

**Annexure-A****Syllabus for the posts of Sister Tutor****I. ANATOMY**

1: Introduction to anatomical terms organization of the human body

- Human Cell structure Tissues-Definition, Types, characteristics, classification, location, functions and formation Membranes and glands-classification and Structure Alterations in disease Applications and implications in nursing

2: The skeletal system

- Bones-types, structure, Axial & Appendicular skeleton,
- Boneformation and growth
- Description of bones
- Joints-classification andstructure
- Alterations in disease
- Applications and implications in nursing

3: The Muscular System

- Types and structure of muscles
- Muscle groups Alterations in disease
- Applications and implications in nursing

4: The Nervous System

- Structure of neurologia& neurons
- Somatic Nervous system
  - Structureof brain, spinal cord, cranial nerves, spinal nerves, peripheral nerves
- Autonomic nervous system
  - sympathetic, parasympathetic
  - Structure,location
- Alteration in disease
- Applications and implications in nursing.

5: The Sensory Organs

- Structure of skin, eye, ear, nose, tongue (auditory and olfactory apparatus)Alterations in disease Applications and implications in nursing

6: Circulatory and Lymphatic System

- The Circulatory System
  - Blood-Microscopic structure
  - Structureof Heart
  - Structure of blood vessels-Arterial and Venous System,
  - Circulation: systemic, pulmonary, coronary
- Lymphatic System
  - Lymphaticissues Lymphatic vessels and lymph
    - Thymus gland
    - Lymph nodes
    - Spleen
  - Lymphatic nodules
- Alterations in disease
- Applications andimplications in nursing

7: The respiratory System

- Structure of the organs of respiration
  - Muscles of respiration:
    - Intercostals and Diaphragm
  - Alterations in disease
  - Applications and implications in nursing
- 8: The Digestive system
- Structure of Alimentary tract and accessory organs of digestion
  - Alterations in disease Applications and implications in nursing
- 9: The excretory system (Urinary)
- Structure of organs of urinary
  - System: Kidney, ureters, urinary bladder, urethra, structure of skin
  - Alterations in diseases
  - Applications and implications in nursing
- 10: The Endocrine System
- Structure of Pituitary, Pancreas, Thyroid, Parathyroid, Thymus and Adrenal gland
  - Alterations in disease
  - Applications and implications in nursing
- T 11: The Reproductive System
- Structure of female reproductive organs Structure of breast
  - Structure of male reproductive organs
  - Structure of breast
  - Alterations in disease
  - Applications and implications in nursing

## II. PHYSIOLOGY

- 1: **Cell physiology**
- Tissue- formation, repair
  - Membranes & glands – functions alterations in disease
  - Applications and implications in nursing
- 2: **Skeletal system**
- Bone formation & growth
  - Bones – functions and movements of bones of axial and appendicular skeleton, bone healing Joints and joint movement
  - Alterations in disease Applications and implications in nursing
- 3: Muscular system**
- Muscle movements, muscle tone physiology of muscle contraction, levels and maintenance of posture
  - Alteration in disease
  - Applications and implications in nursing
- 4: Nervous system**
- Functions of neuralgia & neurons Stimulus & nerve-impulse definitions and mechanism
  - Function of brain, spinal cord, cranial and spinal nerves
  - Cerebrospinal fluid-composition, circulation and function
  - Reflex arc, reflexion and reflexes
  - Autonomic functions: Pain: somatic, visceral, and referred Autonomic learning and biofeedback
  - Alterations in disease
  - Applications and implications in nursing

**5: Circulatory System 8 hrs**

- Blood formation, composition, blood groups, blood coagulation
- Hemoglobin: Structure, Synthesis and breakdown, Variation of molecules, estimation.
- Functions of Heart, Conduction, Cardiac cycle, circulation
- Principles, Control, factors influencing BP and pulse
- Alteration in disease
- Applications and implications in nursing.

**6: The Respiratory System**

- Functions of respiratory organs Physiology of respiration pulmonary ventilation,
- Volume Mechanics of respiration
- Gaseous exchange in lungs
- Carriage of oxygen & carbon-dioxide Exchange of gases in tissues
- Regulation of respiration
- Alteration in disease Application and implications in nursing

**7: The Digestive System**

- Functions of organs of digestive tract.
- Movements of alimentary tract, Digestion in mouth, stomach, small intestines, Large intestines, Absorption of food.
- Functions of liver, gall bladder and pancreas.
- Metabolism of carbohydrates, protein and fat.

**8: The Excretory system**

- Functions of kidneys, ureters, urinary bladder & urethra
- Compositions of urine, Mechanism of urine formation
- Functions of skin Regulation of body temperature Fluid & electrolyte balance.
- Alterations in disease Applications & implications in nursing.

**9: The sensory Organs**

- Functions of skin, eye, ear, nose, tongue
- Alterations in disease
- Applications & implications in nursing

**10: The Endocrine system**

- Functions of Pituitary, pineal body, thymus, Thyroid, parathyroid, pancreas, suprarenal, placenta and ovaries & testes.
- Alterations in disease
- Applications and implications in nursing.

**11: The reproductive System**

- Reproduction of cells – DNA, Mitosis, Meiosis, Spermatogenesis, oogenesis.
- Functions of female reproductive organs; Functions of breast, Female sexual cycle.
- Introduction to embryology Functions of male reproductive organs,
- Male function in reproduction, Male fertility system,
- Alterations in disease
- Applications and implications in nursing.

**12: Lymphatic and Immunological System**

- Circulation of lymph Immunity, Formation of T cells & B cells
- Types of immune response, Antigens, Cytokines, Antibodies

**III. BIOCHEMISTRY**

**1: Introduction**

- Definition and significance in nursing. Review of structure, Composition and functions of cell. Prokaryote and Eukaryote cell organization & Microscopy

**2: Structure and functions of cell membrane**

- Fluid mosaic model tight junction, Cytoskeleton. Transport mechanism; diffusion, osmosis, filtration, active channel, sodium pump. Acid base balance- maintenance & diagnostic tests. PH buffers.

**3: Composition and metabolism of Carbohydrates**

- Types, structure, composition and uses Monosaccharide. Polysaccharides, Oligosaccharides Disaccharides.
- Metabolism - Pathways of glucose: - Glycolysis, Gluconeogenesis: Cori's cycle, Tricarboxylic acid ( TCA ) cycle Glycogenolysis - Pentose Phosphate pathways ( Hexose mono phosphate ) - Regulation of blood glucose level Investigation and their interpretations

**4: Composition and metabolism of lipid**

- Types, structure, composition and uses of fatty acids Nomenclature, Roles and prostaglandins, Metabolism of fatty acid - breakdown - synthesis, Metabolism of triacylglycerols, cholesterol metabolism - Biosynthesis and its Regulation - Bile salts and bilirubin - Vitamin D - Steroid hormones . Lipoproteins and their function : VLDLs- IDLs, LDLs, and HDLs - Transport of lipids- Atherosclerosis investigations & their interpretation

**5: Composition and metabolism of Amino acids and Proteins**

- Types, structure, composition and uses of Amino acids and Proteins,
- Metabolism of Amino acids and proteins, Protein synthesis, targeting and glycosylation- Chromatography- Electrophoresis- Sequencing
- Metabolism of nitrogen - Fixation and Assimilation - Urea Cycle
- Hemes and chlorophylls .
- Enzymes and co- enzymes-
- Classification - Properties- Kinetics and inhibition
- Control Investigations and their interpretations
- Specialized protein : Collagen, Elastin, Keratin, Myosin, Lens,
- Protein Electrophoretic and Quantitative determination of immunoglobins- ELISA etc. Investigations and their interpretations

**6: Composition of Vitamins and minerals**

- Vitamins and minerals: - Structure - Classification - Properties
  - Absorption - Storage and transportation - Normal concentration
  - Investigations and their interpretations
- Free radical and antioxidant.

**IV. MICROBIOLOGY****1: Introduction**

- Importance and relevance to nursing, Historical perspective
- Concepts and terminology, Principles of microbiology.

**2: General characteristics of microbes**

- Structure and classification of microbes, Morphological types, Size and form of bacteria, Motility, Colonization, Growth and nutrition of microbes: temperature, moisture, blood and body fluids
- Laboratory methods of identification of microorganisms, Staining techniques, gram staining, acid fast staining, hanging drop preparation, Culture; various medias.

**3: Infection control**

- Infection: sources, portals of entry and exit, Transmission, asepsis
- Disinfection: types and methods, Sterilization: types and methods
- Chemotherapy and antibiotics,
- Standard safety measures,
- Biomedical waste management,
- Role of nurse.
  - Hospital acquired infection
  - Hospital infection control programme,
    - Protocols, collection of samples, preparation of report and status of rate of infection in the unit/hospital, nurse's accountability, continuing education etc.

**4: Pathogenic organisms**

- Micro-organisms = Cocci – gram positive and gram negative, =Bacilli – gram positive and gram negative = Spirochete =Mycoplasma= Rickettsiae = Chlamydiae –Viruses Fungi –superficial and deep mycoses, Parasites, Rodents & vectors, Characteristics, source, portal of entry, transmission of infection.
- Identification of disease producing micro-organisms collection, handling and transportation of various specimens.

**5: Immunity**

- Immunity-types, classification, Antigen and antibody reaction,
- Hypersensitivity – skin test, Serological tests, Immunoprophylaxis,
- Vaccination & sera – types & classification, storage and handling, cold chain, Immunization for various diseases Immunization schedule.

**V. PHARMACOLOGY****1: Introduction to pharmacology**

- Definitions
- Sources
- Terminology used
- Types : Classification
- Pharmacodynamics: Actions, therapeutic, Adverse, toxic
- Pharmacokinetics: absorption, distribution, metabolism, interaction, excretion
- Review : Routes and principles of Administration of drugs
- Indian pharmacopoeia: Legal issues
- Rational use of drugs
- Principles of therapeutics

**2: Chemotherapy**

- Pharmacology of commonly used :
  - Penicillin
  - Cephalosporins
  - Aminoglycosides
  - Macrolide & Broad Spectrum Antibiotics
  - Sulfonamides
  - Quinolones
  - Antiamoebic
  - Antimalarials
  - Anthelmintics
  - Antiscabies agents

- Antiviral & antifungal agents
- Antitubercular drugs
- Anti leprosy drugs
- Anticancer drugs
- Immuno-suppressants
- Composition, action, dosage, route, indications, contraindications, drug interactions, side effects, adverse effects, toxicity and role of nurse

### **3: Pharmacology of commonly used antiseptic, disinfectants and insecticides**

- Antiseptics: Composition, action, dosage, route, indications, contraindications, drug interactions, side effects, adverse effects, toxicity and role of nurse
- Disinfectants
- Insecticides

### **4: Drugs acting on G.L system**

- Pharmacology of commonly used :
  - Antiemetics
  - Emetics
  - Purgatives
  - Antacids
  - Cholinergic
  - Anticholinergics
  - Fluid and electrolyte
  - Anti diarrhoeals
  - Histamines: Composition, action, dosage, route, indications, contraindications, drug interactions, side effects, adverse effects, toxicity and role of nurse

### **5: Drugs used on Respiratory Systems**

- Pharmacology of commonly used:
  - Antiasthmatics
  - Mucolytics
  - Decongestants
  - Expectorants
  - Antitussives
  - Bronchodilators
  - Broncho constrictors
  - Antihistamines Composition, action, dosage, route, indications, contraindications, drug interactions, side effects, adverse effects, toxicity and role of nurse

### **6: Drugs used on Urinary System**

- Pharmacology of commonly used :
  - Diuretics and antidiuretics
  - Urinary antiseptics
  - Cholinergic and anticholinergics
  - Acidifiers and alkalizers: Composition, action, dosage, route, indications, contraindications, drug interactions, side effects, adverse effects, toxicity and role of nurse

