

बी.पी. कोइराला मेमोरियल क्यान्सर अस्पताल
प्राविधिक (स्वास्थ्य) सेवा, नर्सिङ्ग समुह, क्लिनिकल/कम्युनिटी उपसमुह, अधिकृत नवौं तह, नर्सिङ सुपरभाइजर
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 × 5 = 50 (Short answer) 5 × 10 = 50 (Long answer)	3.00 hrs
II	Technical Subject	100	40	6 × 10 = 60 (Long answer) 2 × 20 = 40 (Problem Solving)	3.00 hrs

द्वितीय चरण (Second Phase)

Subject	Full Marks	Examination
Interview	30	Oral

द्रष्टव्य :

- यो परीक्षा योजनालाई प्रथम चरण (लिखित परीक्षा) र द्वितीय चरण (अन्तर्वार्ता) गरी दुई चरणमा विभाजन गरिएको छ ।
- लिखित परीक्षाको माध्यम भाषा नेपाली वा अंग्रेजी अथवा नेपाली र अंग्रेजी दुवै हुनेछ ।
- प्रथम र द्वितीय पत्रको लिखित परीक्षा छुट्टाछुट्टै हुनेछ ।
- परीक्षामा सोधिने प्रश्नसंख्या, अङ्क र अङ्कभार यथासम्भव सम्बन्धित पत्र/विषयमा तोकिए अनुसार हुनेछ ।
- विषयगत प्रश्नमा प्रत्येक खण्डका लागि छुट्टाछुट्टै उत्तरपुस्तिकाहरु हुनेछन् । परीक्षार्थीले प्रत्येक खण्डका प्रश्नहरुको उत्तर सोही खण्डका उत्तरपुस्तिकामा लेख्नुपर्नेछ ।
- यस पाठ्यक्रममा जे सुकै लेखिएको भएतापनि पाठ्यक्रममा परेका ऐन, नियमहरु, परीक्षाको मिति भन्दा ३ महिना अगाडी (संशोधन भएका वा संशोधित भई हटाईएका वा थप गरी संशोधित भई कायम रहेका) लाई यस पाठ्यक्रममा परेको सम्झनु पर्दछ ।
- प्रथम चरणको परीक्षाबाट छनौट भएका उम्मेदवारहरुलाई मात्र द्वितीय चरणको परीक्षामा सम्मिलित गराइनेछ ।
- पाठ्यक्रम लागू मिति :- २०७८/०२/२२

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 (4×5 marks, 2×10 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

Paper II : Technical Subject

Section (A) – 50 % Marks

1. Nursing Concepts and Principles

- 1.1 Basic needs of clients
- 1.2 Nursing Process : Steps of Nursing process
- 1.3 Common nursing procedures used in the hospital
- 1.4 Meeting safety needs
- 1.5 Promotion of comfort, rest and sleep
- 1.6 Meeting hygiene needs
- 1.7 Meeting nutritional and elimination needs
- 1.8 Stress and crisis and their management
- 1.9 First aid treatment
- 1.10 Administration of drugs
- 1.11 Infection prevention and control measures: Hand hygiene, universal precaution, disinfection and sterilization of equipment and hospital waste management
- 1.12 Emergency conditions and their first aid management: Chocking, burn, fracture, hemorrhage, shock and poisoning
- 1.13 Methods of collecting different specimen for routine and culture test
- 1.14 Pain management: Physiology, assessment and management
- 1.15 Concept of holistic health/ complementary and alternative therapies: Therapeutic touch, bio- feedback relaxation, meditation and yoga
- 1.16 Communication/counseling
- 1.17 Ethical and legal aspects in nursing
- 1.18 Nursing theories

2. Applied Science

- 2.1 Friction, Force, Gravity, Transfer of heat, Fluid and Electrolyte, Osmosis, Diffusion, Acid-base balance
- 2.2 Anatomy and Physiology of all body systems and organs and body mechanisms
- 2.3 Microbiology and Pharmacology
- 2.4 Common investigation and its significance
- 2.5 Common drugs/action /side effects
- 2.6 Chemotherapeutic agents indication, side effects, route of administration
- 2.7 Rehydration therapy
- 2.8 Cancer pathology
- 2.9 Cell cycle and level of carcinogenesis
- 2.10 Carcinogenesis; initiation, promotion, progressions
- 2.11 Characteristics of cancer cell; Pleomorphism, Heterogeneity, Biochemical
- 2.12 Staging and Grading

