यस पाठ्यक्रम योजनालाई दुई चरणमा विभाजन गरिएको छ:

**प्रथम चरण:**  लिखित परीक्षा (Written Examination)  
पूर्णाङ्क : २००

**द्वितीय चरण:**  अन्तर्वांत (Interview)  
पूर्णाङ्क : ३०

**प्रथम चरण (First Phase): लिखित परीक्षा योजना (Written Examination Scheme)**

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**द्वितीय चरण (Second Phase)**

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प्रश्नावली:

१. यो परीक्षा योजनालाई प्रथम चरण (लिखित परीक्षा) र द्वितीय चरण (अन्तर्वांत) गरी दुई चरणमा विभाजन गरिएको छ।

२. लिखित परीक्षालाई माध्यम भाषा नेपाली र अंग्रेजी अथवा नेपाली र अंग्रेजी दुई हुनेछ।

३. प्रथम र द्वितीय पत्रको लिखित परीक्षा हुनेछ।

४. परीक्षालाई सीध्र एवं बहुविकृतक प्रश्नहरूको गठन उदाहरण दिन।

५. बस्तुगत बहुविकृतक प्रश्नहरूको गठन उदाहरण दिन।

६. बहुविकृतक प्रश्नहरूको गठन उदाहरण दिन।

७. बिषयगत प्रश्नहरूमा दिन।

८. दिन।

९. बिषयगत प्रश्नहरू उदाहरण दिन।

१०. दिन।

११. दिन।
1. Nursing Concept and Principles
   1.1 Nursing Theory
      1.1.1 V. Henderson
      1.1.2 D. Orem
      1.1.3 Roy’s
      1.1.4 Florence Nightingale
   1.2 Nursing Process
      1.2.1 Steps of Nursing process
   1.3 Pain and Stress management in Renal diseases (Acute and Chronic)
      1.3.1 Nursing Management
      1.3.2 Medical Management
   1.4 Holistic Health Care
      1.4.1 Components of holistic health care to renal failure
      1.4.2 Methods of holistic care
   1.5 Creativity in Nursing related to organ transplantation
      1.5.1 Methods of creativity
      1.5.2 Barriers of creativity
   1.6 Professional Development
      1.6.1 Nursing ethics in caring for the patient with organ failure
      1.6.2 Trends in the areas of organ transplantation
      1.6.3 Professional and client's right
      1.6.4 Legal Right
      1.6.5 ICN code of Nursing
      1.6.6 ICM code of Nursing
      1.6.7 Nursing Association of Nepal
      1.6.8 Nepal Nursing Council

2. Behavioral Science and Psychology applied in Nursing
   2.1 Major cultural groups and their health seeking behavior.
   2.2 Factors affecting health of the people with special focus to organ failure
      2.2.1 Socio economic conditions
      2.2.2 Education
      2.2.3 Politics
      2.2.4 Gender
      2.2.5 Physical environment
      2.2.6 Occupation
      2.2.7 Nutrition
   2.3 Social problems in Nepal
      2.3.1 Organ trafficking
      2.3.2 Poverty
      2.3.3 Unemployment
2.3.4 Substance abuse
2.3.5 Violence
2.3.6 Gender bias related to organ donation

2.4 Psychology applied to Nursing
2.4.1 Characteristics of human behavior
2.4.2 Causes of behavioral changes
2.4.3 Emotional development
2.4.4 Control of emotion
2.4.5 Counseling of the patient with chronic diseases

3. Education Science in Nursing
3.1 Teaching and Learning
  3.1.1 Principles
  3.1.2 Factors which affect Teaching / Learning
3.2 Roles and Responsibilities of a Hemodialysis and post Transplant nurse
3.3 Teaching Methods and Media
  3.3.1 Teaching methods
    3.3.1.1 Microteaching
    3.3.1.2 Evidenced based learning
    3.3.1.3 Self directed learning
    3.3.1.4 Seminar/Symposium exhibition
    3.3.1.5 Case study presentation
  3.3.2 Media
    3.3.2.1 Audio Aids
    3.3.2.2 Video Aids
    3.3.2.3 Audio - Video Aids
3.4 In-service Education
  3.4.1 Need Assessment
  3.4.2 Planning, organizing & conducting
  3.4.3 Micro teaching to patients visiting a transplant center
  3.4.4 Clinical Teaching to nurses working in a transplant center
  3.4.5 Evaluation and Feedback
3.5 Components of Curriculum Development
3.6 Evaluation
  3.6.1 Types
  3.6.2 Characteristics of evaluation tools