### **7 :Miscellaneous**

- Drugs used in de- addiction
- Drugs used in CPR and emergency

- Vitamins and minerals
- Immuno-suppressants
- Antidotes
- Antivenom
- Vaccines and sera

#### **-8: Drugs used on skin and mucous membranes**

- Topical applications for skin, eye, ear, nose and buccal cavity
- Antipruritics :Composition, action, dosage, route, indications, contraindications, drug interactions, side effects, adverse effects, toxicity and role of nurse

#### **9: Drugs acting on Nervous system**

Basic and applied pharmacology of commonly used:

- Analgesics and Anaesthetics
- Analgesics
  - Non steroidal anti inflammatory (NSAID) drugs
  - Antipyretics
  - Hipnotics and sedatives
  - Opioids
- Non-opioids
  - Tranquilizers
  - General and local anaesthetics
  - Gases
  - Oxygen
  - Nitrous Oxide
  - Carbondioxide
- Cholinergic and anticholinergics:
  - Muscle relaxants
  - ~ Major tranquilizers
  - ~ Ant-psychotics
  - ~ Antidepressants
  - ~ Anticonvulsants
  - ~ Adrenergics
  - ~ Noradrenergics
  - ~ Mood stabilizers
  - ~ Acetylcholine
  - ~ Stimulants:

Composition, action, dosage, route, indications, contraindications, drug interactions, side effects, adverse effects, toxicity and role of nurse

#### **10: Cardiovascular drugs**

- Haematinics
- Cardiotonics
- Anti anginals
- Anti-hypertensives & Vasodilators
- Anti-arrhythmics
- Plasma expanders
- Coagulants & anticoagulants
- Antiplatelets & thrombolytics
- Hypolipidemics: Composition, action, dosage, route, indications,

contraindications, drug interactions, side effects, adverse effects, toxicity and role of nurse

### **11: Drugs used for hormonal disorders and supplementation, contraception and medical termination of pregnancy**

- Insulins & Oral hypoglycemics
- Thyroid supplements and suppressants
- Steroids, Anabolics
- Uterine stimulants and relaxants
- Oral contraceptives
- Other estrogen-progestrone preparations
- Corticotrophine & Gonadotropines
- Adrenaline
- Prostaglandins
- Calcitonins
- Calcium salts
- Calcium regulators: Composition, action, dosages, route, indications, contraindications, drug interactions, side effects, adverse effects, toxicity and role of nurse

### **12: Introduction to drugs used in alternative systems of medicines**

- Ayurveda, Homeopathy, Unani and Siddha etc

## **VI PATHOLOGY**

### **1: Introduction**

- Importance of the study of pathology
- Definition of terms
- Methods and techniques
- Cellular and Tissue changes
- Infiltration and regeneration
- Inflammations and infections
- Wound healing
- Vascular changes
- Cellular growth, Neoplasms
- Normal and Cancer cell
- Benign and Malignant growths
- In situ carcinoma
- Disturbances of fluid and electrolyte imbalance

### **2: Special Pathology**

- Pathological changes in disease conditions of various systems.
- Respiratory tract
- Tuberculosis, Bronchitis, Pleural effusion and Pneumonia
- Lung abscess, Emphysema, Bronchiectasis
- Bronchial asthma, COPD & Tumors
- Cardio-vascular system
- Pericardial effusion
- Rheumatic heart disease
- Infective endocarditis, atherosclerosis
- Ischemia, infarction & aneurysm
- Gastro Intestinal Tract



- Peptic ulcer, typhoid
- Carcinoma of GI tract buccal, Esophageal,
- Gastric & intestinal
- Liver, Gall bladder & Pancreas
- Hepatitis, Chronic liver abscess, cirrhosis
- Tumours of liver, gall bladder and pancreas,
- Cholecystitis
- Kidneys & Urinary tract
- Glomerulonephritis, pyelonephritis
- Calculi, renal failure, renal carcinoma & cystitis
- \* Male genital systems
- Cryptorchidism, testicular atrophy -
- Prostatic hyperplasia, carcinoma penis & prostate
- Female genital system
- Fibroids
- Carcinoma cervix and Endometrium
- Vesicular mole, choriocarcinoma
- Ectopic gestation
- Ovarian cyst & tumour
- Cancer Breast
- Central Nervous system
- Hydrocephalus,
- Meningitis, encephalitis,
- Vascular disorders— thrombosis, embolism
- Stroke, paraplegia, quadriplegia
- Tumours, meningiomas — gliomas
- Metastatic tumour
- Skeletal system
- Bone healing, osteoporosis, osteomyelitis
- Arthritis & tumours

### **3: Clinical Pathology**

- Various blood and bone marrow tests in assessment and monitoring of disease conditions.
- Hemoglobin
- RBC, White Cell & platelet counts
- Bleeding time, clotting time and prothrombin time
- Blood group and cross matching
- Blood chemistry
- Blood culture
- Serological and immunological test
- Other blood tests
- Examination of Bone marrow
- Methods of collection of blood specimen for various clinical pathology, biochemistry, microbiology tests, inference and normal values

### **4: Examination of body cavity fluids, transudates and exudates**

- The laboratory tests used in CSF analysis
- Examination of other body cavity fluids, transudates and exudates sputum, wound discharge

- Analysis of gastric and duodenal contents
- Analysis of semen-sperm count, motility and morphology and their importance in infertility
- Methods of collection of CSF and other cavity fluids specimen for various clinical pathology, biochemistry, microbiology tests, inference and normal values

#### **Urine and faeces**

- Urine
  - Physical characteristics
  - Analysis
  - Culture and sensitivity
- Faeces
  - Characteristics
  - Stool examination: Occult blood, ova, parasite and cyst, reducing substance etc,
- Methods of collection for various tests, inference and normal values

## **VII. NUTRITION**

### **1: Introduction**

- Nutrition: history, concepts, role of nutrition in maintaining health
- Nutritional problems in India, national nutritional policy
- Factors affecting food and nutrition: socio-economic, cultural, tradition, production, system of distribution, life style and food habits etc, role of food and its medicinal value,
- Classification of foods, food standards, elements of nutrition :macro and micro, calories, BMR

### **2: Carbohydrate**

- Classification, caloric value, recommended daily allowances, dietary sources, functions, digestion, absorption and storage, metabolism of carbohydrates,
- Malnutrition: deficiencies and over consumption

### **3: Fats**

- Classification, calories value, recommended daily allowances, dietary sources, functions, digestion, absorption and storage, metabolism, malnutrition: deficiencies and over consumption.

### **4: Proteins**

- Classification, calories value, recommended daily allowances, dietary sources, functions, digestion, absorption, metabolism and storage, malnutrition: deficiencies and over consumption

### **5: Energy**

- Unit of energy- Kcal , energy requirement of different categories of people, measurements of energy, Body mass Index(BMI) and basic metabolism
- Basal Metabolic rate (BMR) - determination and factors affecting.

### **6: Vitamins**

- Classification, recommended daily allowances, dietary sources, functions, absorption, synthesis, metabolism storage and excretion, deficiencies, hyper- vitaminoses

### **7: Minerals**

- Classification, recommended daily allowances, dietary sources, functions, absorption, synthesis, metabolism storage and excretion, deficiencies, over consumption and toxicity

**Unit-8: Water & electrolytes**

- Water: daily requirement, regulation of water metabolism, distribution of body water, electrolytes: types, sources, composition of body fluids, maintenance of fluid and electrolyte balance, over hydration, dehydration and water intoxication, electrolyte imbalance.

**9: Cookery rules and preservation of nutrients**

- Principles, methods of cooking and serving, preservation of nutrients, safe food handling – toxicity, storage of food, food preservation off food adulteration act (PFA), food standards, preparation of simple beverage and different types of food

**10: Balanced diet**

- Elements, food groups, recommended daily allowance, nutritive value of foods calculation of balanced diet for different categories of people, planning menu, budgeting of food, introduction of therapeutic diets: Naturopathy- Diet

**11: Role of nurse in nutritional programme**

- National programme related to nutrition, vitamin-A deficiency programme, national iodine (IDD) programme, mid-day meal programme, midday meal programme, integrated child development scheme (ICDS), national and international agencies working towards food/nutrition, NIPCCD, CARE, FAO, NIN, CFTRI (central food technology and research institute) etc, assessment of nutritional status, nutritional education and role of nurse

**VIII. NURSING FOUNDATION-I****1: Introduction**

- Concept of health: Health illness continuum. Factors influencing health . Causes and risk factors for developing illness. Body defenses: immunity and immunization. Illness and illness Behavior: Impact of illness on patient and family. Health Care Services: Health promotion and prevention, primary Care, Diagnosis, Treatment, Rehabilitation and Continuing Care. Health care teams. Types of health care agencies: Hospital: Types, Organization and Functions, Health promotion and levels

**2: Nursing as a profession**

- Definition and characteristics of a profession, Nursing: -Definition, Concepts philosophy, objectives- Characteristics, nature and scope of nursing practice - Function of nurse , Qualities of a nurse, Categories of nursing personnel, Nursing as a profession , History of Nursing in India, Values: Definition, Types, values Clarification and values in professional Nursing , Caring and Advocacy. Ethics: Definition and Ethical Principles, Code of ethics and professional conduct

**3: Hospital admission and discharge**

- Admission to the Hospital, Unit and its preparation admission bed , - Admission procedure, Special considerations, Medico-legal issues, Role & responsibilities of the Nurse, Discharge from the hospital, Types: Planned discharge, LAMA and abscond referrals and transfers, Discharge planning, Discharge Procedures, Special considerations, Medico-legal issues, Role & responsibilities of nurse,

**4: Nursing Process**

- **Critical Thinking And Nursing Judgment , Critical Thinking:** Thinking and Learning, Competencies, Attitudes for critical thinking, levels of critical thinking in nursing, Nursing Process Overview: Application in Practice , Nursing process format INC, current format, Assessment , Collection of Data: Types, Sources, Methods, Formulating Nursing judgment: Data interpretation, Nursing diagnosis, Identification of client problem, Nursing diagnosis statement, Difference between medical and nursing diagnosis, Planning, Establishing Priorities , Establishing Goals and Expected Outcomes, Selection of interventions: Protocol and standing orders, writing the nursing care plan, Implementation, implementation the plan of care, Evaluation Outcome of care, review and Modify, Documentation and reporting

### **5: Documentation and Reporting**

- **Documentation:** Purposes of Recording and reporting, Communication within the Health care team, Types of records: Ward records, medical /nursing records, Common record - keeping forms. Computerized documentation, Guideline for reporting :Factual basis, accuracy, completeness, currentness, organization, confidentiality, Method of recording, Reporting : Change of shift reports: Transfer reports, Incident reports, Minimizing legal Liability through Effective record keeping

### **6: Vital signs**

- **Guidelines for taking vital signs.** Body temperature: Physiology Regulation, factors affecting body temperature, Assessment of body temperature sites, equipments and technique, special considerations, Temperature alterations: Hyperthermia, Heatstroke, Hypothermia, Hot and cold applications, Pulse :Physiology and regulation, Characteristics of the pulse, Factors affecting pulse , Assessment of pulse sites, location, equipments and technique, special considerations, Alteration in pulse Respiration, Physiology and regulation, mechanics of breathing, characteristics of the respiration, factors affecting respiration, Assessment of respiration: technique, special consideration, Alteration in respiration, Blood Pressure: Physiology and Regulation, Characteristics of the blood pressure, factors affecting blood pressure, Assessment of blood pressure: sites, equipments and technique, special considerations, alterations in blood pressure ,Recording of vital signs

