



All India Institute of Medical Sciences, Jodhpur

Indicative Syllabus for the Post of TB & Chest Disease Health Assistant

(Syllabus is only indicative. The questions can assess any aspect of knowledge, aptitude, attitude and practical skills, which is expected from a trained person to work efficiently at the advertised post)

Section A

40% Questions covering the following topics:-

General Intelligence & Reasoning: It would include questions of non-verbal type. The test will include questions on similarities and differences, space visualization, problem solving, analysis, judgment, decision making, visual memory, discriminating observation, relationship concepts, figure classification, arithmetical number series, non-verbal series etc. The test will also include questions designed to test the candidate's abilities to deal with abstract ideas and symbols and their relationship, arithmetical computation and other analytical functions.

Quantitative Aptitude: This paper will include questions on problems relating to Number Systems, Computation of Whole Numbers, Decimals and Fractions and relationship between Numbers, Fundamental arithmetical operations, Percentages, Ratio and Proportion, Averages, Interest, Profit and Loss, Discount, use of Tables and Graphs, Mensuration, Time and Distance, Ratio and Time, Time and Work, etc.

Computer Knowledge: Candidates' understanding of the Basics of Computer Knowledge, its parts, functions, emails, MS office, etc.

Section B (SUBJECT KNOWLEDGE)

60% Questions to be based on the subject specific to the post with following topics:-

ANATOMY

Content

Introduction to Anatomy

- Subjects of Anatomy
- Main subdivisions of Anatomy
- Commonly used descriptive terms

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

The Skeletal System

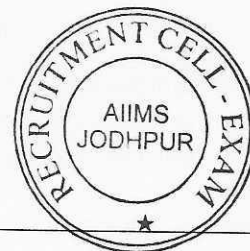
- Bones- types, structure, Axial & Appendicular Skeleton
- Bone formation and growth
- Description of bones
- Joints – classification and structure

Alterations in disease

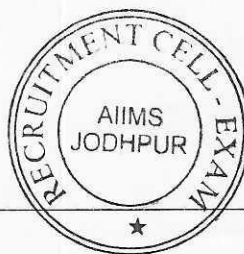
Applications and implications in nursing

The Muscular System

- Types and structure of muscles
- Muscles groups



Content
Alterations in disease Applications and implications in nursing
The Nervous System <ul style="list-style-type: none"> • Structure of neuroglia & neurons • Somatic Nervous system <ul style="list-style-type: none"> ○ Structure of brain, spinal cord, cranial nerves, spinal nerves and peripheral nerves • Autonomic Nervous System – Sympathetic and parasympathetic <ul style="list-style-type: none"> ○ Structure and location Alterations in disease Applications & implications in nursing
The Sensory Organs <ul style="list-style-type: none"> • Structure of skin, eye, ear, nose and tongue (Auditory and olfactory apparatus) Alterations in diseases Applications and implications in nursing
Circulatory and lymphatic system <ul style="list-style-type: none"> • The Circulatory system <ul style="list-style-type: none"> ○ Blood – Microscopic structure ○ Structure of Heart ○ Structure of blood vessels – Arterial & Venous System, ○ Circulation: systemic, pulmonary and coronary • Lymphatic system <ul style="list-style-type: none"> ○ Lymphatic vessels & lymph ○ Lymphatic tissues ○ Thymus gland ○ Lymph nodes ○ Spleen ○ Lymphatic nodules Alterations in disease Applications and implications in nursing
The Respiratory System <ul style="list-style-type: none"> • Structure of the organs of respiration • Muscles of respiration: Intercostal and Diaphragm Alterations in diseases Applications and implications in nursing
The Digestive system <ul style="list-style-type: none"> • Structure of alimentary tract and accessory organs of digestion Alterations in disease Applications and implications in nursing
The Excretory System (Urinary) <ul style="list-style-type: none"> • Structure of organs of urinary system: Kidneys, ureters, urinary bladder, urethra Alterations in disease Applications and implications in nursing
The Endocrine system <ul style="list-style-type: none"> • Structure of Pituitary, pancreas, thyroid, parathyroid, thymus and adrenal glands Alterations in diseases Applications and implications in nursing
The Reproductive system including breast <ul style="list-style-type: none"> • Structure of female reproductive organs • Structure of male reproductive organs • Structure of breast • Introduction to embryology Alterations in diseases Applications and implications in nursing



