

**Test Guidelines for
the National Licensure Examination for Nurses (NLEN)
2012 of Proficiency Certificate Level Nursing Program
(Revised 2022)**

Effective from October 2022

Nepal Nursing Council
Kathmandu, Nepal

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I Background

Nepal Nursing Council (NNC) is an autonomous body under the Nepal Nursing Council Act 2052 formulated by the Government of Nepal. It aims at promoting quality nursing and midwifery education to bring quality nursing and midwifery service in the country.

The National Licensure Examination for Nurses (NLEN) is an examination for nurses introduced by the NNC. The National Licensure Examination for Nurses is an examination to qualify as nursing professionals. It is required for all new pre-service nursing graduates from Proficiency Certificate Level Nursing Programme. The examination is geared towards testing knowledge and practice in relation to the job functions most commonly required by entry-level professional nurses. The examination determines eligibility to earn a title of registered nurse in order to begin working as a professional nurse.

NNC had gone through several processes to establish the National Licensure Examination for Nurses in Nepal. NNC sought references on licensing examination from SAARC Countries including developed countries. NNC also received technical and human resource from JICA to support in conducting the initial licensure examination.

II Objectives

The objectives of the National Licensure Examination for Nurses(NLEN) of Proficiency Certificate Level Nursing programme are as follows:

1. To maintain quality nursing services to the public.
2. To maintain professional standard of knowledge and practice among new graduates
3. To recommend for strengthening the capability of nursing institutions for quality nursing education

III. Test guidelines for the National Licensure Examination for Nurses (NLEN) of Proficiency Certificate Level Nursing Program

Eligibility

(A) Nepalese citizen graduated from Nepal

To meet the educational requirement for licensure as a qualified professional nurse, the candidate must present satisfactory evidence of having completed pre-service nursing education programme approved by the NNC and must submit the documents as mentioned in Table 1.

(B) Nepalese citizen graduated from other countries

Applicants, who have completed pre-service nursing education programme from other countries are required to have their equivalence certificate from the concerned government authority. Applicants need to be graduated from the institute recognized from the respective nursing council or authorized government body and must submit the documents as mentioned in Table 2.

Exception

(A) Reporting prior convictions or disciplinary action against licensing

Applicants are required under 'Regulation of the NLEN of Proficiency Certificate Nursing Program' to report all misdemeanor and felony convictions. Failure to report prior disciplinary action is considered falsification of application and is a ground for denial of licensure or revocation of license.

(B) Applicants with disability

Applicants, who are constitutionally provisioned for special consideration, will be provided opportunity to appear in the examination based on their limitations.

Documents required for Application

The following documents are required for application.

Table 1: List of required documents for Nepalese citizen graduated from Nepal

| Items | Number |
|---|---------------|
| 1. Submission of complete online personal information | 1 |
| 2. Uploading scanned original copies of the following documents (size not more than 2MB and must be in jpg format) <ul style="list-style-type: none">• SLC/SEE Marksheet and Character Certificate• Citizenship• Academic Transcript or Marksheets and Character Certificate of PCL Nursing Programme | Each document |
| 3. Uploading recent white background passport size photo (size not more than 2MB and must be in jpg format) | 1 |
| 4. Online payment of Examination fee of NRs. 3,100/- | 1 |
| *All original academic certificates, citizenship and related documents need to bring for verification while receiving registration certificate from NNC. | |

Table 2: List of required documents for Nepalese citizen graduated from other countries

| Items | Number |
|--|---------------|
| 1. Submission of complete online personal information | 1 |
| 2. Uploading scanned original copies of the following documents (size not more than 2MB and must be in jpg format) <ul style="list-style-type: none">• SLC/SEE Mark sheet and Character Certificate• Citizenship• Academic Transcript or 10+2 Mark sheets or I. Sc. Mark sheets, and Character Certificate• Academic Transcript or Mark sheets and Character Certificate of PCL Nursing Programme | Each document |
| 3. Uploading original scanned copies of documents related to recognition/accreditation of institute from the respective nursing council or individual registration in the respective nursing council or in the authorized government body (only in case of non-existence of nursing council) of the respective country | 1 |
| 4. Uploading original scanned copy of Equivalency letter from CTEVT/TU | 1 |

| | |
|---|---|
| 5. Uploading recent white background passport size photo (size not more than 2MB and must be in jpg format) | 1 |
| 6. Online payment of Examination fee of NRs. 3,100/- | 1 |
| *All original academic certificates, citizenship and related documents need to bring for verification during receiving registration certificate from NNC. | |

Application Process

1. The applicant must upload all the documents to online NLEN registration process within the time period mentioned in the notice.
2. The examination center, time and other important information will be notified on the online admit card. The admit card can be downloaded from online application site prior to date of examination.

ATTENTION!

- If an applicant changes her/his name and/or address after submitting an application for licensure, the applicant must notify the NNC prior to receiving License certificate. An applicant is required to submit legal documents for any changes in the certificate to the NNC immediately after the change occurs.
- Applicants must match EXACTLY as it appears on photo identification at the examination center.

Examination Process

Licensure Examination will be of two and half hours (2:30 hours) duration. Applicants are not allowed to enter the examination room after 15 minutes of starting examination. Applicants can leave the room only after 1 hour of starting the examination.

Test Items

All of the test items are Multiple Choice Questions (MCQs) with four options. Applicants should select the most appropriate one option for each item. Distribution of test items according to subjects in given Table 3.

Table 3: Subject wise distribution of Test Items

| Subjects | Distribution of test items (%) | Possible numbers of items |
|---------------------------|---------------------------------------|----------------------------------|
| Integrated Sciences | 5% | 7 |
| Fundamentals of Nursing | 25% | 38 |
| Community Health Nursing | 15% | 23 |
| Adult Nursing | 20% | 30 |
| Child Health Nursing | 10% | 15 |
| Midwifery and Gynecology | 20% | 30 |
| Leadership and Management | 5% | 7 |
| Total | 100% | 150 |

Frequency of the NLEN

NNC conducts the NLEN three times a year. If applicant fails an examination, s/he will be allowed to apply for the next examination.