### **7: Health Assessment**

- Purpose, process of health assessment, Health history Physical examination: methods- Inspection, palpation, percussion, Auscultation, Olfaction,preparation for examination;

### **8:Machinery, equipment and linen**

- Type; Disposable and reusable - linen, rubber goods, glass ware metal, plastics, furniture, machinery ,Introduction: indent maintenance, Inventory

### **9: Meeting needs of patient**

- Basic needs (activities of daily living) , Providing safe and clean environment:- Physical environment: Temperature, Humidity, noise, ventilation, light odor Pests control, Reduction of physical hazards: Fire, Restraints, side rails, airways, trapez etc. Role of nursing providing safe and clean environment, hygiene: Factors Influencing Hygienic practice hygienic care: care of the skin-

Bath and pressure points, feet and nail, oral cavity, Hair care, Eyes, Ears and Nose , Assessment, Principles, Types, Equipments, Procedure, Special Considerations, patient environment: Room equipments and linen, making patient beds. Types of beds and bed making, Comforts: Factors Influencing comfort, Comfort devices , Physiological needs

Sleep and Rest:, Physiology of sleep, Factors affecting sleep, Promoting rest and sleep, Sleep disorders, Nutrition: Importance, Factors affecting nutritional needs, Assessment of nutritional needs: Variables , Meeting nutritional needs: Principles, equipment, procedure and special consideration. Oral, Enteral: Naso/ Orogastric, Gastrostomy Parenteral: Urinary elimination: Review of physiology of urine elimination, Composition and characteristics of urine, Factors influencing urination, Alteration in urinary elimination, Types and collection of urine specimen: Observation, urine testing, Facilitating urine elimination: assessment, types, equipments, procedures and special considerations, Providing urinal / bedpan ,Condom drainage, Perineal care, Catheterization, Care of urinary drainage, Care of urinary diversions Bladder irrigation Bowel Elimination –

Review of Physiology of bowel elimination, Composition and characteristics of feces. Factors affecting Bowel elimination Alteration in Bowel elimination -Types and collection of specimen of feces: Observation Facilitating bowel elimination : assessment, equipments, procedures and special considerations ○Passing of flatus tube ○Enemas ○Suppository Sitz Bath ○Bowel wash ○Care of Ostomies

## **XI. PSYCHOLOGY**

### **1: Introduction**

- History and origin of science of psychology, Definition and scope of psychology, Relevance to nursing , Methods of psychology

### **2: Biology of behavior**

- Body mind relationship modulation process in health and illness Genetics and behavior: heredity and environment, Brain and behavior: Nervous system, neurons and synapse, Association cortex, right and left hemispheres, Psychology of sensation Muscular and glandular controls of behavior Nature of behavior of an organism/integrated responses

### **3: Cognitive processes**

- Attention: types, determinants, duration and degree, alterations , Perception: meaning, principles, factors affecting, errors, Learning: nature, types, learner and learning, factors influencing, laws and theories ,process, transfer, study habits, Memory: meaning, types, nature factors influencing, development theories and methods of memorizing and forgetting ,Thinking: types and levels, stages of development, relationship with language and communication Intelligence: meaning, classification, uses, theories, Aptitude: concept, types, individual differences and variability, psychometric assessment of cognitive processes . alteration cognitive processes Applications.

### **4: Motivation and emotional processes**

- Motivation: meaning, concepts, types, theories ,motives&behaviors, conflicts and frustration, conflict resolution, Emotions and stress, emotions definition Components Stages in emotions, theories, emotional adjustments, emotions in health

and illness, Stress: stressors, cycle, effect, adaptation and coping, Attitude  
Meaning nature development, Factors affecting Behavior and attitudes, Attitudinal change

- Psychometric assessment of emotions And attitudes ,
- Alterations in emotion ,
- Applications

### **: Personality**

- Definitions, topography, types, theories, Psychometric assessments of personality, Alterations in personality, Applications

### **6: Developmental psychology**

- Psychology of people at different ages from infancy to old age, Psychology of vulnerable individuals -challenged, women sick etc. Psychology of groups

### **7: Mental hygiene and mental health**

- Concepts of mental hygiene and mental health
- Characteristics of mentally healthy person
- Warning signs of poor mental health Promotive and preventive mental health-strategies and services
  - Ego defense mechanisms and implications
  - Personal and social adjustments
  - Guidance and counseling Role of nurse.

### **8: Psychological assessment and tests**

- Types development characteristics principles, uses ,interpretations and role of nurse in psychological assessment.

## **XII. NURSING FOUNDATION-II**

### **1: Meeting needs of the patient**

- Mobility and immobility -Principles of body Mechanics -Maintenance of normal Body Alignment and Mobility -Factors affecting body alignment and mobility -Hazards associated with immobility -Alteration in body -Alignment and mobility -Nursing intervention for impaired Body Alignment and mobility: assessment, types, devices used, method and special considerations, rehabilitation aspects  
Range of motion exercises Maintaining body alignment: positions  
Moving Lifting Transferring Walking Restraints  
Oxygenation -Review of Cardiovascular and respiratory Physiology Factors affecting Oxygenation -Alterations in oxygenation nursing interventions in oxygenation: assessment, types, equipment used, procedure and special considerations Maintenance of patent airway  
Oxygen administration Suction Inhalations: dry and moist Chest physiotherapy and postural drainage Care of Chest drainage Pulse oximetry CPR-Basic life support  
Fluid, Electrolyte, and Acid-Base Balances Review of physiological regulation of Fluid and Electrolyte, Acid-Base Balances Factors affecting Fluid, Electrolyte and Acid-Base Balances -Nursing interventions in Fluid, Electrolyte and Acid-Base Imbalances Assessment, types, equipment, procedures And special considerations Measuring fluid intake and output  
Correcting fluid, electrolyte imbalance: ■Replacement of fluid: Oral and Parenteral Venipuncture, regulating IV flow rates, changing IV solutions and Tubing, changing IV dressing  
■Administering blood transfusion ■Restriction of fluids
- **Psychosocial needs** Concepts of cultural diversity, stress and adaptation, self concept, sexuality, spiritual health, coping with loss, death and grieving Assessment of psychosocial needs Nursing intervention for psychosocial needs -assist with coping and adaptation creating therapeutic environment Recreational and diversional

therapies

## 2: Infection control in clinical settings

- Infection control Nature of Infection Chain of infection transmission  
Defenses against infection: natural and acquired Hospital acquired infection (nosocomial infection) ● Concept of asepsis: medical asepsis, Surgical asepsis Isolation precautions (barrier nursing): Hand washing :simple, hand antisepsis and surgical antisepsis (scrub) Isolation: source and protective Personal protecting equipments: types, uses and technique of wearing and removing Decontamination of equipment and unit Transportation of infected patients Standard safety precautions (universal precaution) Transmission based precautions ● Biomedical waste management: Importance Types of hospital waste Hazards associated with hospital waste Decontamination of hospital waste Segregation and transportation and disposal

## 3- Administration of medications

- General, Principles/considerations:  
Purposes of medication Principles: 5 rights, special considerations, prescriptions, safety in administering medications and medication errors Drug forms  
Routes of administration Storage and maintenance of drugs and Nurses  
Responsibility Broad classification of drug Therapeutic effect, side effects, toxic effects, idiosyncratic reactions, allergic reactions, drug tolerance, drug interactions  
Factors influencing drug actions, Systems of drug Measurement: metric system, apothecary system, household measurements, solutions. Converting measurements  
Units: conversion within one system, conversion between systems, dosage calculation  
Terminologies and abbreviations used in prescription of medications
- Oral drugs administration: oral, sublingual and buccal: equipment, procedure
- Parenteral General principles: Decontamination and disposal of syringes and needles  
Types of parenteral therapies Types of syringes, needles, cannula and infusion sets  
Protection from needle stick injuries: giving medication with a safety syringes  
Routes of parenteral therapies -Intradermal: purpose, site, equipment, Procedure, special consideration -subcutaneous: purpose, site equipment, Procedure, special consideration -intramuscular: purpose, site, equipment, Procedure, special consideration -intravenous: purpose, site, equipment, Procedure, special consideration -advanced techniques: epidural, intrathecal, intraosseous- intraperitoneal, intraplural, intraarterial, -Role of nurse
- Topical administration: purpose, site, equipment, Procedure, special consideration for  
Application to skin Application to mucus membrane -direct application of liquids gargle and swabbing the throat -insertion of drug into body cavity: suppository/medicated packing in rectum/vaginal -instillation: ear, eye, nasal, bladder and rectal -irrigations: eye, ear, bladder, vaginal and rectal – spraying: nose and throat
- Inhalation: nasal, oral, endotracheal/ tracheal (steam, oxygen and medications) – purposes, site, equipment, Procedure, special considerations Recording and reporting of medications administered

## 4 Meeting needs of perioperative patients

- Definition and concept of perioperative nursing Pre operative phase Preparation of patient for surgery ● Intra operative Operation theatre set up and environment Role of nurse ● Post operative phase Recovery unit Post operative unit Post operative care, Wounds: types, classification, wound healing process, factors affecting wound, complication of wound healing ● Surgical asepsis ● Care of the wound: types, equipments, procedure and special considerations □ Dressing, suture care, Care of drainage Application of bandages, binders, splints and slings Heat and cold therapy

### **5 Meeting special needs of the patient**

• Care of patients having alteration in Temperature(hyper and hypothermia) types, Assessment, Management Sensorium (unconsciousness); Assessment, Management Urinary Elimination (retention and incontinence) Assessment, Management Functioning of sensory organs (visual and hearing impairment) Assessment of self care ability Communication methods and special considerations Mobility(physically challenged, cast),assessment of self care ability: communication methods and special considerations Mental state(mentally challenged),assessment of self care ability: Communication methods and special considerations Respiration (distress):types, assessment Management; Comfort-(pain)-Nature, types, factors influencing pain, Coping, Assessment, Management; ●Treatments related to gastrointestinal system: nasogastric suction, gastric irrigation, gastric analysis

### **6- Care of terminally ill patient**

Concepts of loss, Grief, Grieving process Signs of clinical death Care of dying patient: special considerations – Advance directives: euthanasia, will, dying declaration, organ donation etc.Medico-legal issues Care of dead body: equipment, procedure and care of unit Autopsy Embalming.

### **7 -Professional nursing concepts and practices**

• Conceptual and theoretical models of nursing practice: Introduction to models-holistic model health belief model, health promotion model etc ●Introduction to theories in nursing: Peplau's, Henderson's, Orem's, Neuman's, Roger's and Roy's ●Linking theories with nursing process

## **XIII. SOCIOLOGY**

### **Introduction**

- Definition of Sociology
- Nature and Scope of the discipline
- Importance and application of Sociology in Nursing

### **Individual & Society**

- Society and Community
- Nature of Society
- Difference between Society and Community
- Process of Socialization and Individualization
- Personal disorganization

### **Culture**

- Nature of culture
- Evolution of culture
- Diversity and uniformity of culture
- Trans cultural society
- Influence on health and disease

### **Social groups and Processes**

- The meaning and classification of groups
- Primary & Secondary Group
- In-group V/s. out-group, Class, Tribe, Caste
- Economic, Political, Religious groups, Mob, Crowd, Public and Audience

Interaction & Social Processes.