Section (B): 30 %

4. Health Care Management
4.1 Trends of Health Care delivery system in Nepal
4.2 Management:
  4.2.1 Concept, principles, theories
  4.2.2 Resource management
4.3 Planning:
4.3.1 Elements, process
4.3.2 Benefits and Limitation
4.4 Organization
  4.4.1 Types, Principles, elements
4.5 Organizational behavior
  4.5.1 Group Dynamic
  4.5.2 Communication
  4.5.3 Organizational conflict and management (Problem solving)
4.6 Organizational structures of Health Care Delivery system in Nepal
4.7 Leadership
  4.7.1 Theories
  4.7.2 Types
  4.7.3 Functions
  4.7.4 Characteristics
4.8 Supervision and monitoring
  4.8.1 Concept
  4.8.2 Purpose
4.9 Personnel development
  4.9.1 Motivation
  4.9.2 Morale
  4.9.3 Leadership and decision making
4.10 Human Resource Development
  4.10.1 Elements, steps
  4.10.2 Production/distribution
4.11 Health Economics
  4.11.1 Concepts
  4.11.2 Demand and supply
  4.11.3 Cost benefit and cost effectiveness in Nursing Management
  4.11.4 Application in Nursing service
4.12 Health Information Management
4.13 Disaster Management
4.14 Quality Assurance Management
4.15 Job description
4.16 National Policies
  4.16.1 National Health Policy
  4.16.2 Strategy
  4.16.3 Priority
4.17 Current periodic plan
  4.17.1 Sustainable development goal
  4.17.2 Second long-term health plan
5. Research & Statistics
5.1 Research Terminology
  5.1.1 Variables
5.1.2 Principles
5.1.3 Hypothesis
5.1.4 Operational definitions
5.1.5 Limitations & Delimitations
5.1.6 Validity & Reliability

5.2 Ethics & Regulations in Health & Nursing Research
5.2.1 Ethics in Research.
5.2.2 National Ethical guidelines in Health research in Nepal (NHRC)

5.3 Methodology
5.3.1 Types of research
5.3.2 Sampling Techniques
5.3.3 Method of data collection
5.3.4 Development of Instrumentation
5.3.5 Statistical Data analysis
5.3.6 Report writing & Dissemination

5.4 Importance of Research in Nursing services

6. Applied Health Sciences
6.1 Anatomy and physiology of :
   6.1.1 Cardiovascular System
   6.1.2 Respiratory system
   6.1.3 Digestive system
   6.1.4 Nervous system
   6.1.5 Endocrine system

6.2 Patho-physiology
   6.2.1 Acute Tubular Necrosis
   6.2.2 Inflammation
   6.2.3 Thrombosis
   6.2.4 Embolism
   6.2.5 Wound – healing
   6.2.6 Neoplasms
   6.2.7 Pneumonia

Section (C): 40 %

7. Organ donation and transplantation (Kidney, Liver, Pancreas, Heart and Lungs)
7.1 Basic concept of immunology and opportunistic infections after organ transplantation
7.2 Basic concept of organ failure, global and national scenario, complications and treatment modalities
7.3 Concept of organ donation and transplantation
7.4 Pre and post transplant care of organ donor and recipient
7.5 Pharmacology
   7.5.1 Principles of pharmacokinetics and pharmaco-dynamics
   7.5.2 Important drugs used in organ transplantation, brief mechanism of action and adverse reactions
7.6 Microbiology
   7.6.1 Classification of micro organisms common among transplant recipients
   7.6.2 Different methods and types of sterilization

7.7 Nutrition
   7.7.1 Assessment of nutritional status of patients with organ failure
   7.7.2 Therapeutic diet in various organ failures
   7.7.3 Menu planning and calculation of therapeutic calorie for different age groups
   7.7.4 Food belief and practice