Scoring System

Each correct answer receives 1 score. There is no negative scoring system. It means when applicant gives wrong answer, no minus marking will be done.

Passing Standard

The grading system on the NLEN is either pass or fail. No numerical score will be provided. In order to pass the NLEN, the applicant must score at least 50% marks in aggregate.

Result of NLEN

The result of NLEN will be published on the day of examination unless and until there is a technical difficulty. Results will be published on the NNC notice board and on the NNC's website. NNC will not inform the candidates individually.

Registration Process

Once applicants have successfully passed NLEN they can apply for registration to get their license Certificate from the NNC with the registration fee of NPR 1200/ through online payment and they should also bring the admit card along with two photographs same as used in admit card including all the original documents and citizenship certificate.

IV. Syllabus for NLEN

NLEN Content

Below is the list of topics that will be used by item writers and item reviewers of NLEN

INTEGRATED SCIENCES

Integrated Science includes subjects like Anatomy/ Physiology, Microbiology, Pharmacology and Biochemistry related contents.

| Unit | Contents |
|----------------------------|---|
| Anatomy/ Physiology | |
| I. | Cells and Tissues: Structure and functions of human cell, cell division, structure and functions of tissues, membranes, glands and cartilage |
| II. | Cardiovascular/ Lymphatic System: <ul style="list-style-type: none">• Body fluid/electrolytes and acid- base balance• Blood composition, plasma and plasma proteins• Physiology of red blood cells, white blood cells, platelets• Blood groups and Rh factor• Anatomy of cardiovascular system: The heart and blood vessels• Physiology of circulation• Cardiovascular regulation and adjustments• Lymphatic/ immune system |
| III. | Musculoskeletal System <ul style="list-style-type: none">• The human skeleton, its structure and physiology• The joints• The skeletal muscles of human body, neuromuscular junction and muscle physiology |
| IV. | Nervous System <ul style="list-style-type: none">• Functional unit of nervous system, central nervous system, peripheral nervous system, and autonomic nervous system• Somatosensory and somatomotor system and reflexes• Meninges, cerebrospinal fluid, blood- brain barrier and central blood flow |
| V. | Respiratory System Structure and functions of respiratory system Physiology/mechanism/ control of respiration |
| VI. | Gastro-Intestinal System Structure and functions of digestive system digestion and absorption of nutrients accessory organs of gastro-intestinal system |
| VII. | Endocrine System Structure and functions of endocrine glands and hormones. |
| VIII. | Urinary System Functional unit of urinary system physiology of urine formation |
| IX. | Reproductive System <ul style="list-style-type: none">• Male reproductive system, female reproductive system• Contraceptives and action and side effects of contraceptives |

| | |
|--|---|
| X | Special Sensory System • Eye, ear, nose, throat, skin and fascia |
| Microbiology, Parasitology and Virology | |
| I | Introduction of microbial world: Types and characteristics of microorganisms |
| II | Blood parasites, intestinal protozoa and intestinal worms |
| III | Classification of bacteria and bacterial growth cycle, concept of opportunistic and pathogenic organisms |
| IV | Virology: Characteristics, replication, classification of virus |
| V | Immunology: Cells and organs of immune system, defense mechanism of the body, antigen and antibody, hypersensitivity reaction |
| VI | Mycology: Structure and classification of fungus |
| Pharmacology | |
| I | Introduction to pharmacology: terminologies, pharmacokinetics and pharmacodynamics |
| II | Drugs acting on gastrointestinal system: Mechanism of action, indications, contraindication, side effects and their management |
| III | Drugs acting on respiratory system: Mechanism of action, indications, contraindication, side effects and their management |
| IV | Drugs acting on cardiovascular system: Mechanism of action, indications, contraindication, side effects and their management |
| V | Drugs used in Infections: Mechanism of action, indications, contraindication, side effects and their management |
| VI | Drugs acting on central nervous system: Mechanism of action, indications, contraindication, side effects and their management |
| VII | Endocrine and hormonal drugs: Mechanism of action, indications, contraindication, side effects and their management |
| VIII | Drugs acting on urinary system: Mechanism of action, indications, contraindication, side effects and their management |
| IX | Drugs acting on lymphatic system: Mechanism of action, indications, contraindication, side effects and their management |
| X | Drugs acting on skin: Mechanism of action, indications, contraindication, side effects and their management |
| XI | Essential drugs, emergency drugs and antidotes: Mechanism of action, indications, contraindication, side effects and their management |
| Biochemistry | |
| I | Introduction: Osmosis, diffusion, types of solution: Normal, molar, percentage solution |
| II | Biomolecules: Metabolism of carbohydrate, protein and fats |
| III | Enzymes: Types and significance of enzymes |
| IV | Blood coagulation mechanism |
| V | Organ function tests: Liver function tests, renal function test, pancreatic function test and cardiac profile |

| Microbiology, Parasitology and Virology | |
|--|---|
| I | Introduction of microbial world: Types and characteristics of microorganisms |
| II | Blood parasites, intestinal protozoa and intestinal worms |
| III | Classification of bacteria and bacterial growth cycle, concept of opportunistic and pathogenic organisms |
| IV | Virology: Characteristics, replication, classification of virus |
| V | Immunology: Cells and organs of immune system, defense mechanism of the body, antigen and antibody, hypersensitivity reaction |
| VI | Mycology: Structure and classification of fungus |
| Pharmacology | |
| I | Introduction to pharmacology: terminologies, pharmacokinetics and pharmacodynamics |
| II | Drugs acting on gastrointestinal system: Mechanism of action, indications, contraindication, side effects and their management |
| III | Drugs acting on respiratory system: Mechanism of action, indications, contraindication, side effects and their management |
| IV | Drugs acting on cardiovascular system: Mechanism of action, indications, contraindication, side effects and their management |
| V | Drugs used in Infections: Mechanism of action, indications, contraindication, side effects and their management |
| VI | Drugs acting on central nervous system: Mechanism of action, indications, contraindication, side effects and their management |
| VII | Endocrine and hormonal drugs: Mechanism of action, indications, contraindication, side effects and their management |
| VIII | Drugs acting on urinary system: Mechanism of action, indications, contraindication, side effects and their management |
| IX | Drugs acting on lymphatic system: Mechanism of action, indications, contraindication, side effects and their management |
| X | Drugs acting on skin: Mechanism of action, indications, contraindication, side effects and their management |
| XI | Essential drugs, emergency drugs and antidotes: Mechanism of action, indications, contraindication, side effects and their management |
| Biochemistry | |
| I | Introduction: Osmosis, diffusion, types of solution: Normal, molar, percentage solution |
| II | Biomolecules: Metabolism of carbohydrate, protein and fats |
| III | Enzymes: Types and significance of enzymes |
| IV | Blood coagulation mechanism |
| V | Organ function tests: Liver function tests, renal function test, pancreatic function test and cardiac profile |