- Co-operation, Competition, Conflict
- Accommodation, Assimilation & Isolation

### **Population**

- Society and population



- Population distribution in India-Demographic characteristics
- Malthusian theory of Populations
- Population explosion in India and its impact on health status
- Family welfare programs

### **Family and marriage**

- Family Functions
- Types-Joint, Nuclear, Blended and Extended family:
- Characteristics
- The Modern Family-Changes, Problems-Dowry etc.,
- Welfare Services.
- Changes & Legislations on family and marriage in
- India-marriage acts
- Marriage: Forms and functions of marriage
- Marriage and family problems in India
- Family, marriage and their influence on health and health practices

### **Social Stratification**

- Meaning & types of Social stratification
- The Indian Caste System- Origin & Features
- Features of Caste in India Today
- Social Class System and Status Social Mobility-  
Meaning & Types
- Races as a biological concept, criteria of racial classification
- Salient features of Primary races-Racism
- Influence of Class, Caste and Race on health and health practices

### **Types of Communication in India**

#### **(Rural, Urban and Regional)**

- Features of villages community & Characteristics of Indian Village Panchayat system, social dynamics
- Community Development project & Planning
- Changes in Indian Rural Life
- Availability of health facilities in rural and its impact on health and health practices
- Urban-community-features
- The growth of cities: Urbanization and its impact on health and health practices
- Major Urban problems – Urban Slums
- Region; Problems and impact on Health

### **Social Change**

- Nature and process of Social Change
- Factors influencing Social change : Cultural change, Cultural lag
- Introduction to Theories of social change : Linear, Cyclical, Marxian, Functional Role of nurse – Change agents

### **Social organization and social system**

- Social organization : elements, types
- Democratic and authoritarian modes of participation,
- Voluntary associations
- Social System : Definition and Types of social system

- Role and Status as structural elements of social system
- Inter – relationship of institutions

### **Social Problems**

- Social disorganization
- Control & Planning : poverty, housing, illiteracy, food supplies, prostitution, rights of women & children, vulnerable groups:
- Elderly, handicapped, minority groups and other marginalized groups, child labour, child abuse, delinquency and crime, substance abuse, HIV / AIDS.
- Social Welfare programs in India
- Role of Nurse

## **XIV. COMMUNITY HEALTH NURSING**

### **Introduction**

- Community health nursing
- Definition, concepts, and dimensions of health
- Promotion of health
- Maintenance of health

### **Determinants Of Health**

- Eugenics
- Environment:
  - Physical: Air, Light, Ventilation, Water, Housing, Sanitation, and Disposal of waste, Disposal of dead bodies, Forestation, Noise, and Climate Communication: Infrastructure facilities and Linkages
  - Acts regulating the environment:
    - National Pollution Control Board
    - Bacterial and Viral: Agents, host carriers and immunity
    - Arthropods and Rodents
    - Food hygiene: Production, Preservation, Purchase, Preparation, Consumption
      - Acts regulating food hygiene — Prevention of food adulteration Act, Drugs and cosmetic Act
  - Socio-cultural
    - Customs, taboos
    - Marriage system
    - Family structure
    - Status of special groups: Females, Children, Elderly, Challenged groups and Sick persons
  - Life Style
    - Hygiene
      - Physical activity
        - Recreation and sleep
        - Sexual life
        - Spiritual life philosophy
        - Self reliance
        - Dietary pattern
        - Education•
        - Occupation

- Financial Management

- Income
- Budget
- Purchasing power
- Security

### **Epidemiology**

- Definition, concept, aims, scope, uses and terminology used in epidemiology

- Dynamics of disease Transmission: Epidemiological triad
- Morbidity and mortality: Measurements
- Levels of prevention
- Methods of epidemiology of
  - Descriptive
  - Analytical: Epidemic investigation
  - Experimental

### **Epidemiology And Nursing Management Of Common Communicable Diseases**

- Respiratory infections

- Small pox
- Chicken pox
- Measles
- Influenza
- Rubella
- ARI's & Pneumonia
- Mumps
- Diphtheria
- Whooping cough
- Meningococcal meningitis
- Tuberculosis
- SARS

- Intestinal Infections

- Poliomyelitis
- Viral Hepatitis
- Diarrhoeal diseases
- Typhoid fever
- Food poisoning
- Amoebiasis
- Hook worm infection
- Ascariasis
- Dracunculiasis

- Arthropod infections

- Dengue
- Malaria
- Filariasis
- Zoonoses

- Viral
- Rabies
- Yellow fever
- Japanese encephalitis
- Kyasnur Forrest Disease

- Bacterial
  - Brucellosis
  - Plagues
  - Human Salmonellosis
  - Anthrax
  - Leptospirosis
- Rickettsial diseases
  - Rickettsial Zoonoses
  - Scrub typhus
  - Murine typhus
  - Tick typhus
  - Q fever
- Parasitic zoonoses
  - Taeniasis
  - Tetanus
  - Leprosy
- STD & RTI

Yaws

- HIV / AIDS, Any other

### **Epidemiology and nursing management of common Non- communicable diseases**

- Malnutrition: Under nutrition, over nutrition, nutritional deficiencies
- Anaemia
- Hypertension
- Stroke
- Rheumatic Heart Disease
- Coronary Heart Disease
- Cancer
- Diabetes mellitus
- Blindness
- Accidents
- Mental illness
- Obesity
- Iodine deficiency
- Fluorosis
- Epilepsy

### **Demography**

- Definition, concepts and scope
- Methods of collection, analysis and interpretation of demographic data
- Demographic rates and ratios

### **Population and its control**

- Population explosion and its impact on social, economic development of individual, society and country
- Population control:
  - Overall development, Women empowerment, Social, Economic and Educational development
- Limiting family size;
  - Promotion of small family norm
  - Methods: spacing (Natural, Biological, Chemical,

- Mechanical methods, etc.,)  
 - Terminal: Surgical methods  
 - Emergency contraception

## **XV. GENETICS**

### **Introduction**

- Practical application of genetics in Nursing
- Impact of genetic condition on families
- Review of cellular division mitosis and meiosis.
- Characteristics and structure of genes
- Chromosomes — sex determination
- Chromosomal aberrations— Patterns of inheritance:
  - Mendelian theory of inheritance
  - Multiple allots and blood groups
  - Sex linked inheritance
  - Mechanism of inheritance
  - Errors in transmission (Mutation)

### **Maternal, prenatal and genetic influences on development of defects and diseases**

- Conditions affecting the mother : genetic and infections
- Consanguinity atrophy
- Prenatal nutrition and food allergies.
- Maternal age
- Maternal drug therapy
- Prenatal testing and diagnosis
- Effect of Radiation, drugs and chemicals
- Infertility
- Spontaneous abortion
- Neural Tube Defects and the role of folic acid in lowering the risks
- Down syndrome (Trisomy 21)

### **Genetic testing in the neonates and children**

- Screening for
  - Congenital abnormalities
  - Developmental delay
  - Dysmorphism

### **Genetic conditions of adolescents and adults**

- Cancer genetics Familial Cancer
- Inborn errors of metabolism
- Blood group alleles and haematological disorder
- Genetic haemochromatosis
- Huntington's disease
- Mental illness

### **Services related to Genetics**

- Genetic testing
- Human genome project
- Gene therapy
- The Eugenics movement
- Genetic Counseling Legal and Ethical issues

## **XVI. MEDICAL SURGICAL NURSING (Adult including Geriatrics)- I**

### **Introduction**

- Introduction to medical surgical nursing-Evolution and trends of medical and surgical nursing
- Review of Concepts of Health and illness Disease-concepts, causations, classification- International Classification Diseases(ICD -10 or later version), Acute illness chronic stages if illness
- Review of concepts of comprehensive nursing care in medical surgical conditions based on nursing process • Role of Nurse, patient and family in care of adult patient • Role and responsibilities of a nurse in medical surgical settings:
  - Outpatient department.
  - In-patient unit.
  - Intensive care unit
  - Home and Community setting
- Introduction to Medical Surgical asepsis
  - Inflammation and Infection Immunity
  - Wound healing
- Care of Surgical Patient
  - Pre-operative
  - Intra operative
  - Post Operative

### **Common signs and symptoms and management**

- Fluid and electrolyte imbalance • Vomiting
- Dyspnea and cough, respiratory obstruction
- Fever
- Shock
- Unconsciousness, syncope
- Pain
- Incontinence
- Edema
- Age related problems-geriatric

### **Nursing management of patients (adults including elderly) with respiratory problems**

- Review of anatomy and physiology of respiratory system,
- Nursing Assessment—History and Physiology assessment
- Etiology, Pathophysiology,
- Clinical manifestations, diagnosis, treatment modalities and medical, surgical, dietetics & nursing management of adult including elderly with—
  - Upper Respiratory tract infections.
  - Bronchitis
  - Asthma
  - Emphysema
  - Empyema
  - Atelectasis
  - Chronic obstructive -
  - Pulmonary Diseases(COPD)
  - Bronchiectasis
  - Pneumonia -

- Pulmonary tuberculosis
- Lung abscess
- Pleural effusion
- Cysts and Tumours
- Chest injuries
- Respiratory arrest and insufficiency
- Pulmonary embolism special therapies, alternative therapies

Nursing procedures: Drugs used in treatment of respiratory disorders

### **Nursing management of patients (adults including elderly) with disorders of digestive system**

- Review of anatomy and physiology of digestive system,
- Nursing Assessment—History and Physical assessment
- Etiology, Pathophysiology,
- Clinical manifestations, diagnosis, treatment modalities and medical, surgical, dietetics & nursing management
- Disorders of
  - Oral cavity- lips, gums, tongue, salivary glands and teeth
  - Oesophagus- inflammation, stricture, obstruction, bleeding and tumours
  - Stomach and duodenum hiatus hernia, gastritis, peptic and duodenal ulcer, bleeding, tumours, pyloric stenosis
  - Small intestinal disorders inflammation and infection, enteritis, malabsorption, obstruction, tumour and perforation
  - Large intestinal disorders- Colitis, inflammation and infection, obstruction and tumour and lump
  - Hernias
  - Appendix-inflammation, mass, abscess, rupture
  - Anal & Rectum; hemorrhoids, fissures, Fistulas
- Peritonitis/acute abdomen
  - Pancreas; inflammation, cyst, abscess and tumours
  - Liver; inflammation, cyst, abscess, cirrhosis, portal hypertension, hepatic failure, tumours
  - Gall Bladder; inflammation, obstruction, stones and tumours

### **Nursing management of patients (adults including elderly) with blood and cardio vascular problems**

- Review of anatomy and physiology of blood and cardio vascular system
- Nursing Assessment-History and Physical assessment
- Etiology, Pathophysiology, clinical manifestations, diagnosis, treatment modalities and medical, surgical, dietetics & nursing management of—
- Vascular system
  - Hypertension, Hypotension
  - Artherosclerosis
  - Raynaud's disease
  - Aneurism and Perpherial vascular disorders

## Heart

- Coronary artery diseases
- Ischemic Heart Disease
- Ischemic Heart Disease
- Coronary atherosclerosis
- Angina pectoris

## Myocardial infarction

- Valvular disorders of the heart
- Congenital and acquired
- Rheumatic Heart diseases
- Endocarditis, Pericarditis Myocarditis
- Cardio Myopathies
- Cardiac dysrhythmias, Heart Block
- Congestive cardiac failure
- Cor-pulmonale, Pulmonary edema, cardiogenic shock, cardiac tamponade
- Cardiac emergencies and arrest
- Cardio Pulmonary Resuscitation (CPR)
- Blood
- Anaemias
- Polycythemis
- Bleeding disorders; clotting factor defects and platelets defects
- Thalassemia
- Leukaemias
- Leukopenias and agranulocytosis
- Lymphomas
- Myelomas
- Special therapies
- Blood transfusion, safety checks, procedure and requirements, management of adverse transfusion reaction, records for blood transfusion.
- Management and counseling of blood donors, phlebotomy procedure, and post donation management.
- Blood bank functioning and hospital transfusion committee. Bio-safety and waste management in relation to blood Transfusion
- Role of a nurse in Organ donation, retrieval and banking