3. Applied Health Sciences

- 3.1 Anatomy and physiology of :
 - 3.1.1 Cardiovascular System
 - 3.1.2 Respiratory system
 - 3.1.3 Digestive system
 - 3.1.4 Muscular skeletal system
 - 3.1.5 Nervous system
 - 3.1.6 Special senses
 - 3.1.7 Reproductive system

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- 3.1.8 Endocrine system
- 3.2 Pharmacology
 - 3.2.1 Principles of pharmacy kinetics and pharmacy dynamic
 - 3.2.2 Important Drugs and their actions
 - 3.2.3 List of essential Drugs as specified by WHO/ DDA (Department of Drug Administration)
 - 3.2.5 Life saving drugs
- 3.3 Patho- physiology
 - 3.3.1 General concepts of necrosis
 - 3.3.2 Inflammation
 - 3.3.3 Thrombosis
 - 3.3.4 Embolism
 - 3.3.5 wound – healing oedema
 - 3.3.6 Neoplasms
 - 3.3.7 Antigens and antibodies
- 3.4 Microbiology
 - 3.4.1 Classification of Micro – organism
 - 3.4.2 Microbial Morphology and the process of :
 - 3.4.3 Drug sensitivity testing
 - 3.4.4 Important terminologies
 - 3.4.5 Opportunistic infections
 - 3.4.6 Pathogens
 - 3.4.7 Bacterial toxins
- 3.5 Sterilization
 - 3.5.1 Different methods and Types
- 3.6 Biochemistry
 - 3.6.1 Digestion and absorption of carbohydrate, protein and fat
 - 3.6.2 Malabsorption
 - 3.6.3 Classifications of vitamins and requirement of different age group
- 3.7 Nutrition
 - 3.7.1 Assessment of Nutrition status
 - 3.7.2 Therapeutic diet in various medical conditions
 - 3.7.3 Menu planning & calculation of calorie for different age group
 - 3.7.4 Food belief & practice
 - 3.7.5 Common Nutritional deficiency diseases
- 4. Behavioral Science and Psychology Applied in Nursing**
 - 4.1 Major cultural groups and their health seeking behaviour
 - 4.2 Factors affecting health of the people
 - 4.3 Psychology applied to Nursing
- 5. Professionalism in Nursing and Nursing Organization**
 - 5.1 Code of ethics, code of professional conduct
 - 5.2 Professional organization: NAN, NNC, ICN
 - 5.3 Family planning association of Nepal
 - 5.4 Aama Milan Kendra (Mothers Club)
 - 5.5 Nepal CRS company
 - 5.6 Nepal Red Cross Society
 - 5.7 National Vitamin A Programme
 - 5.8 Britain Nepal Medical Trust (BNMT)

- 5.9 WHO
- 5.10 UNICEF
- 5.11 UNFPA
- 5.12 USAID
- 5.13 GTZ
- 5.14 Educational and career opportunities in nursing
- 5.15 Role of nursing education and research in professional advancement

6. Indicators

- 6.1 Health indicators
- 6.2 Demography/Socio-cultural
- 6.3 Socioeconomic
- 6.4 Reproductive health indicators
- 6.5 Population Dynamic

Section (B) – 50 % Marks

7. Cancer prevention

- 7.1 Epidemiology, concept and approach
- 7.2 Level of cancer prevention, screening and diagnosis
- 7.3 Most ten common cancers in male and female in world
- 7.4 Vaccine use in cancer prevention

8. Cancer Treatment Modalities:

8.1 Medical Oncology

- 8.1.1 Cancer of lung, head and neck cancer, CLL, CML, Colorectal, Breast , cancer of GB and hepatic cancer, lymphoma, prostate, germ cell tumors, Osteosarcoma, Rhabdomyosarcoma, soft tissue sarcoma, cancer of urinary bladder, multiple myeloma
- 8.1.2 Antineoplastic agent : Introduction and its classification
- 8.1.3 Safe handling of cytotoxic agent and its preparation
- 8.1.4 Chemo administration and disposal of chemo related waste
- 8.1.5 Extravasations of chemo and its management
- 8.1.6 Management of chemo spill
- 8.1.7 Management of side effects of antineoplastic agent
- 8.1.8 Nursing care of patients receiving chemotherapy
- 8.1.9 Management of neutropenia in cancer
- 8.1.10 Diabetes mellitus, Diabetes insipidus, Hypertension, pathological fracture related to cancer, Dislocation
- 8.1.11 Pediatric oncology
 - 8.1.11.1 Major developmental characteristics and milestones
 - 8.1.11.2 Promoting optimum development of children
 - 8.1.11.3 Nursing care of critically ill children
- 8.1.12 Stress of illness and hospitalization
- 8.1.13 Hematological malignancies; ALL, AML, Lymphoma. Wilm's Tumors, Retinoblastoma, Ewing's sarcoma, osteosarcoma, hepatoblastoma germ cell tumours, soft tissue sarcoma