FUNDAMENTALS OF NURSING

| Units | Contents |
|-------|--|
| I | <p>Introduction of Nursing and Hospital Nursing</p> <ul style="list-style-type: none"> • Definition and history of nursing/ professional organizations/ ethics • Consumer/Professional Protection <p>Hospital Nursing: patient admission, ward orientation, intra ward transfer and discharge procedures</p> |
| II | <p>Basic Human Need</p> <ul style="list-style-type: none"> • Physiological needs • Love and belonging • Safety and security needs • Self-esteem needs <p>Self-actualization needs</p> |
| III | <p>Stress and Adaptation:</p> <p>Stress, stressors, its effects, coping mechanisms and stress managements</p> |
| IV | <p>Nursing Process:</p> <p>Assessments, nursing diagnosis, planning, intervention and evaluation including documentation</p> |
| V | <p>Nursing Measures to Assess the Patients (vital signs; Meaning and types, Observation/ measurement of vital signs)</p> <ul style="list-style-type: none"> • Body temperature • Respiration • Blood pressure • Pulse |
| VI | <p>Nursing Measures related to the Physical Need of the Patients</p> <ul style="list-style-type: none"> • Meaning purpose and principles • Procedures of Personal hygiene • Bathing and skin care • Nail and foot care • Oral Hygiene (conscious and unconscious client) • Hair wash/Hair care • Pediculosis |
| VII | <p>Comfort Measures</p> <ul style="list-style-type: none"> • Bed making including types, purpose, principles • Pressure sore including definition, stages major sites, risk factors for developing, (preventive measures: back care, different positioning and use of different devices) |
| VIII | <p>Measures related to Meeting Nutritional Need</p> <ul style="list-style-type: none"> • Feeding helpless client • Insertion of Ryle's tube and feeding • Maintaining fluid and electrolyte balance • Care of client with IV infusion and blood transfusion |
| IX. | <p>Measures related to Elimination Needs</p> <ul style="list-style-type: none"> • Condition: Constipation/diarrhea/distension of bladder and abdomen including definition, causes, signs/symptoms, ways of relieving conditions and treatment/measures • ORS-composition and method of preparation |

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|------|--|
| | <ul style="list-style-type: none"> • Intake and output monitoring • Catheterization including definition, purpose, principles, types of catheter, <ul style="list-style-type: none"> - Catheterization of child adult, male/female/elderly - Catheter care maintaining drainage - Hazards of catheterization infection • Enema: definition, types, purposes, principles and procedures |
| X | <p>Hot and Cold Application Application of hot and cold and sitz bath including, definition, purposes, effects, procedures and precautionary measures of hot and cold application</p> |
| XI | <p>Safety Needs</p> <ul style="list-style-type: none"> • Hazards in hospital including medical, chemical, biological radiological and electrical, fire hazards, liquid hazards, sharp hazards, physical hazards (slippery floor, fall) • Protective and preventive measures: use of side rails, restraint (physical and chemical), care of environment, adequate water supply/cleanliness, adequate ventilation, adequate lighting, avoid slippery floor, floors free of sharp instruments, temperature and humidity. |
| XII | <p>Infection Prevention</p> <ul style="list-style-type: none"> • Diseases transmission cycle • Medical and surgical asepsis, hospital waste disposal (isolation, isolation technique and types and precautionary measures while caring the patient) steps of instrument processing, and sterilization, hand washing, universal precaution, waste disposal |
| XIII | <p>Wound Care:</p> <ul style="list-style-type: none"> • Definition, classification, process of wound healing, complications of wound healing Dressing, sutures, suture, removal bandaging including definition, types purpose and principles, procedures and special considerations |
| XIV | <p>Drug Administration</p> <ul style="list-style-type: none"> • Prescription: Definition and parts of prescription • Drugs-Definition, types, common side effects common abbreviation, routes of administration, calculation in metric system and in house hold system, different between drugs and medicine |
| XV | <p>Oxygen Therapy</p> <ul style="list-style-type: none"> • Purpose, indication and methods <p>Safety precaution, oxygen toxicity</p> |
| XVI | <p>Exercise</p> <ul style="list-style-type: none"> • Active and passive exercises, deep breathing and coughing exercise and postural drainage: including definition, purpose, procedure. • Lifting and transferring patient: From stretcher to bed and vice versa, from wheel chair to bed and vice versa |