Content
<p>The Integumentary system:</p> <ul style="list-style-type: none"> • Structure of skin: Epidermis, Dermis • Appendages of the skin <ul style="list-style-type: none"> ○ Hair ○ Nails ○ Sebaceous & Sweat glands ○ Arrector pili muscles <p>Alterations in diseases Applications and implications in nursing</p>

Physiology

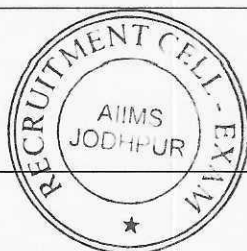
Content
<p>Cell Physiology</p> <ul style="list-style-type: none"> • Tissue- formation and repair • Membranes & glands – Functions <p>Alterations in diseases Applications and implications in nursing (Applied physiology)</p>
<p>Skeletal System</p> <ul style="list-style-type: none"> • Bone formation & growth • Bones – Functions and movements of bones of axial and appendicular skeleton and bone healing • Joints and joint movement <p>Alterations in disease Applications and implications in nursing (Applied physiology)</p>
<p>Muscular System</p> <ul style="list-style-type: none"> • Muscular movements, Muscle tone, physiology of muscle contraction, levels and maintenance of posture <p>Alterations in disease Applications and implications in nursing (Applied physiology)</p>
<p>Control System</p> <p>A. Nervous System</p> <ul style="list-style-type: none"> • Functions of Neuroglia & neurons • Stimulus & nerve- impulse- definitions and mechanism • Functions of brain, spinal cord, cranial and spinal nerves • Cerebrospinal fluid- composition, circulation and function • Reflex arc, Reflex action and reflexes • Autonomic functions – <ul style="list-style-type: none"> ○ Pain: somatic, visceral & referred ○ Autonomic learning and biofeedback • Thermoregulation- Maintaining body temperature <p>Alterations in diseases Application and implications in nursing (Applied physiology)</p> <p>B. The Endocrine System</p> <ul style="list-style-type: none"> • Functions of Pituitary, pineal body, thymus, Thyroid, Parathyroid, Pancreas, Suprarenal, Placenta, ovaries & Testes <p>Alterations in disease Applications and implications in nursing (Applied physiology)</p>
<p>Blood & Circulatory System</p> <ul style="list-style-type: none"> • Blood formation, composition, blood groups, blood coagulation • Haemoglobin: Structure, Synthesis and breakdown, Variation of molecules, estimation • Functions of blood • Functions of Heart, Conduction, Cardiac cycle, circulation – Principles, Control, factors influencing BP and pulse. Normal ECG <p>Alterations in diseases Applications and implications in nursing (Applied physiology)</p>
<p>The Respiratory System</p>



Content
<ul style="list-style-type: none"> • Functions of respiratory organs • Physiology of respiration • Pulmonary ventilation, Volume • Mechanism of respiration • Gaseous exchange in lungs • Carriage of oxygen & carbon- dioxide • Exchange of gases in tissues • Regulation of respiration. • Vocal communication <ul style="list-style-type: none"> ○ Mechanism of sound production ○ Neural control of sound production ○ Speaking ○ Dysarthria <p>Alterations in disease Applications and implications in nursing (Applied physiology)</p>
<p>The Digestive System</p> <ul style="list-style-type: none"> • Functions of organs of digestive tract. Movements of alimentary tract, Digestion in mouth, stomach, small intestine, Large intestine, Absorption of food. Functions of liver, gall bladder and pancreas • Metabolism of carbohydrates, proteins and fats
<p>The Excretory System</p> <ul style="list-style-type: none"> • Functions of Kidneys, ureters, urinary bladder & urethra • Composition of urine • Mechanism of urine formation • Function of skin • Regulation of body temperature • Fluid and electrolyte balance. <p>Alterations in disease Applications and implications in nursing (Applied physiology)</p>
<p>The Sensory Organs</p> <ul style="list-style-type: none"> • Functions of skin, eye, ear, nose, tongue, <p>Alterations in disease Applications and implications in nursing (Applied physiology)</p>
<p>The Reproductive System</p> <ul style="list-style-type: none"> • Reproduction of cells – DNA, Mitosis, meiosis spermatogenesis, oogenesis. • Functions of female reproductive organs; functions of breast, Female sexual cycle. • Functions of male reproductive organs, Male function in reproduction, Male fertility system, <p>Alterations in disease Applications and implications in nursing (Applied physiology)</p>
<p>Defense: Neural, Lymphatic and Immunological</p> <ul style="list-style-type: none"> • Neural • Circulation of lymph • Immunity <ul style="list-style-type: none"> ○ Formation of T- cells and B cells ○ Types of Immune response ○ Antigens ○ Cytokines ○ Antibodies ○ Spleen