## **Nursing management of patients (adults including elderly) with genito-urinary problems**

- Review of anatomy and physiology of genitor-urinary system
- Nursing Assessment— History and Physical assessment
- Etiology, Pathophysiology, clinical manifestations, diagnosis, treatment modalities and medical, surgical, dietetics & Nursing management of
- Nephritis
- Nephrotic syndrome
- Nephrosis
- Renal calculus
- Tumours



- Acute renal failure
- Chronic renal failure
- End stage renal transplant
- Congenital disorders, urinary bladder and urethra inflammation, infection, stricture, obstruction, tumour, prostrate
- Special therapies, alternative therapies

### **Nursing management of patients (adults including elderly) reproductive system**

- Review of anatomy and physiology of male reproductive system.
- Nursing Assessment— History and Physical assessment
- Etiology, Pathophysiology, clinical manifestations, diagnosis, treatment modalities and medical, surgical, dietetics & nursing management of disorders of male reproductive system
- Congenital malformation; cryptorchidism
- Hypospadiasis, Epispadiasis
- Infections
- Testis and adjacent structures
- Penis
- Prostate: inflammation, infection, hypertrophy, tumour
- Sexual Dysfunction
- Infertility
- Contraception
- Breast; gynecomastia, tumour
- Climacteric changes special therapies, alternative therapies

### **Nursing management of patients (adults including elderly) with disorders of endocrine system**

- Review of anatomy and physiology endocrine system.
- Nursing Assessment — History and Physical assessment
- Etiology, Pathophysiology, clinical manifestations, diagnosis, treatment modalities and medical, surgical, dietetics & nursing management of disorders of Thyroid and Parathyroid

- Diabetes mellitus  
95

- Diabetes insipidus
- Adrenal tumour
- Pituitary disorders, special therapies, alternative therapies

### **Nursing management of patients (adults including elderly) with disorders of Integumentary system**

- Review of anatomy and physiology of skin and its appendages.
  - Nursing Assessment— History and Physical assessment
  - Etiology, Pathophysiology, clinical manifestations, diagnosis, treatment modalities and medical, surgical, dietetics & nursing management of disorders of skin and its appendages.
  - Lesions and abrasions
  - Infection and infestations; Dermatitis
  - Dermatoses; infectious and Non infectious
- “inflammatory dermatoses”

- Acne Vulgaris
- Allergies and Eczema
- Psoriasis
- Malignant melanoma
- Alopecia

### **Nursing management of patients (adults including elderly) with Musculoskeletal problems**

- Review of anatomy and physiology of musculoskeletal system.
- Nursing Assessment— History and Physical assessment
- Etiology, Pathophysiology, clinical manifestations, diagnosis, treatment modalities and medical, surgical, dietetics & nursing management of—
- Disorders of:
  - Muscles, Ligaments and joints-inflammation, infection, trauma
  - Bones-inflammation, infection, dislocation, fracture, tumour and trauma
  - Osteomalacia and osteoporosis
  - Arthritis
  - Congenital deformities
  - Spinal column-defects and deformities, Tumor, Prolapsed inter vertebral disc, Pott's spine
  - Paget's disease
- Amputation
- Prostheses
- Transplant & replacement surgeries
- Rehabilitation, Special therapies, alternative therapies

### **Nursing management of patients (adults including elderly) with Immunological problems**

- Review of Immune system. Nursing Assessment— History and Physical assessment
- Etiology, Pathophysiology, clinical manifestations, diagnosis, treatment modalities and medical, surgical, dietetics & nursing management of—
- Immunodeficiency disorder
- Primary immuno deficiency
- Phagocytic dysfunction
- B-cell and T-cell deficiencies
- Secondary immunodeficiencies
- Acquired immunodeficiencies and Acquired immunodeficiency Syndrome (AIDS)
  - Incidence of HIV & AIDS
  - Transmission-Prevention of Transmission 0
  - Standard safety precautions
  - Role of Nurse; Counseling
  - Health education and home care consideration
  - National AIDS Control Programme-NACO, various national and international agencies
  - Infection control program
  - Rehabilitation Special therapies, alternative therapies

### **Nursing management of patients (adults including elderly) with Musculoskeletal problems**

- Review of anatomy and physiology of musculoskeletal system.
- Nursing Assessment — History and Physical assessment Epidemiology, infectious process, clinical manifestations, diagnosis, treatment, prevention and dietics. Control and eradication of common Communicable Diseases
  - Tuberculosis
  - Diarrhoeal diseases
  - Hepatitis A-B
  - Herpes
  - Chickenpox
  - Smallpox
  - Typhoid
  - Meningitis
  - Gas gangrene
  - Leprosy'
  - Dengue
  - Plague
  - Malaria
  - Diphtheria
  - Pertussis
  - Poliomyelitis
  - Measles
  - Mumps
  - Influenza
  - Tetanus
  - Yellow fever
  - Filariasis
  - HIV, AIDS
- Reproductive Tract Infections
- Special Infection control measures: Notification, Isolation, Quarantine, Immunization, Infectious Diseases Hospitals

### **Pen Operative nursing**

- Organisation and Physical set up of the Operation Theatre (OT):
  - Classifications
  - O. T. DESIGN
  - Staffing
  - Members of the OT team
  - Duties and responsibilities of nurse in O.T.
  - Principles of Health and operating room attire.
  - Instruments,
  - Sutures and suture materials
  - Equipments
  - O.T. tables and sets for common surgical procedures
  - Positions and draping for common surgical procedures
  - Scrubbing procedures
  - Gowning and gloving
  - Preparation of O.T. Sets
  - Monitoring the patient during surgical procedures

- Maintenance of therapeutic environment in O.T.
- Standard Safety measures
  - Infection control; fumigation, disinfection and sterilisation
  - Biomedical waste management
  - Prevention of accidents and hazards in O.T.
- Anaesthesia
  - Types
  - Methods of administration
  - Equipments
  - Drugs
- Cardio Pulmonary Resuscitation (CPR)
- Pain management techniques
- Legal Aspects

### **XVII. MEDICAL SURGICAL NURSING (Adult including Geriatrics)- II**

#### **Nursing management of patient with disorders of Ear, Nose and Throat**

- Review of anatomy and physiology of the Ear Nose and Throat.
- Nursing Assessment – History and Physical assessment.
- Etiology, Pathophysiology, clinical manifestations, diagnostic treatment modalities & surgical nursing management of Ear Nose and Throat disorders:
  - External ear: deformities otalgia, foreign bodies, and tumors.
  - Middle Ear-Impacted wax, Tympanic membrane perforation, otitis media, otosclerosis, mastoiditis, tumors.
  - Inner ear-Meniere's Disease, labyrinthitis, ototoxicity, tumors
  - Upper airway infections- common cold, sinusitis, ethinitis, rhinitis, pharyngitis, tonsillitis and adenoiditis, peritonsillar abscess, laryngitis
  - Upper respiratory airway-epistaxis, Nasal obstruction, laryngeal obstruction, cancer of the larynx
  - Cancer of the Oral cavity
  - Speech defects and therapy
  - Deafness
  - Prevention, control and rehabilitation
  - Hearing Aids, implanted hearing devices
  - Special therapies
  - Nursing procedures
  - Drugs used in treatment of disorders of Ear Nose and Throat
  - Role of nurse communicating with hearing impaired and muteness.

#### **Nursing management of patient with disorders of Eye, Nose and Throat**

- Review of anatomy and physiology of the Eye.
- Nursing Assessment – History and Physical assessment.
- Etiology, Pathophysiology, clinical manifestations, diagnostic treatment modalities & surgical nursing management of Eye disorders:
  - Refractive errors o Eyelids-infection, tumours and deformities
  - Conjunctiva-inflammation and infection, bleeding
  - Cornea-inflammation and infection
  - Lens-Cataracts
  - Glaucoma

- Disorder of the uveal tract,
- Ocular tumours
- Disorders of posterior chamber and retina: Retinal and vitreous problems.
- Retinal detachment
- Ocular emergencies and their prevention
- Blindness
- National blindness control program
- Eye Banking Eye prostheses and Rehabilitation
- Role of a nurse-Communication with visually impaired patient, Eye camps
- Special therapies
- Nursing procedures
- Drugs used in treatment of disorders of eye

### **Nursing management of patient with neurological disorders**

- Review of anatomy and physiology of the neurological system
- Nursing Assessment-History and Physical and neurological
- Etiology, pathophysiology, clinical manifestations, diagnosis, treatment modalities and medical & surgical nursing management of neurological disorders:
- Congenital malformation
- Headache
- Spinal Injuries:
- Hemiplegia
- Quadraplegia
- Spinal cord compression/herniation of intervertebral disc
- Tumors of the brain & spinal cord
- Intra cranial and cerebral aneurysms
- Infections:
- Meningitis, Encephalitis, Brain abscess, neurocysticercosis.
- Movement disorders V
- Chorea
- Seizures
- Epilepsies
- Cerebro Vascular Accident (CVA)
- Cranial, Spinal Neuropathies Bell's palsy, trigeminal neuralgia
- Peripheral Neuropathies; Guillain-Barré's Syndrome
- Myasthenia gravis
- Content Multiple sclerosis
- Degenerative disease
- Delirium
- Dementia
- Alzheimer's disease
- Parkinson's disease
- Management of unconscious patients and patients with stroke
- Role of the nurse in communicating with patient having neurological deficit
- Rehabilitation of patients with neurological deficit
- Role of nurse in long stay facility (institutions) and at home

### **Nursing management of patient with disorders of female reproductive system**

- Review of anatomy and physiology of the female reproductive system
- Nursing Assessment-History and Physical assessment.
- Breast Self Examination
- Etiology, pathophysiology, clinical manifestations, diagnosis, treatment modalities and medical & surgical nursing management of disorders of female reproductive system
- Congenital abnormalities of female reproductive system
- Sexuality and Reproductive Health
- Sexual Health Assessment
- Menstrual Disorders; Dysmenorrhea, Premenstrual Syndrome
- Abnormal Uterine Bleeding; Menorrhagia, Metrorrhagia

#### **Pelvic Inflammatory Disease**

- Ovarian and fallopian tube disorders; infections, cysts, tumours
- Uterine and cervical disorders, Endometriosis, polyps, Fibroids, Cervical and uterine tumours, Uterine displacement, Cystocele / Urethrocele / Rectocele
- Vaginal disorders; Infections, cysts, tumours
- Diseases of breasts; Deformities, Infections, Cysts and Tumours
- Menopause and Hormonal Replacement Therapy

#### **Infertility**

- Contraception; Types Methods, Risk and effectiveness
- \* Spacing Methods
- \* Barrier methods, Intra Uterine Devices, Hormonal,
- \* Post Conceptional Methods, etc
- \* Terminal methods
- Sterilization
- Emergency Contraception methods
- Abortion— Natural, Medical and surgical abortion— MTP
  - Act
- Toxic Shock Syndrome
- Injuries and Trauma; Sexual violence
- Special therapies
- Nursing procedures
- Drugs used in treatment of gynecological disorders
- National family welfare programme

### **Nursing management of patient with Burs, reconstructive and cosmetic surgery**

- Review of anatomy and physiology of skin and connective tissues and various deformities
- Nursing Assessment-History and Physical assessment and Assessment of burns and fluid and electrolyte loss.
- Etiology, Classification, pathophysiology, clinical manifestations, diagnosis, treatment modalities and medical & surgical
- Nursing management of Burns and Re-constructive and Cosmetic surgery;
- Types of Re-constructive and Cosmetic surgery; for burns, congenital deformities, injuries and cosmetic purposes
- Role of Nurse
- Legal aspects