COMMUNITY HEALTH NURSING

| Unit | Contents |
|-------------|---|
| I | Introduction to Community Health Nursing <ul style="list-style-type: none"> • Determinants of health • Level of illness prevention • Major roles and functions of the nurse in community/public health |
| II | Primary Health Care, Universal Health Coverage and Sustainable Development Goals <ul style="list-style-type: none"> • Elements and principles of primary health care • Role of the nurse in primary health care • Universal health coverage: Measurement and impact • Sustainable Development Goals |
| III | Communications <ul style="list-style-type: none"> • Elements of communication • Types of communication and counseling • Keys to overcoming barriers of communication • Interviewing in community |
| IV | Epidemiology <ul style="list-style-type: none"> • Concept of disease and modes of disease transmission • Epidemiological approach to solve community health problems • Steps of investigation of epidemic diseases |
| V | Health indicators and vital statistics <ul style="list-style-type: none"> • Use of indicators vital and health statistics • Sources of vital and health statistics |
| VI | Community Health Diagnosis <ul style="list-style-type: none"> • Steps of the community health diagnosis process • Difference between community and clinical diagnosis • Methods of data collection |
| VII | Nutrition of Family and Community <ul style="list-style-type: none"> • Main function of food • Nutrients and their deficiencies • Meaning of balanced diet • Food security- Policy of Government of Nepal • Milk pasteurization • Food adulteration • National Nutrition programme • Meal planning • Introduction of solid food to the infant |
| VIII | Health Education |

| | |
|-------------|---|
| | <ul style="list-style-type: none"> • Health education: Introduction, purposes, advantages, disadvantages and process • Methods : Individual, group and mass • Media of health education • Use of methods and media for health education • Evaluation of health education |
| IX | Family Planning <ul style="list-style-type: none"> • Health aspects of family planning • Types/methods: Modern and traditional contraceptive methods and their advantages and disadvantages • Use of "ABHIBADAN/ GATHER" for family planning counseling • Emergency Contraception |
| X | Immunization <ul style="list-style-type: none"> • Immunity and immunization • National Immunization Programme (NIP) : Introduction, types of immunization, target, indication/contraindication, route, side effects of vaccine cover by national immunization schedule |
| XI | Environmental Health and Sanitation <ul style="list-style-type: none"> • Component of environment • Refuse and sewage • Health Care Waste Management • Transmission of faecal-borne diseases through carriers • Impact of Health Care Waste on environment and public health • Pollution hazards |
| XII | Water <ul style="list-style-type: none"> • Uses of water • Daily requirement of water for a person • Sources of water and its impurities • Water-borne diseases • Purification of water |
| XIII | Housing <ul style="list-style-type: none"> • Criteria for healthful housing • Housing needs for human being • Standards of housing • Effects of poor housing on health |
| XIV | Occupational Health and Occupational Health Hazards |
| XV | Family Health Nursing <ul style="list-style-type: none"> • Objectives and principles of family health and family centred care • Types of nurse family contact <ul style="list-style-type: none"> ▪ Home visit and family contact ▪ Group conference |

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|--------------|---|
| | <ul style="list-style-type: none"> ▪ Written communication • Types of family health problems and nursing problems |
| XVI | Sexual and Reproductive Health and Rights <ul style="list-style-type: none"> • Components of reproductive health package • Reproductive rights • Sexual rights of men and women • Constitutional rights to health care and right of women |
| XVII | Sexually Transmitted Infections (STIs) <ul style="list-style-type: none"> • Common STIs prevalent in Nepal • Essentials of Syndromic STI Management • Prevention and control of STIs: Primary and Secondary prevention |
| XVIII | School Health Program and School Health Nurse <ul style="list-style-type: none"> • Objectives and purposes of school health program • Activities (Aspects) and components of School Health Program • Target groups involved in the school health care. Roles and responsibilities of school health nurse |

MEDICAL AND SURGICAL NURSING

| Units | Contents |
|-------|--|
| I | Introduction to Medical Surgical Nursing <ul style="list-style-type: none"> • Developmental needs and tasks of adulthood • Stress and crisis • Rehabilitation : Concept, types, goals and services |
| II | Nursing Care of Patients with respiratory disorders including etiology, pathophysiology, signs and symptoms, investigation, treatment, nursing management <ul style="list-style-type: none"> • Disorders of pleura and pleural spaces • Disorders the trachea, bronchial tree and lungs • Special nursing care of patient with: <ul style="list-style-type: none"> ▪ Oxygen therapy ▪ Water seal drainage ▪ Tracheotomy ▪ Postural drainage |
| III | Nursing Care of Patients with Gastrointestinal Disorders (including etiology, pathophysiology, signs and symptoms, investigation, treatment, nursing management) <ul style="list-style-type: none"> • Specific nursing care of patients with following procedures • Meeting the nutritional need by nasogastric tube feeding, jejunostomy feeding, insertion and care of nasogastric tube, • Total parenteral nutrition (TPN), • Therapeutic diets • Colostomy care and feeding including meeting psychological need of the individual |
| IV | Nursing Care of Patients with the Musculo-skeletal Disorders (including etiology, pathophysiology, signs and symptoms, investigation, treatment, nursing management) |

| | |
|------|---|
| | <ul style="list-style-type: none"> • Specific nursing care of patients with following procedures <ul style="list-style-type: none"> ▪ Closed and open reduction ▪ Amputation ▪ Immobility problem: pressure sore, respiratory complication, urinary stasis, calculi, contracture /deformities and cardiovascular problems ▪ Prevention of immobility proper positioning and turning <ul style="list-style-type: none"> ○ deep breathing exercises ○ range of the motion • Used of special orthopedic equipment <ul style="list-style-type: none"> ▪ Bed and frames, traction ▪ Splints, plaster, cradles ▪ Sand bag, crutch, walker, bars |
| V | <p>Nursing Care of the Patients with Cardiovascular and Hematologic Disorders (including etiology, path physiology, signs and symptoms, investigation, treatment, nursing management)</p> <ul style="list-style-type: none"> • Specific nursing care with following procedures <ul style="list-style-type: none"> ▪ Blood transfusion ▪ Cardiopulmonary resuscitation ▪ Cardiac Pacing ▪ Cardiac catheterization |
| VI | <p>Nursing Care of Patients with Fluid, Electrolyte, Urinary and Renal System Disorders (including etiology, path physiology, signs and symptoms, investigation, treatment, nursing management)</p> <ul style="list-style-type: none"> • Specific nursing care with following procedures <ul style="list-style-type: none"> ▪ Fluid replacement/Type of solution used ▪ Intravenous therapy ▪ Dialysis: Haemo/ peritoneal dialysis, ▪ Bladder irrigations • Renal transplantation |
| VII | <p>Nursing Care of Patients with Nervous System Disorders (including etiology, path physiology, signs and symptoms, investigation, treatment, nursing management)</p> <ul style="list-style-type: none"> • Specific nursing care of patient with following conditions <ul style="list-style-type: none"> ▪ Paralysis ▪ Unconsciousness ▪ Seizure disorder |
| VIII | <p>Nursing Care of Patient with Endocrine Disorder (including etiology, path physiology, signs and symptoms, investigation, treatment, nursing management)</p> <ul style="list-style-type: none"> • Specific care of patients with following procedures <ul style="list-style-type: none"> ▪ Insulin therapy ▪ cortisone therapy |
| IX | <p>Nursing Care of Patients with Skin Disorders including etiology, path physiology, signs and symptoms, investigation, treatment, nursing management)</p> <ul style="list-style-type: none"> • Special nursing care of patient with burn |