NUTRITION

Content
<p>Introduction To Food & Nutrition</p> <ul style="list-style-type: none"> • Nutrition: History & Concepts • Classification of food, food groups • Role of nutrition in maintaining health,



Content

- Factors affecting food and nutrition: socio- economic, cultural, tradition, production, system of distribution, life style and food habits etc
- Role of food & its medicinal value
- Classification of foods
- Food standards
- Elements of nutrition: macro and micro
- Calorie, BMR
- Assessment of nutritional status
- National nutritional problems
- National nutrition programmes
 - Vitamin A deficiency programme
 - National iodine deficiency disorders (IDD) programme
 - Mid - day meal programme
 - Integrated child development scheme (ICDS)
 - National & International Agencies **Working towards food / nutrition** - NIPCCD, CARE, FAO, NIN & CFTRI(**Central food technology & research Institute**)
- Role of nurse in nutrition education

Carbohydrates

- Classification & Caloric value
- Recommended daily allowances
- Dietary sources & Functions
- Digestion, absorption and storage, metabolism of carbohydrates
- Malnutrition: Deficiencies

Fats

- Classification
- Caloric value
- Recommended daily allowances
- Dietary sources
- Functions
- Digestion, absorption and storage metabolism
- Malnutrition: Deficiencies and over consumption

Proteins

- Classification
- Caloric value
- Recommended daily allowances
- Dietary sources
- Functions
- Digestion, absorption, metabolism and storage
- Malnutrition: Deficiencies and Over consumption

Vitamins

- Classification
- Recommended daily allowances
- Dietary sources
- Functions
- Absorption, synthesis, metabolism, storage and excretion
- Deficiencies
- Hypervitaminosis

Minerals

- Classification
- Recommended daily allowances
- Dietary sources
- Functions
- Absorption, synthesis, metabolism, storage and excretion
- Deficiencies
- Over consumption and toxicity

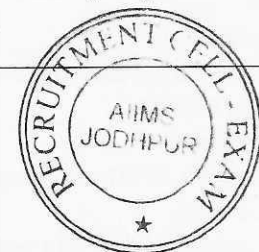
Water & Electrolytes



Content
<ul style="list-style-type: none"> • Water: Daily requirement, regulation of water metabolism and distribution of body water • Electrolytes: Types, sources, composition of body fluids • Maintenance of fluid & electrolyte balance • Over hydration, dehydration and water intoxication • Electrolyte imbalances
<p>Cookery rules & preservation of nutrients</p> <ul style="list-style-type: none"> • Principles, methods of cooking and serving. • Preservation of nutrients during cooking • Safe food handling- toxicity • Storage of food • Food Preservation, Food Additives & its principles • Food Adulteration , PFA (prevention of PFA) • Preparation of simple beverages & different types of food
<p>Normal Nutrition/ Balanced diet</p> <ul style="list-style-type: none"> • Elements • Recommended dietary allowances • Nutritive value of food • Nutrition during Pregnancy and Lactation • Nutrition during Infancy • Nutrition during Childhood and Adolescence • Nutrition during Adulthood • Nutrition during Elderly • Calculation of balanced diets for the above mentioned groups • Planning menu • Budgeting of food
<p>Therapeutic Nutrition</p> <ul style="list-style-type: none"> ○ Naturopathy: Diet ○ Therapeutic modification of the Normal diet • Planning and Preparation of hospital diets • Nutrition and Weight Management • Nutrition during diseases of-liver, Cardiovascular, Diabetes Mellitus, Renal Disease, Gastro-Intestinal Disease. • Drug and nutrient interaction