- Rehabilitation
- Special therapies o Psycho social aspects
- Nursing procedures Drugs used in treatment of Burns, reconstructive and cosmetic surgery

### **Nursing management of patient with oncological conditions**

- Structure & characteristics of normal & cancer cells
- Nursing Assessment-History and Physical assessment
- Prevention, Screening, Early detection, Warning signs of cancer
- Epidemiology, Etiology, Classification, Path physiology, Staging, clinical manifestations, diagnosis, treatment of oncological conditions
- Common malignancies of various body systems; Oral, larynx, lung, Stomach and Colon, Liver, Leukemias and lymphomas, Breast, cervix, Ovary, Uterus, Sarcoma, Brain, Renal, Bladder, Prostate etc
- Oncological emergencies
- Modalities of treatment
  - \* Immunotherapy
  - \* Chemotherapy
  - \* Radiotherapy
  - \* Surgical Interventions
  - \* Stem cell and Bone marrow transplants
  - \* Gene therapy
  - \*Other forms of treatment
- Psycho social aspects of cancer
- Rehabilitation
- Palliative care; Symptom and Pain management, Nutritional support
- Home care
- Hospice care
- Stomal Therapy
- Special therapies - Psycho social aspects
- Nursing procedures

### **Nursing management of patients in EMERGENCY & DISASTER situations**

#### **Disaster Nursing:**

- Concepts and principles of Disaster Nursing
- Causes and Types of Disaster:
  - Natural and Man made
  - Earthquakes, Floods, Epidemics, Cyclones
  - Fire, Explosion, Accidents
  - Violence, Terrorism, Bio chemical, War
- Policies related to emergency/disaster management: International, National, State and Institutional
- Disaster preparedness
- Team, Guidelines, Protocols, Equipments, Resources
- Coordination and involvement of Community, various Government departments, Non Govt. organizations and International Agencies
- Role of nurse : working
- Legal Aspects of Disaster Nursing
- Impact of Health after effects: Post traumatic stress disaster
- Rehabilitation: Physical, Psycho social, Financial, Relocation

### **Emergency Nursing**

- Concept, priorities, principles and scope of emergency nursing
- Organization of emergency services: physical set up, staffing, equipment and supplies, protocols, concepts of triage and role of triage nurse
- Co ordination and involvement of different departments and facilities
- Nursing assessment - History and Physical assessment
- Etiology, Patho physiology, Clinical manifestations, Diagnosis,
- Treatment modalities and medical surgical nursing management of patient with medical surgical emergency
- Principles of emergency management
- Common emergencies
- Respiratory emergencies
- Cardiac emergencies
- Shock and Hemorrhage
- Pain
- Poly trauma, road accidents, crush injuries, wound
- Seizures
- Thermal Emergencies: Heat stroke & cold injuries
- Pediatric emergencies
- Psychiatric emergencies
- Obstetrical emergencies
- Violence, Abuse, Sexual assault
- Cardio pulmonary resuscitation
- Crisis intervention
- Role of nurse: Communication and Inter Personal Relations
- Medico- legal Aspects

### **Nursing care of the elderly**

- Nursing assessment—history and physical assessment
- Aging;
- Demography; Myths and realities
- Concepts and theories of aging
- Cognitive aspects of aging
- Normal biological aging
- Age related body systems changes
- Psysocial aspects of aging
- medications and elderly
- Stress and coping in older adults
- Common health problems and nursing management;
- Cardiovascular, respiratory, Musculoskeletal,
- Endocrine, genitor-urinary, gastrointestinal
- Neurological, skin and other sensory organs
- Psychosocial and sexual
- Abuse of elderly
- Role of nurse for care of elderly: ambulation
- Nutritional, communicational, psychosocial, and spiritual
- Role of nurse for caregivers of elderly
- Role of family and formal and non-formal care givers



- use of aids and prosthesis (hearing aids, dentures)
- legal and ethical issues Provisions and programmes for elderly; privileges, community programmes and health services;
- home and institutional care

### **Nursing management of patient in critical care units**

- Nursing assessment-History and physical assessment
- Classification
- Principles of critical care nursing
- Organization; Physical setup, policies, Staffing norms,
- Protocols, equipment and supplies
- Special equipments; ventilators, cardiac monitors, defibrillators,
- Resuscitation equipments
- Infection control protocols
- Nursing management of critically patients;
- Monitoring of critically ill patient
- CPR-Advance cardiac Life support
- Treatments and procedures
- Transitional care
- Ethical and legal Aspects
- Communication with patient and family
- Intensive care records
- Crisis Intervention
- Death and Dying—coping with
- Drugs used in critical care unit

### **Nursing management of patients' adults including elderly with occupational and Industrial disorders.**

- Nursing assessment - History and physical assessment
- Etiology, pathophysiology ,clinical manifestations ,diagnosis ,treatment modalities and medical & surgical nursing management of occupational and industrial health disorders
- Role of nurse
- Special therapies, alternative therapies,
- Nursing procedures
- Drug used in treatment of occupational and industrial disorders

## **XVIII. COMMUNITY HEALTH NURSING- II**

### **Definition, concept & scope of community Health and Community Health Nursing**

- Historical development of
  - Community health
  - Community health Nursing
  - Pre - independence
  - Post-independence

### **Health planning and policies and problems**

- National health planning in India — Five Year Plans
- Various committees and commissions on health and family welfare  
Central council for health and family welfare (CCH and FW)  
National health policies (1983, 2002, 2018)

National population policy

Health problems in India

### **Delivery of community health services**

Planning, budgeting and material management of SCs, PHC and, CHC

Rural: Organization, staffing and functions of rural health services provided by government at:

Village Sub centre

Primary health centre

Community health center / sub divisional

Hospitals

District

State

Centre

Urban: Organization, staffing and functions of urban health services provided by government at:

Slums Dispensaries

Maternal and child health centers

Special Clinics

Hospitals

Corporation / Municipality / Board

### **Components of health services**

- Environmental sanitation
- Health education
- Vital statistics
- M.C.H - antenatal, natal, postnatal MTP Act, female foeticide act,
- child adoption act
- Family Welfare
- National health programmes
- School health services
- Occupational health
- Defence services
- Systems of Medicine and health care
- Allopathy
- Indian System of Medicine and Homeopathy
- Alternative health care systems like yoga, meditation, social and spiritual healing etc.
- Referral system

### **Community health nursing approaches, concepts and roles and responsibilities of nursing personnel.**

- Approaches
  - Nursing theories and Nursing process
  - Epidemiological approach
  - Problem solving approach
  - Evidence based approach
  - Empowering people to care for themselves
- Concepts of Primary Health Care:
  - Equitable distribution
  - Community participation

- Focus on prevention
- Use of appropriate technology
- Multi-sectoral approach
- Roles and responsibilities of Community health nursing personnel in
  - Family health services
  - Information Education
  - Communication (IEC)
  - Management information (MIS):

#### Maintenance of Records & Reports

- Training and supervision of various categories of health workers
- National Health Programmes
- Environmental sanitation
- Maternal and Child health and Family welfare
- Treatment of minor ailments
- School Health Services
- Occupational Health
- Organization of clinics, camps: Types, Preparation, Planning, conduct and evaluation
- Waste management in the center, clinics etc.
- Home visit: Concept, Principles, Techniques: Bag technique home visit

- Qualities of Community Health Nurse with nursing personnel
- Job description of Community health nursing personnel

Assisting individuals and groups to promote and maintain their health.

Empowerment for self care of individual, families and groups in-Assessment of self and family

#### **Monitoring growth and development**

- Mile stones
- Weight measurement
- Social development
- Temperature and Blood pressure monitoring
- Menstrual cycle
- Breast self examination and testicles
- Warning signs of various diseases
- Tests Urine for sugar and albumin, blood sugar
- Seek health services for
- Routine checkup
- Immunization
- Counseling
- Diagnosis
- Treatment
- Follow up

#### C. Maintenance of Health records for self and family

Continue medical care and follow up in community for various diseases and disabilities

Carryout therapeutic procedures as prescribed / required for self and family

#### **Waste Management**

- Collection and disposal of waste at home and community

#### **Sensitize and handle social issues affecting health and development for self and family**

- Women Empowerment
- Women and child abuse
- Abuse of elders
- Female Foeticide
- Commercial sex workers
- Food adulteration
- Substance abuse

#### **Utilize community resources for and family**

- Trauma services
- Old age homes
- Orphanage
- Homes for physically and mentally challenged individuals

#### **National health and family welfare programmes and the role of a nurse.**

- 1) National ART Programme
- 2) Revised National Tuberculosis Control Programme (RNTCP)
- 3) National Anti-Malaria Programme
- 4) National Filaria control programme
- 5) National Guinea worm eradication programme
- 6) National Leprosy eradication programme
- 7) National AIDS control programme
- 8) STD control programme
- 9) National programme for control of blindness
- 10) Iodine deficiency disorder programme
- 11) Expanded programme on immunization
- 12) National Family Welfare Programme-RCH Programme historical development, organization, administration, Research, constraints
- 13) National water supply and sanitation programme
- 14) Minimum Need programme
- 15) National Diabetics control programme
- 16) Polio Eradication Pulse Polio Programme
- 17) National cancer control Programme
- 18) Yaws Eradication Programme
- 19) National Nutritional Anemia prophylaxis programme
- 20) 20 point programme
- 21) ICDS programme
- 22) Mid-day meal applied nutritional programme
- 23) National mental health programme Health ESI CGHS Health insurance

#### **Health Agencies**

International — WHO, UNFPA, UNDP, World Bank, FAO, UNICEF, DANIDA, European Commission (EC). Red cross, USAID, UNESCO, Colombo Plan, ILO, CARE etc.  
 National - Indian Red Cross, Indian Council for child welfare, Family Planning Association of India (FPAI), Tuberculosis Association of India, Hindu KushtNivaran Sangh, Central Social Welfare Board, All India Women's conference, Blind Association of India etc.

### **XIX. MENTAL HEALTH NURSING**

#### **Introduction**

- Perspective of Mental Health and Mental Health Nursing: evolution of mental health services, treatments and nursing practices.