| | |
|------|---|
| X | Nursing Care of Patients with Eye, Ear, Nose and Throat Disorders(including etiology, path physiology, signs and symptoms, investigation, treatment, nursing management) |
| XI | Nursing care of patient with fallowing communicable disorder including etiology, path physiology, signs and symptoms, investigation, treatment, nursing management <ul style="list-style-type: none"> • malaria, dengue fever, kalazar, typhoid, paratyphoid and cholera, chickenpox, measles, rubella, influenza, leishmaniasis, hepatitis a, b, and c, lymphatic, filariasis, encephalitis, viral meningitis, bacterial meningitis, HIV, Dengue fever, rabies, brucellosis |
| XII | Oncology nursing <ul style="list-style-type: none"> • Oncological disorders <ul style="list-style-type: none"> ▪ Warning sign ▪ Etiology, ▪ Primary, secondary and tertiary prevention and control • Cancer treatment modalities and nursing management <ul style="list-style-type: none"> ▪ Chemotherapy ▪ Radiotherapy ▪ Immunotherapy ▪ Hormonal therapy ▪ Surgery ▪ Rehabilitation • Palliative care • Pain management <ul style="list-style-type: none"> ▪ Nursing management in pain relief <ul style="list-style-type: none"> ○ Pharmacologic pain management (WHO Ladder) ○ Non Pharmacologic pain management • Psychosocial aspects of terminally ill patient • Grieve and bereavement • End of life care |
| XIII | Operation Theatres Nursing <ul style="list-style-type: none"> • Function and management of OT Responsibilities of the scrub nurse, circulating nurses and recovery nurse |
| XIV | Gerontology and Geriatric Nursing <ul style="list-style-type: none"> • Ageing population in Nepal with national and international concern • Common Geriatric needs and Problems • Different facilities for Health Care Services: National and international Nursing care of the terminally ill |
| XV | Nursing care of patients with mental disorders including etiology, path physiology, signs and symptoms, investigation, treatment, nursing management <ul style="list-style-type: none"> • Mental health assessment • Psychosis and schizophrenic disorder • Mood disorder • Neurotic and stress related disorder • Personality disorder • Substance |

CHILD HEALTH NURSING

| Unit | Contents |
|------|--|
| I | Introduction to Child Health Nursing: Terminology used in child health nursing, different age group children |
| II | Growth and Development of Children from Infancy to Adolescence: Principles and factors affecting growth and development, developmental characteristics and milestones, developmental tasks, promotion of growth and development at different age groups, behavioral problem in children |
| III | Illness and Hospitalization of Children: Stress of illness and hospitalization in different age group, admission and discharge procedure, pain assessment and management in different age group, pediatric medicine dosage calculation |
| IV | Communication with Children: Methods and techniques of effective communication with children |
| V | Physical Assessment of Children: History taking and physical examination (head to toe), approaches to physical assessment according to age group |
| VI | Community Based Integrated Management of Childhood Illness (CBIMCI): Concept of CBIMCI, management of childhood illnesses (acute respiratory infection, diarrheal diseases, measles, malnutrition and malaria) |
| VII | Newborn and Newborn Health Problems: Extra-uterine adjustment, physiological changes, normal newborn care, common newborn problems and their management: birth asphyxia (including newborn resuscitation), jaundice (including phototherapy), sepsis, hypothermia, hyperthermia, low birth weight and prematurity |
| VIII | Childhood Morbidity Conditions and their Management <ul style="list-style-type: none"> • Respiratory Disorders • Gastro-intestinal Disorders • Cardio-vascular and Hematological Disorders • Genitourinary Disorders • Endocrine Disorders • Neurological Disorders • Musculoskeletal Disorders • Skin, Eye, Ear, Nose, Throat and Dental Disorders |
| IX | Common Childhood Emergency Conditions: Falls, burns, drowning, suffocation, poisoning, road accidents, sharp instrument injuries, foreign body aspiration, cardio-pulmonary resuscitation |
| X | Child and Family with Special Needs: Child with chronic illnesses and disabilities; coping with unexpected death of a child |

MIDWIFERY -I

| Unit | Content |
|------|--|
| I | <p>Midwifery and Reproductive Health</p> <ul style="list-style-type: none"> • Definition of midwives, Midwifery/SBA, Maternity Nursing • Terminologies used in midwifery • Short history of midwifery: education/service (international/National) • Trend and evolution of Midwifery education and service in Nepal: • Sexual/Reproductive Health (SRH) <p>Safe motherhood:</p> <ul style="list-style-type: none"> • National Strategies policy and plan of Safe motherhood in Nepal • Role and responsibilities of a midwife and Maternity Nurse. <p>Ethical and legal aspect in midwifery</p> <ul style="list-style-type: none"> • Nurses Scope of practice in Maternity Nursing • Ethics in Maternity Nursing • Ethical issues may arise in care of women in antenatal • Respectful maternity care • Right of women in pregnancy, labour and breast feeding • Code of ethic for Maternity nurses • ICN/ICM/NNC (MNC) and • Midwifery regulation <p>Respectful maternity care</p> |
| II | <p>Anatomy and physiology of reproductive system</p> <p>Review of Male reproductive system</p> <p>Review of female reproductive system</p> <p>Female Pelvis</p> <ul style="list-style-type: none"> ▪ Bones ▪ Joints ▪ Ligaments, Parts Measurement ▪ Areas of pelvis brim and their significance <p>Types of pelvic and their effect on birth</p> <ul style="list-style-type: none"> ▪ Pelvic floor (Perineum) and Function ▪ Anatomy and Physiology ▪ Prevention of injury ▪ Pelvic floor exercise |
| III | <p>Menstruation and Conception</p> <p>Menstrual cycle (review)</p> <p>Conception (timing, usual site, physiology)</p> |
| IV | <p>Anatomy and Physiology of Male Reproductive System</p> <p>Male Reproductive System: A review the structure, position function and its relation to conception and pregnancy.</p> |
| V | <p>Communication: pre-conceptual and genetic counselling</p> |