Biochemistry

Content
<p>Introduction</p> <ul style="list-style-type: none"> • Definition and significance in nursing • As Basic science for the study of medicine • Review of structure, composition and functions of cell • Functions of chief intracellular components • Prokaryote and Eukaryote cell organization • Microscopy
<p>Structure and functions of Cell membrane</p> <ul style="list-style-type: none"> • Fluid mosaic model tight junction, Cytoskeleton • Transport mechanism: diffusion, osmosis, filtration, active, channel and sodium pump • Acid base balance- maintenance & diagnostic tests <ul style="list-style-type: none"> ○ PH buffers
<p>Composition and metabolism of carbohydrates</p> <ul style="list-style-type: none"> • General Nature • Classification • Biological Importance • Types, structure, composition and uses <ul style="list-style-type: none"> ○ Monosaccharides, Disaccharides, Polysaccharides, Oligosaccharides



Content

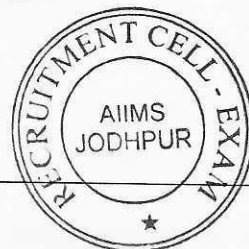
- Metabolism
 - Pathways of glucose:
 - Glycolysis
 - Gluconeogenesis: Cori's cycle, Tricarboxylic acid (TCA) cycle
 - Glycogenolysis
 - Pentose phosphate Pathways
 - Regulation of blood glucose level
 - Glycogen synthesis & breakdown
 - Sources & fate of glucose in body-Phosphorylation, Glycolysis,
 - Fate of pyruvic acid, Citric acid cycle
 - Energy Metabolism of other hexoses,
 - HMP shunt & its biological significance
 - Blood glucose -Normal level & regulations,
 - Glycosuria
 - Digestion & Absorption of Carbohydrates
- Investigations and their interpretations

Composition and metabolism of Lipids

- General Nature
- Classification
- Biological Importance
- Types, structure, composition and uses of fatty acids
 - Nomenclature, Roles and prostaglandins
- Metabolism of fatty acid
 - Breakdown
 - Synthesis
- Metabolism of triacylglycerols
- Digestion & Absorption of Lipids
- Cholesterol metabolism
 - Biosynthesis and its regulation
 - Bile salts and bilirubin
 - Vitamin D
 - Steroid hormones
- Lipoproteins and their functions:
 - VLDLs - IDLs, LDLs and HDLs
 - Transport of lipids
 - Atherosclerosis
 - Investigations and their interpretations
- Metabolism of Lipids
 - Plasma lipids
 - Fate of fat after absorption
 - Sources of fat depot,
 - Relation of liver to fat metabolism,
 - Fatty liver-Lipotrophic factors
 - Ketone bodies-Formation & utilization,
 - Cholesterol-Sources, Occurrence & distribution, Blood Level & Metabolism

Composition and metabolism of Amino acids and proteins

- General Nature
- Classification
- Biological Importance
- Physical Properties -as colloids
- Properties due to charge & due to size.-Tests for identification, Protein precipitants, Denaturation.
- Types, structure, composition and uses of Amino acids and proteins
- Metabolism of amino acids and proteins
 - Protein synthesis, targeting and glycosylation
 - Chromatography
 - Electrophoresis
 - Sequencing
 - Amino acid Pool, Amino acid hormones,



Content

- Dynamic equilibrium & balance
- Essential amino acids,
- Deamination, Transamination, & glutamine formation.
- Metabolism of Nitrogen
 - Fixation and assimilation
 - Urea cycle
 - Hemes and chlorophylls
 - Urea formation
- Digestion & Absorption of Proteins
- Enzymes and co-enzymes
 - Classification
 - Properties
 - Kinetics and inhibition
 - Control
 - Mechanism of action
 - Enzyme inhibition
 - Coenzymes, Isoenzymes
 - Diagnostic significance
- Chemistry of Nucleic acid
 - Purines & Pyrimidine bases
 - Nucleotides & Nucleosides
 - Nucleic Acids-DNA & RNAs
 - Biological significance
- Investigations and their interpretations

Composition of Vitamins and Minerals

- Vitamins and minerals:
 - Structure
 - Classification
 - Fat soluble vitamins
 - Water soluble vitamins
 - Properties
 - Absorption
 - Storage & transportation
 - Normal concentration
- Metabolism of minerals
 - Metabolism of sodium, Potassium, Calcium & Phosphorus, Iron.
- Water & Electrolytic balance & Imbalance
- Acid-base balance & Imbalance
- Investigations and their interpretations