8.2 Biological Therapy: Cytokines, Antibody therapy, Effectors cells, Immunomodulators, Retinoids

8.3 Surgical oncology

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- 8.3.1 Developmental tasks, Application of nursing process, Common diagnostic procedures
- 8.3.2 Nursing management of patient with following:
 - 8.3.2.1 Neurosurgery
 - 8.3.2.2 Thoracic surgery
 - 8.3.2.3 Head and Neck surgery
 - 8.3.2.4 Gynecological malignancies
 - 8.3.2.5 Urological surgery
 - 8.3.2.6 Malignancies of bone
 - 8.3.2.7 GI surgery
 - 8.3.2.8 Breast surgery
- 8.3.3 Cancer related conditions : HIV and cancer, TB and cancer, Infections and cancer and Diabetes and cancer
- 8.3.4 Management of anaemia in cancer
- 8.3.5 Diet and nutrition in cancer patients
- 8.3.6 CSSD management
- 8.4 **Radiation Therapy**
 - 8.4.1 Introduction
 - 8.4.2 Principle of RT and types of RT
 - 8.4.3 Patient preparation for external radiation therapy and brachy therapy
 - 8.4.4 Systemic and local Side effects management after radiation therapy
- 8.5 **Hospice and Palliative Care**
 - 8.5.1 Pain management: Physiology, assessment and management
 - 8.5.2 Symptom management in palliative care - wound care, dyspnea, and constipation
 - 8.5.3 Psychosocial issues
 - 8.5.4 End of life care
 - 8.5.5 Breaking bad news
 - 8.5.6 Stoma care

9. Nursing management in oncological emergencies

- 9.1 Structural and Metabolic

10. Geriatric Nursing

- 10.1 Physiological changes and common health problems of elderly people: Arteriosclerosis, myocardial infarction, hypertension, COPD, cancer, asthma, diabetes mellitus, senile cataract, glaucoma, osteoporosis and gout
- 10.2 Health promotion activities of elderly clients
- 10.3 Common cancers of elderly clients and their treatment therapies
- 10.4 Geriatric emergencies and their management: Chest pain, syncope, GI bleeding and hypothermia
- 10.5 Stress of illness and hospitalization

11. Psychiatric Nursing

- 11.1 Mental health assessment: History taking and mental status examination
- 11.2 Treatment modalities for mental illnesses
- 11.3 Thought and mood disorders: depression
- 11.4 Neurotic and stress-related disorders

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11.5 Psychiatric emergencies: Panic attacks, attempted suicide, hysterical attacks, alcohol withdrawal syndrome

12. Leadership and Management in Nursing Planning

- 12.1 Principles of leadership and management
- 12.2 Management process: Supervision, motivation, implementation and evaluation
- 12.3 Concept of authority, power, responsibility and accountability
- 12.4 Change process
- 12.5 Management of resources including human resource management
- 12.6 Health management information system (HMIS)
- 12.7 Management of budget
- 12.8 National health planning and concept of national health system

13. Nursing Research

- 13.1 Purpose and significance of research in nursing
- 13.2 Research process
- 13.3 Principles, purposes and components of research proposal
- 13.4 Principles and components of a research report
- 13.5 Basic statistics in research: Graphic presentation of data, frequency distribution, measures of central tendency and measures of variability

14. Nursing Practice Issues

- 14.1 Alternative system of health and complementary therapies including USANi, ayurvedic and homeopathy
- 14.2 Models of illness prevention and health promotion, rehabilitation and referral
- 14.3 Family nursing and home health care/ family centered nursing approach
- 14.4 Disaster nursing management
- 14.5 Evidence based practice and its important in work place

15. General Surgical Principles

- 15.1 Shock
- 15.2 Surgical infection
- 15.3 Fluid and electrolyte imbalance
- 15.4 Preoperative and post operative patient care
- 15.5 TNM classification of cancers