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| VI | <p>Fetal and placental Development Development of fertilized ovum Placenta, membranes, and cord</p> <ul style="list-style-type: none"> • Development • Functions • Malformation • Clinical implications |
| VII | <p>Fetal circulation and its changes at birth Reason of difference between fetal and adult circulation.</p> |
| VIII | <p>Fetal skull, its structure and Relationship Area of fetal skull and its importance</p> <ul style="list-style-type: none"> • Land marks • Bones • Sutures • Fontanelles • Moulding • Measurement of fetal skull <p>Relationship of fetus to the uterus and pelvis</p> <ul style="list-style-type: none"> • Lie • Presentation • Attitude • Denominator • Position • Presenting Part • Engagement • Station |
| IX | <p>Physiological Changes, Psychological and Emotional Changes during Pregnancy Physiological Changes in</p> <ul style="list-style-type: none"> • Reproductive system • Musculoskeletal system • Maternal weight • Breast and Skin • Cardiovascular system • Respiratory system • Urinary system • Gastrointestinal system • Endocrine system • Changes in metabolism <p>Psychological and Emotional Changes during Pregnancy</p> |
| X | <p>Signs and symptoms of pregnancy and Diagnosis</p> <ul style="list-style-type: none"> ▪ Presumptive signs ▪ Probable signs ▪ Positive signs |

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| XI | <p>Antenatal Examination (ANC) of Women of and Fetus during Pregnancy</p> <ul style="list-style-type: none"> • Antenatal Care: An introduction • Purposes and importance • Assessment of women • History taking • Physical Examination • Obstetrical Examination • General Pathological Investigations in ANC • Assessment of Fetal Wellbeing in ANC • Special Care of Women during Pregnancy • Behavior Change communication and information with women, spouse and family (Health teaching/counselling) |
| XII | <p>Disorders of Pregnancy and their Management</p> <ul style="list-style-type: none"> • Minor disorders of pregnancy in different systems • Major disorders of pregnancy • Bleeding in early pregnancy • Bleeding in late pregnancy |
| XIII | <p>Disease associated to Pregnancy Disease and their sign and symptoms, effect and management</p> <ul style="list-style-type: none"> • Diabetes • Tuberculosis • Jaundice • Rh incompatibility • Malaria • Disease and their sign and symptoms, effect and management • Anemia • Cardiac disease • STD including HIV/AIDS • TORCH infection • Effect of disease on: Pregnancy, labor, puerperium |
| XIV | <p>Medication related to Pregnancy</p> <ul style="list-style-type: none"> • Hematenics • Oxytocin • Antibiotics • Magnesium Sulfate • 14.5 insulin • Antihelminthics • Drugs used in cardiac disease • Tocolytic agents • Steroids (Dexamethosone) • Teratogenic drugs <p>Drugs allowed under SBA protocol</p> |
| XV | <p>Documentation and information systems in relation of antenatal</p> <p>Documentation and information systems in antenatal</p> |

MIDWIFERY -II

| Unit | Content |
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| I | <p>Normal Labor:</p> <ul style="list-style-type: none"> • Definition of labor, normal labor, abnormal labour <ul style="list-style-type: none"> ▪ Physiological changes in labor ▪ Stages of labor ▪ Sign and symptoms of different stages of labor • Onset of labor • Theories and causes of onset labor • True labor and false labor • Factors of labor • Vaginal Examination |
| II | <p>Mechanism of normal labor</p> <ul style="list-style-type: none"> • Engagement • Descent • Flexion of the head • Internal rotation of the head • Crowing of the head • Extension to the head • Restitution of head • Internal rotation of the shoulder • External rotation of head • Lateral flexion of the body (Restitution) |
| III | <p>Physiological Change during 1st Stage of labor</p> <ul style="list-style-type: none"> • Contraction and retraction of uterine muscles • Formation of upper and lower uterine segment • Development of retraction ring • Taking up the cervix • Dilatation of the cervix • Presence of show • Formation of the bag of water • General fluid pressure • Fetal axis pressure • Rupture of membrane |
| IV | <p>Management of (first stage of labor) normal labor</p> <ul style="list-style-type: none"> • General management • Management during first stage of labour <ul style="list-style-type: none"> ▪ Fetal monitoring • Maternal monitoring <ul style="list-style-type: none"> ▪ Active management of labor ▪ Use of partograph |
| V | <p>Physiological Changes during 2nd Stage of labor</p> |

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| VI | <p>Management of 2nd Stage of labor</p> <ul style="list-style-type: none"> • Constant supervision of maternal and fetal condition along with progress of labor • Preparation of delivery • Steps of conduction normal delivery • Episiotomy • APGAR scoring • Immediate care of newborn (eight steps) • Helping Baby Breathe (HBB) • Essential newborn care • Newborn resuscitation |
| VII | <p>Physiological changes during 3rd Stage of labor</p> <ul style="list-style-type: none"> • Remarkable uterine contraction • Separation of the placenta • Expulsion of the placenta • Control of bleeding |
| VIII | <p>Management of 3rd Stage of labor</p> <ul style="list-style-type: none"> • Observation of third stage of labor • Active management of third stage of labor • Methods of placenta delivery • Examination of birth canal after delivery and its importance in complication prevention. • Placenta examination • Normal and abnormal findings and its clinical significance |
| IX | <p>Drugs used in labor (indication, route, action, side effects and its management)</p> <ul style="list-style-type: none"> • Sedation • Oxytocic • Prstagladin • Misoprostol • Epidocin • Drugs used for neonates (respiratory stimulants) • Xylocaine • Vitamin K • Vitamin A • Epiduural block • Dexamethosone • IV drip |
| X | <p>Management of 4th Stage of labor</p> <ul style="list-style-type: none"> • Care of mother and newborn • Documentation and information |