Immunochemistry

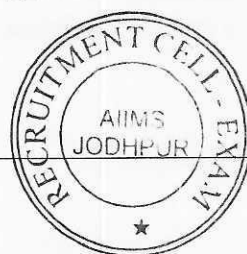
- Immune response
- Structure and classification of Immunoglobins
- Mechanism of antibody production
- Antigens: HLA typing
- Free radical and Antioxidants
- Specialized protein: Collagen, Elastin, Keratin, Myosin, Lens protein.
- Electrophoretic and Quantitative determination of Immunoglobins – ELISA etc.
- Investigations and their interpretations

NURSING FOUNDATIONS

Content

Health and Wellness

- Definition of health
- Concept of health
- Concept of wellness and wellbeing
- Concept of health-illness continuum



Content

- Models of health and illness
- Variables influencing health and health beliefs and practices
- Health promotion, wellness and levels of disease prevention
- Risk factors influencing health
- Risk-factor modification and changing health behaviors
- Illness and illness behaviour
- Impact of illness on the client and family
- National Health Policy of India
- Health care services: Health promotion and prevention, primary care, diagnosis, treatment, rehabilitation and continuing care
- Health care teams
- Types of health care agencies
- Hospitals: Types, organization and functions
- Health promotion and levels of disease prevention
- Primary health care and its delivery: Role of nurse

Nursing as a Profession

- Nursing: Definition, concepts, philosophy, objectives
- History of nursing in India
- Characteristics, nature and scope of nursing practice
- Qualities of a professional nurse
- Professional responsibilities and roles of a nurse
- Categories of nursing personnel
- Nursing as a profession: Definition and characteristics of a profession
- Nursing education in India
- International & national nursing organizations
- Trends of nursing in India
- Ethics and values in nursing
 - Professional nursing code of ethics
 - Code of ethics for nurses in India
 - Ethical dilemma and issues in healthcare
 - Values: Definition, value formation and value clarification
- Evidence Based Practice (EBP) in Nursing

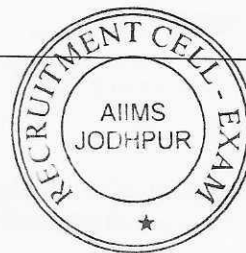
Hospital Admission and Discharge

- Admission to the hospital
 - Unit and its preparation admission bed.
 - Admission procedure
 - Special considerations
 - Medico legal issues in admission
 - Roles and responsibilities of the nurse in admission
- Discharge from the hospital
 - Types of discharge: Planned discharge, LAMA/DAMA and abscond, referrals and transfers.
 - Discharge planning.
 - Discharge procedure.
 - Special considerations.
 - Medico legal issues in discharge
 - Roles and responsibilities of the nurse in discharge.
 - Care of the unit after discharge.

Communication and Nurse Patient Relationship

- Communication and nursing practice.
- Basic elements of communication process.
- Barriers of communication
- Forms of communication.
- Professional nursing relationship.
- Elements of professional communication.
- Communicating with special group (children, women, physically and mentally challenged and elderly).
- Patient teaching: importance, purpose, process, role of nurse

The Nursing Process



Content

- Clinical decisions in nursing practice
- Critical thinking defined
- Levels of critical thinking in nursing
- Critical thinking competencies
- A critical thinking model for clinical decision making
- Developing critical thinking skills
- Critical thinking synthesis
- Nursing Process: Overview
 - *Nursing assessment.*
 - *Nursing diagnosis*
 - *Planning nursing care*
 - *Implementation of nursing care*
 - *Evaluation*

Documentation and Reporting

- Documentation: *Purpose 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, correctness, organization, & confidentiality*
- Methods of recording
- Reporting: *Change of shift reports, Transfer reports, incident reports*
- Minimizing legal liability through effective record keeping

Vital Signs

- Introduction

- 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, hypothermia & Heatstroke): *assessment & management.*
- 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.*
- Alterations in pulse: Tachycardia and bradycardia.