- Prevalence and incidence of mental health problems and disorders.
- Mental Health Act
- National Mental Health Policy vis a vis National Health Policy
- Mental health team
- Nature and scope of mental health nursing
- Role and functions of mental health nurse in various settings and factors affecting.
- Concepts of normal and abnormal behaviour

### **Principles and Concepts of Mental Health Nursing**

- Definition: Mental health nursing and terminology used
- Classification of mental disorders : ICD
- Review of personality development, defense mechanisms
- Maladaptive behaviour of individuals and groups: stress, crisis and disasters
- Etiology: Bio-psycho-social factors
- Psychopathology of mental disorders: Review of structure and functions of brain, limbic system and abnormal Neuro transmission
- Principles of Mental health nursing practice
- Conceptual models and the role of nurse:
  - Existential Model
  - Psycho-analytical models
  - Behavioural models
  - Inter personal model

### **Assessment of mental health status**

- History taking
- Mental status examination
- Mini mental status examination
- Neurological examination review
- Investigations: Related Blood chemistry, EEG, CT & MRI
- Psychological tests Role and responsibilities of nurse

### **Therapeutic communication and nurse-patient relationship**

Therapeutic communication:

- Types, Techniques, Characteristics
- Types of relationship,
- Ethics and responsibilities
- Elements of nurse patient contract
- Review of technique of IPR-Johari Window
- Goals, phases, tasks, therapeutic techniques
- Therapeutic impasse and its intervention

### **Treatment modalities and therapies used in mental disorders**

Psycho pharmacology

Psychological therapies

Therapeutic community, psycho analytical, cognitive and supportive, family group, group behavioural, play, psycho-drama, music, dance, recreational and light therapy Relaxation therapies: Yoga, Meditation, Bio-feedback Alternative systems of medicine Occupational therapy

- Physical therapy: electro convulsive therapy
- Geriatric considerations Role of nurse in above therapies

Nursing management of patients with Schizophrenia, and other psychotic disorders

- Classification : ICD
- Etiology, psycho-pathology, types, clinical manifestations, diagnosis
- Nursing Assessment – History, Physical and Mental assessment
- Treatment modalities and nursing management of patients with Schizophrenia, and other psychotic disorders
- Geriatric considerations
- Follow-up and home care and rehabilitation

#### **Nursing management of patients with mood disorders**

- Mood disorders: Bipolar affective disorder, mania, Depression and Dysthymia etc.,
- Etiology, psycho-pathology, types, clinical manifestations, diagnosis
- Nursing Assessment – History, Physical and Mental assessment
- Treatment modalities and nursing management of patients with mood disorders
- Follow-up and home care and rehabilitation

#### **Nursing management of patients with neurotic, stress related and somatization disorders**

- Anxiety disorders, phobias, Dissociation and Conversion disorders, Obsessive compulsive disorders, somatoform disorders, Post traumatic stress disorders
- Etiology, psycho-pathology, clinical manifestations, diagnosis
- Nursing Assessment – History, Physical and Mental assessment
- Treatment modalities and nursing management of patients with neurotic, stress related and somatization disorders
- Geriatric considerations
- Follow-up and home care and rehabilitation

#### **Nursing management of patients with substance use disorders**

- Commonly used psychotropic substance : Classification, forms, routes, action, intoxication and withdrawal
- Etiology of dependence : Tolerance, psychological and physical dependence, withdrawal syndrome, diagnosis,
- Nursing assessment – History, Physical, mental assessment and drug assay
- Treatment (Detoxification, antabuse and narcotic antagonist therapy and harm reduction) and nursing management of patients with substance use disorders
- Geriatric considerations
- Follow –up and home care and rehabilitation

#### **Nursing management of patients with Personality, Sexual and Eating disorders**

- Classification of disorders' \*Etiology, psycho-pathology, characteristics & diagnosis
- Nursing assessment – History, physical, mental assessment
- Treatment modalities and nursing management of patients with Personality, Sexual and Eating disorders
- Geriatric considerations
- Follow-up and home care and rehabilitation

#### **Nursing management of childhood and adolescent disorders including mental deficiency**

- Classification of disorders
- Etiology, psycho-pathology, characteristics & diagnosis
- Nursing assessment – History, physical, mental assessment
- Treatment modalities and nursing management of patients with Personality, Sexual and Eating disorders
- Geriatric considerations
- Follow –up and home care and rehabilitation

### **Nursing management of patients with organic brain disorders**

Classification: ICD

- Etiology, psycho-pathology clinical features, diagnosis and differential diagnosis(Parkinson's and Alzheimers)
- Nursing assessment-History, physical, mental and neurological assessment
- Treatment modalities and nursing management of patients with organic brain disorders
- Geriatric considerations
- Follow-up and home care and rehabilitation

### **Psychiatric emergencies and crisis intervention**

- Types of psychiatric emergencies and their management
- Stress adaptation model :Stress and stressors, coping, resources and mechanism
- Grief: Theories of grieving process, principles, techniques of counseling
- Types of crisis
- Crisis intervention : principles, techniques and process
- Geriatric considerations Role and responsibilities of nurse

### **Community Mental Health Nursing**

- Development of community mental health services
- National Mental Health Programme
- Institutionalization Versus De institutionalization
- Model of Preventive psychiatry: Levels of Prevention
- Mental Health Services available at the primary, secondary, tertiary levels including rehabilitation and role of nurse
- Mental Health Agencies: Government and Voluntary, National and International
- Mental Health Nursing issues for special populations: Children, Adolescence, Women, Elderly, Victims of violence and abuse, Handicapped, HIV/AIDS, etc.,

## **XX. CHILD HEALTH NURSING**

### **Introduction:**

Modern concepts of child care-Internationally accepted rights of the child -National policy and legislations in relation to child health and welfare -National programmes related to child health and welfare -Agencies related to welfare services to the children -Changing trends in

hospital care, preventive, promotive and curative aspects of child health. -Child morbidity and mortality rates -Differences between an adult and child -Hospital environment for a sick child -Impact of hospitalization on the child and family -Grief and bereavement -The role of a

child health nurse in caring for a hospitalized child -Principles of pre and post operative care of infants and children -Child health nursing procedures.

### **The healthy child**

- Principles of growth & development
- Factors affecting growth & development
- Growth and development from birth to adolescence.
- The needs of normal children through the stages of developmental and parental guidance
- Nutritional needs of children & infants: breast feeding, exclusive breast feeding, supplementary/artificial feeding and weaning
- Baby friendly hospital concept
- Accidents: causes and prevention
- Value of play and selection of play material
- Preventive immunization, immunization program and cold chain
- preventive paediatrics
- Care of under five & under five clinics/ well baby clinics

### **Neonate**

- Nursing care of a neonate
- Nursing care of a normal newborn care/Essential newborn care
- Neonatal resuscitation
- Nursing management of a low birth weight baby
- Kangaroo mother care
- Nursing management of common neonatal disorders
- Organization of neonatal unit
- Identification and nursing management of common congenital malformations.

### **Integrated management of neonatal and childhood illness (IMNCI)**

- Nursing management in common childhood diseases
- Nutritional deficiency disorders
- Respiratory disorders and infections
- Gastrointestinal infections, infections and congenital defects and rheumatic fever, rheumatic heart disease
- Genito-urinary disorders: acute glomerulonephritis, Nephrotic syndrome, Wilms' tumor, infection and congenital disorders.
- Neurological infections and disorders:
- Convulsions, epilepsy, meningitis, hydrocephalus, spina-bifida.
- Haematological disorders:
- Anaemia, thalassemia, ITP, Leukemia, hemophilia
- Endocrine disorders: Juvenile Diabetes Mellitus
- Orthopedic disorders: club feet, hip dislocation and fracture.
- Disorders of skin, eye, and ears
- Common communicable diseases in children, their identification, nursing



management in hospital and home and prevention Child health emergencies:

- Poisoning, foreign bodies, haemorrhage, burns and drowning
  - Management of behavioral and social problems in children
- Management of common behavioral disorders
- Management of common psychiatric problems
- Management of challenged children: Mentally, physically & socially challenged
- Welfare services for challenged children in India
- Child guidance clinics

## **XXI. MANAGEMENT OF NURSING SERVICES**

### **I: Introduction**

- Introduction to management in nursing
- Definition, concepts and theories
- Functions of management
- principles of management
- Role of nurse as a manager

### **ii: Elements & Process Of Management**

- Management Process
- planning: mission Philosophy, objectives operational plan
- Staffing Philosophy, Staffing study, Norms, Activities, Patient classification systems, Scheduling
- Human resource management: recruiting, selecting, deployment, retaining promoting, superannuation etc.,
- Budgeting: Concept, principles, types, cost benefit analysis, audit
- Material management: equipment and supplies
- Directing process (Leading \*controlling: Quality management program
- Evaluation Review Technique (PERT), bench marking, Activity
- Plan (Gantt, Chart)

### **: management of nursing services in the hospital andCommunity.**

- Management of Nursing Services in the Hospitals and Community planning:
- Hospital and patient care units including ward management
- Emergency and disaster management
- Human resource management:
- Recruiting, selecting, deployment, retaining, promoting, superannuation etc,
- Categories of nursing personnel including job description of all levels
- Patient/population classification systems
- Patients/population assignment and nursing care responsibilities
- Staff development and welfare
- Budgeting: Proposal, projecting requirements for staff, equipments and supplies for
- Hospital and patient care units
- Emergency and disaster management
- Material management:
- Procurement, inventory control, auditing and maintenance in
- Hospital and patient care units

- Emergency and disaster management
- Directing and leading:
- Delegation, participatory management
- Assignments, rotations, delegations
- Supervision and guidance
- Implement standards, policies, procedures and practices
- Staff development and welfare
- Maintenance of discipline
- controlling / evaluation:
- Nursing rounds / Visits, Nursing protocols, Manuals
- Quality assurance model, documentation
- Record and reports Performance appraisal
- concepts, theories and techniques of organizational behaviour and human relations.**
- Organizational behaviour and human relations
- Concepts and theories of organizational behaviours
- Review of channels of communication
- Leadership styles
- Review of motivation:
- Concepts and Theories
- Group dynamics
- Techniques of
- Communication and • Inter personal relationships
- Human relations
- Public relations in context of nursing
- Relations with professional associations and employee unions and collective bargaining
- planning and organizing in-service education program**
- In service education
- Nature and scope of in service education program
- organization of in service education
- principles of adult learning
- planning for in service education program, techniques, methods and evaluation of staff education program
- Preparation of report
- Describe management of nursing educational institutions**
- Management of Nursing Educational Institutions
- Establishment of nursing educational institution — INC norms and guidelines
- Co ordination with
- Regulatory bodies
- Accreditation
- Affiliation Philosophy / objectives Organization
- Structure
- Committees Physical facilities
- College / School
- Hostel Students
- Selection

- Admission
- Guidance and Counseling
- Maintaining discipline Faculty and staff
- Selection
- Recruitment
- Job description
- Placement
- Performance appraisal
- Development and welfare
- Budgeting
- Equipments and supplies: audio visual equipments, laboratory equipments, books, journals etc.,
- Curriculum: Planning, Implementation and Evaluation
- Clinical facilities
- Transport facilities
- Institutional records and reports — administrative, faculty, staff and Students

**Describe ethical and legal responsibilities of a professional nurse**

- Explain the nursing practice standard
- Nursing as a Profession
- Nursing as a Profession
- Philosophy: Nursing practice
- Aims and objectives
- Characteristics of a professional nurse
- Regulatory bodies: INC, SNC Acts— Constitution, Functions
- Current trends and issues in Nursing professional ethics
- Code of ethics: INC, ICN
- Code of professional conduct: INC, ICN
- Practice standards for Nursing: INC
- Consumer protection Act
- Legal aspect in Nursing
- Legal terms related to practice: Registration and Licensing
- Laws related to Nursing practice; Breach and Penalties
- Malpractice and Negligence

**Explain the various opportunities for professional advancement**

- Professional advancements:
- Continuing education
- Career Opportunities
- Collective bargaining
- Membership with
- Professional organizations:
- National and International
- Participation in research activities
- Publications: Journals, Newspapers, etc.,

**XXII. COMMUNICATION & EDUCATIONAL TECHNOLOGY**

Describe the communication process

- Identify techniques of effective communication
- Review of Communication Process
- Process: elements and chance
- Facilitators
- Barriers and methods of overcoming
- Techniques

Establish effective inter- personal relations the patients, families &coworkers.

Interpersonal relations

- Purpose & types
- Phases
- Barriers & methods of overcoming
- Johari Window

Develop effective human relations in context of nursing

- Human relations
- Understanding self motivation, social attitudes
- Individual and groups
- Groups & individual
- Human relations in context of nursing
- Group dynamics
- Team work

Develop basic skills of counseling and guidance

- Guidance &counseling
- Definition
- Purpose, scope and nee
- Basic principles
- Organization of counseling services
- Types of counseling approaches
- Role and presentation of counselor
- Issues for counseling in Nursing: studies and practitioners
- Counselling process-steps & technique stools of counselor
- Managing disciplinary problems
- Management of crisis & referral

Describe the philosophy & principles of education.