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| XI | <p>Complication during 1st Stage</p> <ul style="list-style-type: none"> • PPROM/PROM • Abnormal uterine contraction • Cervical dystopia • Prolonged labor • Maternal distress • Fetal distress |
| XII | <p>Complication during 2nd Stage of labor</p> <ul style="list-style-type: none"> • Prolonged second stage • Fetal distress • Cord presentation and prolapsed • Maternal distress |
| XIII | <p>Complication during 3rd Stage of labor</p> <ul style="list-style-type: none"> • Post-partum hemorrhage • Uterine inversion • Retain placenta • Obstetrical shock • Amniotic fluid embolism |
| XIV | <p>Abnormal labor (Definition causes and nursing management)</p> <ul style="list-style-type: none"> • Occipital posterior position • Multiple/Multifetal pregnancy • Malpresentation • Prematurity and Post dated/maturity • Muconium staining |
| XV | <p>Surgical intervention during labor</p> <ul style="list-style-type: none"> • Methods of surgical intervention (definition and indication) <ul style="list-style-type: none"> ▪ Vacuum delivery ▪ Forceps delivery ▪ Episiotomy ▪ Caesarean section ▪ Nursing management • Preparation of mother • Preparation of equipment • Preparation of self <ul style="list-style-type: none"> ▪ Post-procedure care |
| XVI | <p>Obstructed and prolonged labor</p> <ul style="list-style-type: none"> • Prolonged labor • Obstructed labor |

MIDWIFERY – III

| Unit | Content |
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| I | <p>Introduction to Puerperium</p> <ul style="list-style-type: none"> • Revision of physiological changes during pregnancy and labor • Puerperium (characteristics and duration) • Changes during puerperium <p>Anatomical changes during puerperium</p> <ul style="list-style-type: none"> • Reproductive System <ul style="list-style-type: none"> - Involution of uterus - Involution of other pelvic structure • Other system <ul style="list-style-type: none"> - Urinary system - GI system - Nervous system - Integumentary system - Musculo -skeletal system - Cardio vascular system - Endocrine system <p>Physiological changes during puerperium</p> <ul style="list-style-type: none"> • Lochia • Vital signs • Lactation • Weight loss, fluid loss and blood loss • Menstruation and ovulation <p>Psychological changes</p> <p>Emotional changes</p> <p>Nursing care during puerperium</p> |
| II | <p>Postpartum care</p> <p>Goals, components and principles of postpartum care.</p> <p>Postnatal examination of mother</p> <ul style="list-style-type: none"> • History • Purpose • Equipments <p>Procedure</p> <ul style="list-style-type: none"> • Daily assessment of mothers • General wellbeing • Temperature, pulse and blood pressure • Urine examination, weight • Tiredness and fatigue • Uterus lochia, perineum, vulva and anus • Micturition and elimination <p>General care of mother</p> <ul style="list-style-type: none"> • Rest and sleep • Diet and nutrition • Care of bowel and bladder • Clothing • Postnatal exercise • Emotional support |

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| | Perineal care, breast care |
| III | <p>Minor disorder of puerperium</p> <ul style="list-style-type: none"> • After pain • Sub involution of uterus • Retention of urine • Maternal blue/4th day blue • Constipation and Hemorrhoids <p>Perineal pain</p> |
| IV | <p>Major disorder of puerperium and their nursing management</p> <ul style="list-style-type: none"> • Puerperal sepsis/pyrexia • Puerperal hemorrhages • Urinary tract infection and incontinence of urine • Vulval hematoma • Pulmonary embolism <p>Postnatal depression and psychosis</p> |
| V | <p>Lactation management</p> <p>Review anatomy breast Physiology of lactation</p> <ul style="list-style-type: none"> • Mammogenesis • Lactogenesis • Galactokinesis • Galactopoiesis <p>Breast milk: composition</p> <ul style="list-style-type: none"> • Advantages of breast feeding • Breast feeding techniques: position, attachment and suckling • Recommendation practice • Expressed breast milk: technique and storage • Suppression of lactation <p>Different method of feeding in special conditions (baby with HIV positive mother, cleft lip/palate, premature infant)</p> <p>Breast milk substitute acts and regulation Baby friendly hospital</p> |
| VI | <p>Common breast problem and their management</p> <p>Common breast problem Causes, sign and symptoms, prevention and management of breast problems:</p> <ul style="list-style-type: none"> • Abnormal nipple (long nipple, short nipple, abnormally large nipple, inverted and flat nipple) • Cracked nipple • Breast engorgement • Plugged duct • Mastitis <p>Breast abscess</p> |

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| VII | <p>Care of newborn baby</p> <ul style="list-style-type: none"> • Introduction of newborn baby • Physical features and characteristics of newborn • Physiological changes in newborn baby • Need of the newborn • Examination of newborn baby <p>Kangaroo mother care (KMC)</p> |
| VIII | <p>Minor Disorder of newborn and their nursing management</p> <p>Common minor disorders of newborn</p> <ul style="list-style-type: none"> • Sore buttocks/Diaper rashes • Hypothermia • Skin rashes • Dehydration fever • Physiological jaundice • Vomiting • Trush • Constipation • Swollen breast • Stuffy nose • Pseudo-menstruation <p>Pre-deciduous teeth</p> |
| IX | <p>Major disorders and their management</p> <ul style="list-style-type: none"> • Asphyxia neonatrum • Respiration distress syndrome • Meconium Aspiration Syndrome • Hypoglycemia • Hypovolemia • Neonatal jaundice • Neonatal sepsis • Neonatal meningitis • Neonatal tetanus • Convulsion • Omphalitis • Ophthalmic neonatrum <p>Pemphigus neonatrum (skin infection)</p> |
| X | <p>Care of large and small babies</p> <ul style="list-style-type: none"> • Premature baby • Definition • Causes and clinical features |