- **Respiration:**

- Physiology and regulation, mechanics of breathing, characteristics of the respiration, factors affecting respiration.
- Assessment of respiration: *techniques, special consideration.*
- Alteration in respiration: *types, assessment & management.*

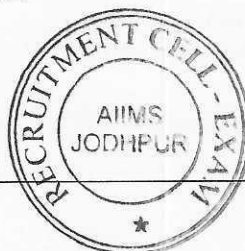
- **Blood pressure:**

- 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: *Hypertension and hypotension.*

- **Recording of vital signs**

Health Assessment

- Purposes of health assessment
- Health history taking
- Physical examination
 - Preparation & organization of physical examination
 - Methods & techniques of physical assessment.
 - General assessment
 - Head to toe examination
 - Systemic health assessment
 - Assessment of self care ability
 - Recording of health assessment
 - After care of physical assessment



Content

Machinery, Equipment and Linen in Patient Care

- Indent, maintenance and inventory.
- Hospital housekeeping.
 - Purposes, principles and basic guidelines
 - Care rubber/plastic goods
 - Care of linen
 - Care of enamelware
 - Care of stainless steel articles
 - Care of glassware
 - Care of hospital furniture
 - Care of sharp instruments
 - Care machines used in patient care

Meeting Needs of Hospitalized Patient

- Patient safety:

- Environmental safety: *temperature, humidity, noise, ventilation, light, odour, pests control.*
- Fall, fire and accident safety
- Safety devices: *restraints, side rails, airways, trapez etc*
- Role of nurse in providing safe and clean environment

- Hygiene:

- Factors influencing hygienic practice.
- Hygienic care: Hair care, Oral care, Bed bath, Back care, Hand-feet & nail care, Eye care, Care of ear and nose.
- Patient environment: *Unit cleaning/ disinfection.*

- Comfort:

- Factors influencing comfort
- Types of beds and bed making
- Comfort devices
- Comfortable positions
- Pain management: *Nature, types, factors influencing pain, coping, assessment and management of pain.*

- Sleep and rest:

- Physiology of sleep
- Factors affecting sleep
- Promoting rest & sleep
- Sleep disorders

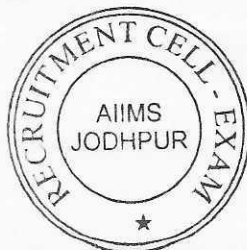
- Nutrition:

- Importance and factors affecting nutritional needs
- Assessment of nutritional needs
- Meeting nutritional needs
 - Oral feeding
 - Enteral feeding: Naso/orogastric, nasoenteric feeding & gastrostomy/ jujenostomy.
 - Parenteral nutrition.
 - Gastric lavage

- Urinary elimination:

- 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/bed pan
 - Perineal care
 - Condom urinary drainage
 - Urinary catheterization
 - Indwelling catheter care
 - Care of urinary diversions
 - Closed catheter irrigation

- Bowel elimination:



Content

- Factors affecting bowel elimination.
- Alteration in bowel elimination
- Types and collection of specimen of faeces: observation.
- Facilitating bowel elimination: assessment, equipment's, procedures and special considerations
 - Passing of flatus tube
 - Enemas
 - Suppository
 - Sitz bath
 - Bowel wash
 - Care of ostomies
 - Nasogastric suction/ gastric decompression gastric irrigation, & gastric analysis.
- **Mobility and exercise:**
 - 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 interventions for impaired body alignment and mobility: assessment, types, devices used, method and special considerations, rehabilitation aspects
 - Range of motion exercises.
 - Positions of patient in bed.
 - Moving and lifting.
 - Transferring & transporting.
- **Oxygenation:**
 - Factors affecting oxygenation.
 - Alterations in oxygenation.
 - Nursing interventions in oxygenation: assessment, types, equipment used, procedure and special considerations
 - Maintenance of patent airway
 - Oxygen administration
 - Inhalations: dry and moist
 - Chest physiotherapy and postural drainage
 - Suctioning: Oropharyngeal & ETT
 - Care of chest drainage
 - Pulse oximetry
 - Basic life support (BLS)
- **Fluid, electrolyte and acid base balances**
 - Distribution and composition of body fluids.
 - Movements and regulation of body fluid and electrolytes.
 - Regulation of acid-base balance & types of acid-base imbalance.
 - Types of intravenous fluids.
 - Measuring fluid intake and output and maintaining intake-output charts.
 - Initiating intravenous therapy.
 - Regulating intravenous flow rate
 - Maintenance of intravenous system
 - Changing a peripheral intravenous dressing.
 - Blood transfusion.
 - Conditions need fluid restriction
- **Skin integrity**
 - Pressure ulcers: concept, pathogenesis and classification.
 - Risk factors of pressure ulcer development.
 - Factors influencing pressure ulcer formation
 - Care & management of pressure ulcer.
 - Assessment of risk for pressure ulcer development
 - Management of pressure ulcers
- **Psychosocial needs**
 - Concepts of cultural diversity, self-concept, sexuality, spiritual health, stress and adaptation.
 - Assessment of psychosocial needs of patient and family.