7.8 Role and Responsibilities of Nurse in the prevention of organ failure
   7.8.1 Primordial prevention
   7.8.2 Primary prevention
   7.8.3 Secondary prevention
   7.8.4 Tertiary prevention

8. Laws related to health, nursing and organ donation and transplantation
   8.1 Medico-legal case
   8.2 Disposal of dead body
   8.3 Narcotic drugs
   8.4 Human Organ Transplant Act and Regulations

9. General knowledge about Shahid Dharmabhakta National Transplant Center
1. **Advanced Nursing**
   1.1 Developmental tasks of different age groups
   1.2 Physiological, social and common medical problems of Geriatrics and their management
   1.3 Pre-natal, Intra-natal and post-natal nursing care of the patient
   1.4 Basic neonatal care management
   1.5 Problem solving approach in care of patient
   1.6 Application of holistic approach in care of patient
   1.7 Advancement in the diagnostic procedures for different illnesses
   1.8 Case study and case presentation

2. **Nursing care of common Communicable and non-communicable diseases**
   2.1 Water borne diseases
   2.2 Air borne diseases
   2.3 Vector transmission
   2.4 Sexual Transmitted Infection (STI)
   2.5 Hypertension
   2.6 Diabetes mellitus
   2.7 Obesity
   2.8 Cancer

### Section (B): 40 %

3. **Medical Surgical Nursing (Adult+ Child) Nursing Care & Management of clients suffering with diseases related to following systems**
   3.1 Genito urinary problems
   3.2 Cardiovascular problems
   3.3 Neurological problems
   3.4 Hepato-biliary problems
   3.5 Endocrine problems
   3.6 Gastrointestinal problems
   3.7 Respiratory problems

4. **Nursing management**
   4.1 Roles and responsibilities of a incharge in hemodialysis and Transplant ICU
   4.2 Performance appraisal
   4.3 Conflict management
   4.4 Time management
   4.5 Quality assurance of nursing procedures
   4.6 Human resource management
   4.7 Dealing with violent patients and their visitors
5. **Organ donation and transplantation: Pre and post transplant counseling, nursing care and responsibilities**

5.1 **Pre and Post transplant counseling**
   5.1.1 Steps of counseling
   5.1.2 Pre-requisites for counseling
   5.1.3 Assessment of level of understanding of the patients
   5.1.4 Important aspects in pre and post organ transplant counseling
   5.1.5 Counseling of the bereaving families for cadaveric organ donation
   5.1.6 Challenges in dealing with patients and families with chronic diseases and roles and responsibilities of a nurse in their management

5.2 **Nursing care of the patients with chronic diseases**
   5.2.1 Common chronic diseases prevalent in Nepal with special focus on organ failure
   5.2.2 Management of clients with renal, liver, pancreas, heart and lung failure
   5.2.3 Emergency preparedness
   5.2.4 Resuscitation
   5.2.5 Therapeutic diet in patients with various organ failures
   5.2.6 Nurse's roles and responsibilities in the prevention of organ failure.

5.3 **Nurses' roles in organ transplantation**
   5.3.1 Indications for organ transplantation
   5.3.2 Specific investigations of prospective organ donor and recipient
   5.3.3 Nursing care of the patient after kidney, liver, pancreas, heart and lung transplantation
   5.3.4 Specific investigations after organ transplantation
   5.3.5 Possible complications after transplantation and their nursing management
   5.3.6 Nursing responsibilities while administering commonly used drugs after transplantation
   5.3.7 Concept of immunology, immunological tests (HLA, DSA, PRA, CDC), common post transplant infections and their nursing management.
   5.3.8 Discharge teaching and follow-up of transplant recipients

5.4 **Human Organ Transplant Act and Regulations**
   5.4.1 Human Organ Transplantation (Regulation and Prohibition) Act- 2055
   5.4.2 Human Organ Transplantation (Regulation and Prohibition) Act- 2072
   5.4.3 Human Organ Transplantation Regulations- 2073
   5.4.4 Concept and practice of International rules and regulations on Organ donation and transplantation