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| | <ul style="list-style-type: none"> • Nursing management • Complication • Dysmature/intrauterine growth retardation (IUGR)/small for date • Definition • Types • Causes and clinical features • Nursing management • Complication <p>Post maturity/heavy for dates/large or gestational age</p> |
| XI | <p>Birth injuries and their management</p> <ul style="list-style-type: none"> • Birth injuries • Injury to the head • Injury to the nerve • Soft tissue injury <p>Fracture bone</p> |
| XII | <p>Congenital anomalies and their management</p> <ul style="list-style-type: none"> • Congenital anomalies: Definition, causes, clinical features and management • Common congenital anomalies of GI system • Common congenital anomalies of nervous system • Common congenital anomalies of genito-urinary system • Congenital anomalies of musculoskeletal system • Congenital anomalies of heart <ul style="list-style-type: none"> ▪ Acynotic heart disease ▪ Cynotic heart disease <p>Chromosome and chromosomal anomalies</p> |
| XIII | <p>Discharge Instructions/counselling</p> <ul style="list-style-type: none"> • Nutrition for mother • Genital hygiene • General hygiene • Breast care/perineal care • Rest/sleep • Family planning • Postnatal exercise • Danger sign of postnatal mother and baby • Care of baby (cleanliness, feeding, protection from infection, accident, warmth and immunization) <p>Follow up</p> |

GYNECOLOGICAL NURSING

| Unit | Content |
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| I | <p>Human Reproduction</p> <ul style="list-style-type: none"> • Review anatomy and physiology of human reproduction system of male and female • Human sexuality • Review human conception |
| II | <p>Malformations, female reproductive organs and menstrual irregularities and AUB</p> <ul style="list-style-type: none"> • Mal-position and malformation • Abnormal menstrual bleeding (definition, etiology, signs and symptoms, diagnosis, treatment and nursing management) |
| III | <p>Infection of female reproductive system</p> <ul style="list-style-type: none"> • Vaginitis • Vulvitis • Barthololine cyst and abscess • Endometritis/endometriosis • Salpingitis • Oophoritis |
| IV | <p>Bleeding in early pregnancy</p> <ul style="list-style-type: none"> • Abortion (MVA, CAC, PAC) • Ectopic pregnancy • Hydatiform mole • Erosion of cervix • Cervical polyps |
| V | <p>Bleeding in late pregnancy Anterpartum hemorrhage (placenta previa, vasa previa, abruption placenta)</p> |
| VI | <p>Pelvic Organ Prolapsed and Genital Fistula</p> <ul style="list-style-type: none"> • Definition, etiology, signs and symptoms, diagnosis, treatment and Nursing Management of: <ul style="list-style-type: none"> ○ Cystocele ○ Rectocele ○ Uterine prolapsed ○ Vaginal vault prolapsed • Definition, etiology, signs and symptoms, diagnosis, treatment and Nursing Management of: Genital Fistula (VVF, RVF, UVF) |
| VII | <p>Menopause</p> <ul style="list-style-type: none"> • Definition, etiology, signs and symptoms of menopause • Diagnosis, treatment and Nursing and Management of menopause |
| VIII | <p>Sexually transmitted infections (review)</p> <ul style="list-style-type: none"> • Sexually transmitted infection and their management during pregnancy <ul style="list-style-type: none"> ○ Gonorrhea ○ Syphilis ○ Hepatitis B ○ Chlamydia |

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| | <ul style="list-style-type: none"> ○ Monoliasis, Trichomoniasis ○ HIV/AIDS |
| IX | <p>Reproductive Neoplasm</p> <ul style="list-style-type: none"> • Neoplasm of reproductive system • Benign growths, fibroid <ul style="list-style-type: none"> ○ Benign tumors: Breast, uterus, cervix and valve ○ Malignant tumors: breast, uterus, cervix and valve ○ Screening of reproductive neoplasum |
| X | <p>Sub-fertility/Infertility</p> <ul style="list-style-type: none"> • Problems of sub-fertility/infertility • Male sub-fertility • Female sub-fertility • Treatment modalities |
| XI | <p>Investigations</p> <ul style="list-style-type: none"> • Preparation of the clients fro following investigation <ul style="list-style-type: none"> ○ Laparoscopy ○ Histero-salpingiography ○ High vaginal swab <p>TVS, Pap smear, colcoscopy, endometrium/cervical biopsy, FNAC</p> |

LEADERSHIP AND MANAGEMENT

| Unit | Contents |
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| I | Introduction to Leadership and Management: Terminologies, principles and functions of management and types of leadership |
| II | Management Process: <ul style="list-style-type: none">• Assessment of client's needs and problems, staff needs, strengths and limitations and material and supplies resources• Prioritization of needs and problems of the client, Planning of patient care; staff scheduling, methods of clients care assignments• Implementation: Division of work and delegation of responsibilities, motivation and supervision of staff and staff development program; monitoring• Evaluation: Types, purpose and methods and client satisfaction and staff performance satisfaction |
| III | Nursing Profession: Criteria of profession, Regulatory bodies in nursing , professional correspondence |
| IV | Conflict Management: Causes and types of conflict, and principles and process of conflict management |
| V | Management of Delivery of Health Services: Organizational structure and function of government health services |
| VI | National Health Policy and Planning: Targets, indicators, strategies and policies; job description of different level nursing personnel |
| VII | Organizational Change and Change Process: Forces of change and change process |
| VIII | Information and Data Management: Health management information system and tools |
| IX | Health Care Social Security/Health Insurance: Concept, policy and strategies |
| X | Disaster management: Mass casualty management, disaster management cycle , role of nurse in disaster management |

Note: For further information visit Nepal Nursing Council's website: <http://www.nnc.org.np> or contact Nepal Nursing Council's Office Tel: 4372521.