Content

- Nursing intervention for psychosocial needs.
- Assisting with coping and adaptation
- Creating therapeutic environment
- Recreational and diversional therapies.

Infection Control in Clinical Settings

- Infection control

- Nature of infection.
- Chain of infection transmission.
- Defences against infection: natural and acquired.
- Hospital acquired infection (Nosocomial infection).
- Concept of asepsis: *medical asepsis and surgical asepsis*.
- Isolation precautions (Barrier nursing)
- Hand washing: *Medical and surgical hand washing*.
- Isolation: source and protective.
- Personal protective equipment's: *types, uses and technique of wearing and removing*
- *Disinfection of equipment and unit*
- Transportation of infected patients
- Standard safety precautions (universal precautions).
- Transmission based precautions

- Biomedical waste management:

- Concept and importance
- Types of hospital waste
- Hazards associated with hospital waste
- Segregation of hospital waste
- Treatment, transportation and disposal of hospital waste

Administration of Medications

- Pharmacological concept:

- Pharmacokinetics & Pharmacodynamics

- Indian drug legislations & standards

- Routes of drug administration

Types of drug action/ effects

- Storage and maintenance of drugs and nurses responsibility.

- Systems of drug measurement

- Clinical drug dose calculation & converting

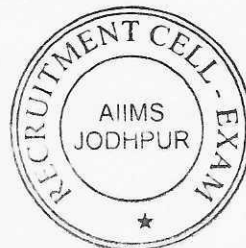
- Terminologies and abbreviations used in prescriptions of medications.

- Principles of drug administration including seven 'Rs'.

- Medication administration:

- Oral drugs administration: oral, sublingual and buccal
- Parenteral medication: purpose, sites, equipment's, preparation and procedure & special consideration:-
 - Subcutaneous injection
 - Intradermal injection
 - Intramuscular injection
 - Intravenous infusion
 - Advanced injection techniques: epidural, intrathecal, intraosseous, intraperitoneal, intraplural, intra-arterial:- role of nurse .
- Topical application: purposes, site, equipment, procedure, special considerations:
 - Skin application
 - Nasal instillation
 - Eye instillation
 - Ear instillation
 - Vaginal instillation
 - Rectal instillation
- Medication by inhalation:
- Irrigations: eye, ear, bladder, vaginal and rectal.
- Spraying: nose and throat

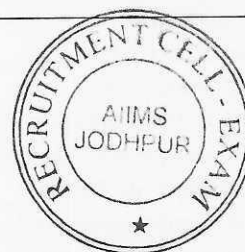
- Recording and reporting of medications administered



Content
<p>Meeting Needs of Perioperative Patients</p> <ul style="list-style-type: none"> - Definition and concept of peri-operative nursing - Preoperative phase <ul style="list-style-type: none"> • Preparation of patient for surgery - Intra-operative phase <ul style="list-style-type: none"> • Operation theatre set up and environment • Role of nurse in intra-operative phase. - Postoperative phase <ul style="list-style-type: none"> • Recovery unit and post-operative unit. • Postoperative care - Wounds: <i>types, classifications wound healing process, factors affecting wound, complications of wound healing</i> - Surgical asepsis - Care of the wound: <i>types, equipment's, procedure and special considerations</i> <ul style="list-style-type: none"> • Surgical dressings, suture care. • Care of drainage at surgical site. • Application of bandages and binders.
<p>Care of terminally ill patient</p> <ul style="list-style-type: none"> • 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 in care of terminally ill patient. • Care of dead body: equipment, procedure and care of unit • Autopsy and embalming
<p>Theoretical Foundations of Nursing Practice</p> <ul style="list-style-type: none"> • The domain of nursing theory • Interdisciplinary theories • Selected nursing theories • Link between theory and knowledge development in nursing
<p>Concept and Principles of First Aid</p> <ul style="list-style-type: none"> • Definition, aims and importance of first aid. • Principles of first aid. • Preparation of first aid kit. <p>First aid in emergencies</p> <ul style="list-style-type: none"> • Asphyxia, Drowning, shock, wounds and bleeding • Injuries to the bone, joints and muscles – fracture, sprain, strain, hanging and fall. • Burns and scalds. • Poisoning – Ingestion, inhalation, bites and stings. • Foreign body in eye, ear, nose and throat.

