

बि.पि. कोइराला मेमोरियल क्यान्सर अस्पताल
प्राविधिक (स्वास्थ्य) सेवा, नर्सिङ्ग समुह, क्लिनिकल/कम्युनिटी उपसमुह, अधिकृत नवौं तह, नर्सिङ सुपरभाइजर
पदको खुला र आन्तरिक प्रतियोगितात्मक परीक्षाको पाठ्यक्रम
एवं परीक्षा योजना

कुल पूर्णाङ्क : १२०

| १. प्रथम चरण : – लिखित परीक्षा | | | | पूर्णाङ्क :- १०० | | |
|---------------------------------------|-----------|------------|-----------------|---------------------------|---------------------|---------------------|
| पत्र / विषय | पूर्णाङ्क | उतीर्णाङ्क | परीक्षा प्रणाली | प्रश्नसंख्या X अङ्क | समय | |
| General Subject and Technical Subject | १०० | ४० | वस्तुगत | बहुवैकल्पिक प्रश्न (MCQs) | १०० प्रश्न x १ अङ्क | १ घण्टा ३० मिनेट |

२. द्वितीय चरण : – अन्तर्वार्ता

| विषय | पूर्णाङ्क | परीक्षा प्रणाली |
|--------------|-----------|-----------------|
| अन्तर्वार्ता | २० | मौखिक |

द्रष्टव्य :

१. यो 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. लिखित परीक्षामा यथासम्भव पाठ्यक्रमका सबै एकाईबाट देहाय बमोजिम प्रश्नहरू सोधिनेछ ।

| खण्ड | अङ्कभार | वस्तुगत प्रश्न संख्या |
|----------|---------|-------------------------|
| A | १० | १० प्रश्न X १ अङ्क = १० |
| B | १० | १० प्रश्न X १ अङ्क = १० |

४. 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 ।
५. यस पाठ्यक्रम योजना अन्तर्गतका पत्र/विषयका विषयवस्तुमा जेसुकै लेखिएको भए तापनि पाठ्यक्रममा परेका कानून, ऐन, नियम तथा नीतिहरू परीक्षाको मिति भन्दा ३ महिना अगाडि (संशोधन भएका वा संशोधन भई हटाईएका वा थप गरी संशोधन भई) कायम रहेकालाई यस पाठ्यक्रममा परेको सम्भन्नु पर्दछ ।
६. प्रथम चरणको परीक्षाबाट छनौट भएका उम्मेदवारहरूलाई मात्र द्वितीय चरणको परीक्षामा सम्मिलित गराइनेछ ।
७. पाठ्यक्रम लागू मिति :- २०७४/११/२९

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पत्र/विषय : **General Subject and Technical Subject**

General Subject

Section (A) – 10 Marks

- 1. B.P.Koirala Memorial Cancer Hospital, Related Legislations and General Health Issues**
 - 1.1. B.P.Koirala Memorial Cancer Hospital : History, organizational structure, functions, roles, services, problems and challenges
 - 1.2. National Health Policy
 - 1.3. B.P.Koirala Memorial Cancer Hospital related act and regulations
 - 1.4. Health Service Act, 2053 and Health Service Regulation, 2055
 - 1.5. Professional council related acts and regulations
 - 1.6. NMC and National Health Agencies
 - 1.7. Nursing council Act, 2052
 - 1.8. Professional and medical ethics
- 2. Present Constitution of Nepal (Health and welfare issues)**

Technical Subject

Section (B) – 90 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

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- 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
 - 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)
 - 3.2.4 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

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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

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

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- 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 incipidus, 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 malignencies; 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**
 - 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

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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

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

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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

The questions distribution for this paper/subject shall be as follows:

| Section | Marks | Multiple Choice Questions |
|---------|-------|--------------------------------|
| | | No. of Questions × Mark |
| A | 10 | 10 Questions × 1Mark =10 Marks |
| B | 90 | 90 Questions × 1Mark =90 Marks |