- Explain the teaching learning process
- Principles of education & teaching learning process
- Education: meaning, philosophy, aims, functions & principles
  - Nature and characteristics of learning
  - Principles and maxims of teaching
  - Formulating objectives; general and specific
  - Lesson planning
  - Classroom management

Demonstrate teaching skill using various teaching methods in clinical, classroom and community settings.

Methods of teaching

- Lecture, demonstration, group discussion, seminar, discussion, role play, project, field trip, work shop, exhibition, programmed instruction, computer assisted learning, micro teaching problem based learning, self instructional module, and simulation etc.

- Clinical teaching methods: Case method, nursing round & reports, bedside clinic, conference (individual & group) process recording.

: Prepare and use different types of educational media effectively

Educational Media

- Purposes & types of A.V Aids, principles and sources etc.

- Graphic aids: chalk board, chart, graph, poster, flash cards, flannel graph, bulletin, cartoon

- Three dimensional aids: objects, specimens, models, puppets

- Printed aids: Pamphlets, & leaflets

- Projected aids; slides, overhead projector, films, TV, VCR/VCD ,camera, microscope, LCD

- Audio aids: tape recorder, public address system

- Computer

Prepare different types of questions for assessment of knowledge, skills and attitudes.

Assessment

- Purpose and scope of evaluation & assessment

- Criteria for selection of assessment techniques and methods

- Assessment of knowledge: essay type questions, short answer questions(SAQ), Multiple choice questions(MCQ)

- Assessment of skills: observation checklist, practical exam, viva, objective structured clinical examination (OSCE)

- Assessment of Attitudes: Attitude scales

Teaching individuals, group and communities about health with their active participation.

Information, Education & communication for health (IEC)

- Health behaviour and health education

- Planning for health education

- Health education with individuals, groups & communities

- Communicating health messages

- Methods & media for communicating health messages

- Using mass media

### **XXIII. MIDWIFERY AND OBSTETRICAL NURSING**

Recognise the trends and issues in midwifery and obstetrical nursing

- Introduction to midwifery and obstetrical Nursing

- Introduction to concepts of midwifery and obstetrical nursing

- Trends in midwifery and obstetrical nursing

- Historical perspectives and current trends

- Legal and ethical aspects

- Pre-conception care and preparing for parenthood

- Role of nurse in midwifery and obstetrical care

- National policy and legislation in relation to maternal health and welfare

- Maternal, morbidity, mortality and fertility rates
  - Perinatal, morbidity and mortality rates
- : Describe the anatomy and physiology of female reproductive system
- Review of anatomy and physiology of female reproductive system and foetal development
  - Female pelvis-general description of the bones, joints, ligaments, planes of the pelvis diameters of the true pelvis, important landmarks, variations in pelvis shapes
  - Female organs of reproduction external genitalia, internal genital organs and their anatomical
  - relations, musculature-blood supply, nerves, lymphatics, pelvic cellular tissue,
  - Pelvic peritoneum.
  - Physiology of menstrual cycle
  - Human sexuality
  - Foetal development
  - Conception

**Review of:**

Fertilization, implantation (embedding of the ovum), development of the embryo and placenta at term-functions, abnormalities, the foetal sac, amniotic fluid, the umbilical cord

Foetal

circulation, foetal skull, bones, sutures and measurements.

Review of genetics

: Describe the diagnosis and management of women during antenatal period.

- Assessment and management of pregnancy(ante-natal)
- Normal pregnancy
- Physiological changes during pregnancy
- Reproductive system
- Cardio vascular system
- Respiratory system
- Urinary system
- Gastro intestinal system
- Metabolic changes
- Skeletal changes
- Endocrine system
- Psychological changes
- Discomforts of pregnancy
- Diagnosis of pregnancy
- Signs
- Differential diagnosis
- Confirmatory tests
- Ante-natal care
- Objectives
- assessment
- History and physical examination
- Antenatal examination

- Signs of previous child-birth
- Relationship of foetus to uterus and
- Pelvis lie, attitude, presentation, position.
- Per vaginal Examination
- Screening and assessment for high risk, Risk approach
- History and physical examination
- Modalities of diagnosis, invasive and non-invasive, ultrasonics, cardio tomography, NST,CST Antenatal preparation
- Antenatal counseling
- Antenatal exercise
- Diet
- Substance use
- Education for child birth
- Husband and families
- Preparation for safe confinement
- Prevention from radiation Psychosocial cultural aspects of pregnancy
- Adjustment to pregnancy
- Unwed mother
- Single parent
- Teen age pregnancy
- Sexual violence
- Adoption

Describe the physiology and stages of labour.

- Describe the management of women during intranatal period.
- Assessment and management of intranatal period
- Physiology of labour mechanism of labour management of labour

#### **First stage**

- Signs and symptoms of onset of labour; normal and abnormal
- Duration
- Preparation of labour room women
- Assessment and observation of women in labour; partogram-maternal and foetal monitoring
- Active management of labour, induction of labour
- Pain relief and comfort in labour

#### **Second stage**

- Signs and symptoms, normal and abnormal
- Duration
- Conduct of delivery; principles and techniques
- Episiotomy (only if required)
- Receiving the newborn
- Neonatal resuscitation initial steps and subsequent resuscitation
- Care of umbilical cord
- Immediate assessment including screening for congenital anomalies
- Identification
- Bonding
- Initiate feeding

- Screening and transportation of the neonate

### **Third stage**

- Signs and symptoms; normal and abnormal
- Duration
- Method of placental expulsion
- Management; principles and techniques
- Examination of the placenta
- Examination of perineum Maintaining records, and reports Forth stage
- Describe the physiology of purperium.
- Description the management of women during postnatal period.
- Assessment and management of women during postnatal period
- Normal purperium physiology Duration
- Postnatal assessment and management
- Promoting physical and emotional well-being
- Lactation management
- Immunization
- Family dynamics after child-birth
- Family welfare services; methods, counseling
- Follow-up
- Records and reports

Describe the assessment and management of normal neonate

- Assessment and management of normal neonates
  - Normal Neonate; Physiological adaptation, Initial and daily assessment
- Essential newborn care; thermal control Breast feeding, prevention of infections
- Immunization
  - minor disorders of newborn and its management
  - Levels of neonatal care (level I,II,&III)
  - At primary, secondary and tertiary levels
  - Maintenance of reports and records.

Describe the Identification and management of women with high risk pregnancy.

- High-risk pregnancy-assessment and management
- Screening and assessment
- Ultrasonics, cardiotomography, NST, CST, non-invasive and invasive
- Newer modalities of diagnosis high- risk approach
- Levels of care; primary, secondary and tertiary levels
- Disorders of pregnancy
- Hyper-emesis gravidarum, bleeding in early pregnancy, abortion, ectopic
- Pregnancy, vesicular mole,
- Antepartum haemorrhage Uterine abnormality and displacement Diseases complicating pregnancy
- Medical and surgical conditions
- Infections, RTI (STD), UTI, HIV,TORCH
- Gynaecological diseases complicating pregnancy



- Pregnancy induced hypertension and diabetes, hydramnios
- Rh incompatibility
- Mental disorders
- Adolescent pregnancy, Elderly prime and grand multipara
- Multiple pregnancy
- Abnormalities of placenta and cord
- Intra-uterine growth-retardation
- Nursing management of mothers with high-risk pregnancy
- Maintenance of records and report

Describe management of abnormal labour and .Obstetrical emergencies

- Abnormal labour-assessment and management
- Disorders in labour
- CPD and contracted pelvis
- Malpositions and malpresentations
- Premature labour, disorders of uterine actions-precipitate labour, prolonged labour
- Complications of third stage: injuries to birth canal
- Obstetrical emergencies and their Management;
- Presentation and prolapse of cord, vasa praevia, amniotic fluid embolism, rupture of the uterus, shoulder dystocia, obstetrical shock.
- Obstetrical procedures and operations
- Induction of labour, forceps, vacuum version, manual removal of placenta, caesarean section, destructive operations.
- Nursing management of women undergoing obstetrical operations and procedures.

Describe management of postnatal complications.

- Abnormalities during postnatal Periods
- Assessment and management of women with postnatal complications
- Puerperal infections, UTI, thrombo- Embolic disorders, post-partum haemorrhage,
- Eclampsia and subinvolutions
- Psychological complications:
- Post partum blues
- Post partum depression Post partum psychosis

Identify the risk neonates and their nursing management

- Assessment and management of high risk newborn
- Admission of neonates in the neonatal intensive care units protocols
- Nursing management of:
- Low birth weight babies
- Infections
- Respiratory problems
- Haemolytic disorders
- Birth injuries

- Malformations
- Monitoring high risk neonates
- Feeding of high risk neonates
- Organisation and management of neonatal intensive care units
- Infection control in neonatal intensive care units maintenance of reports and records

Describe indication dosage, action, side effects and nurses responsibilities in the administration of drugs used for mothers.

- Pharmacotherapeutics in obstetrics
- Indication, dosage, action, contraindication and side effects of drugs
- Effect of drugs on pregnancy, labour and puerperium
- Nursing responsibilities in the administration of drugs in obstetrics
- Oxytocin, antihypertensives, diuretics, tocolytic agents, anticonvulsants;
- Analgesics and anesthetics in obstetrics
- Effects of maternal medication on foetus and neonate

Appreciate the importance of family welfare programme.

- Describe the methods of contraception and role of nurse in family welfare programme.
- Family welfare programme
- Population trends and problem in India
- Concepts, aims, importance and history of family welfare programme
- National population: dynamics, policy and education
- National family welfare programme; RCH, ICDS, MCH, safe motherhood
- Organization and administration; at national, state, district, block and village levels
- Methods of contraception; spacing, temporary and permanent, Emergency contraception
- Infertility and its management
- Counselling for family welfare
- Latest research in contraception
- Maintenance of vital statistics
- Role of national international and voluntary organizations
- Role of nurse in family welfare programme
- Training/supervision/collaboration with other functionaries in community like
- ANMs, LHVs, Anganwadi workers, TBAs (Traditional birth attendant-Dai)

#### **XXIV. NURSING RESEARCH AND STATISTICS**

Describe the concept of research, terms, need and areas of research in nursing.

- Explain the steps of research process.
- Research and research process
- Introduction and need for nursing research

- Definition of research and nursing research
- Steps of scientific method
- Characteristics of good research
- Steps of research process- overview

: Identify and state the research problem and objectives

- Research problem/question
- Identification of problem area
- Problem statement
- Criteria of a good research problem
- Writing objectives

: Review the related literature

- Review of Literature
- Location
- Sources
- On line search; CTNHAL, COCHRANE etc
- Purposes
- Method of review

Describe the research approaches and designs

- Research approaches and designs
- Historical, Survey and experimental
- Qualitative and quantitative designs

Explain the sampling and data collection

- Sampling and data collection
- Definition of population Sample, sampling criteria, factors influencing sampling process, types of sampling techniques.
- Data-why, what from whom, when and where to collect
- Data collection methods and instruments:
- Methods of data collection
- Questioning, interviewing .Observations, record analysis and measurement
- Pilot study
- Data collection procedure

Analyze, interpret and summarize the research data

- Analysis of data:
- Complication, Tabulation, Summarization, presentation, interpretation of Data

Explain the use of statistics, scales of measurement and graphical presentation of data.

- Describe the measures of central tendency and variability and methods of correlation.
- Introduction to Statistics

- Definition, use of statistics, scales of measurement
- Frequency distribution and graphical presentation of data
- Mean, Median, Mode, Standard deviation
- Normal probability and tests of significance
- Co-efficient of correlation
- Statistical packages and its application

Communicate and utilize the research findings

- Communication and utilization of Research
- Communication of research findings
- Verbal report .Writing research report .Writing scientific article/paper
- Critical review of published research
- Utilization of research findings