 8. Neoplasms of The Head and Neck

- 8.1 Head and Neck Cancer
- 8.2 Odontogenic Tumors
- 8.3 Thymomas and Thymic Tumors

## 9. Oncologic Emergencies

# 10. Manifestation of complications of cancer and cancer treatment in various systems and their management

- 10.1 Infection and sepsis
- 10.2 Para- Neoplastic syndrome
- 10.3 CNS complications
- 10.4 Metabolic Complications
- 10.5 Neuromuscular complications

## 11. Cancer Diagnostics

- 11.1 Radiological diagnostics
- 11.2 Biochemical Diagnostics
- 11.3 Tumor markers, IHC (Immunohistochemistry), Flowcytometry

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- 11.4 Basics of Radiation Oncology
- 11.5 Basics of Surgical Oncology

# 12. Recent Advances in cancer management

- 12.1 Essentials of Molecular Biology
- 12.2 Molecular Biology of cancer
- 12.3 Newer approaches in cancer; Immunotherapy, Biotherapy, Genetherapy

## 13. Palliative Care

- 13.1 Introduction and basic concept including definition
- 13.2 Guidelines for palliative care
- 13.3 Different pharmacologic & non-pharmacologic methods
- 13.4 Pain assessment and management, WHO ladder, balanced use of opiods
- 13.5 Common symptom management
- 13.6 Palliative anticancer medicine
- 13.7 Ethical issues in Palliative care
- 13.8 Psychosocial issues
- 13.9 End of life care
- 13.10 Supportive care and quality of life
- 13.11 Rehabilitation of cancer patient
- 13.12 Palliative radiotherapy
- 13.13 Palliative chemotherapy
- 13.14 Home care
- 13.15 Hospice care