PSYCHOLOGY

Content
<p>Introduction:</p> <ul style="list-style-type: none"> • History and origin of science of psychology • Definitions & Scope of psychology • Relevance to nursing • Methods of psychology
<p>Biology of behavior</p> <ul style="list-style-type: none"> • Body mind relationship modulation process in health and illness • Genetics and behaviour: <ul style="list-style-type: none"> • Heredity and environment • Brain and behaviour: Nervous System, Neurons and synapse, • Association Cortex, Rt and Lt Hemispheres • Psychology of Sensations



Content
<ul style="list-style-type: none"> • Muscular and glandular controls of behaviour • Nature of behaviour of an organism/ Integrated responses
<p>Cognitive Processes:</p> <ul style="list-style-type: none"> • Attention: Types, determinants, Duration & degree and alterations • Perception: Meaning, Principles, factors affecting and Errors, • Learning: Nature, Types, Learner and learning, Factors influencing, laws and theories, process, transfer and study habits • Memory: Meaning, Types, Nature, Factors influencing, Development theories and methods of memorizing & forgetting • Thinking: Types and levels, stages of development, Relationship with language and communication • Intelligence: Meaning, classification, uses and theories • Aptitude: Concept, types, Individual differences and variability • Psychometric assessment of cognitive processes • Alterations in cognitive process • Applications
<p>Motivation and Emotional processes:</p> <ul style="list-style-type: none"> • Motivation: Meaning, Concepts, Types, Theories, Motives and behavior, Conflicts and frustration and conflict resolution • Emotions & stress <ul style="list-style-type: none"> ○ Emotion: Definition, components, Changes in emotions, theories, emotional adjustment, emotions in health and illness ○ Stress: stressors, cycle, effect, adaptation & coping • Attitude: Meaning, nature, development and factors affecting, <ul style="list-style-type: none"> ○ Behavior and attitudes ○ Attitudinal changes • Psychometric assessments of emotions and attitudes • Alterations in emotions • Applications
<p>Personality:</p> <ul style="list-style-type: none"> • Definitions, topography, types and Theories • Psychometric assessments of personality • Personality assessment: objective test, projective test/ subjective test. • Alternations in personality • Applications
<p>Psychological assessment & tests:</p> <ul style="list-style-type: none"> • Types, development, Characteristics, Principles, Uses, Interpretations and Role of nurse in psychological assessment i.e. VIQ, PIQ.
<p>Developmental Psychology:</p> <ul style="list-style-type: none"> • Psychology of people at different ages from infancy to old age • Psychology of vulnerable individuals- challenged, women, sick etc • Psychology of groups
<p>Mental hygiene and mental Health:</p> <ul style="list-style-type: none"> • 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



MICROBIOLOGY

Content
<ul style="list-style-type: none"> • Introduction & Historical background:

Content

- Importance of Medical Microbiology in diagnosis and prevention of infectious diseases. Explain the importance of microbiology in nursing. Contribution of Antony van Leeuwenhoek, Pasteur, Lister, Robert Koch, Fleming, Jenner etc.

- **Definition:**

- Medical Microbiology which includes the branches, Bacteriology, Virology, Mycology, Parasitology and Immunology. Infection, Pathogen, Commensal, Symbiosis, Host, Vector, Contagious Disease, Infectious disease, Epidemic, Endemic, Pandemic & Zoonosis, Flora of the human body.
- Source, Mode of infection, route of infection and spread, Endogenous and exogenous infection, reservoir of infection.

Infection Control

- **Sterilization and Disinfection:**

Definition of sterilization, Disinfection, Asepsis, Antisepsis, ubiquity of bacteria, Mode of killing microbes and preventing them. Enumeration of physical methods of sterilization which includes principles and their application. Details on working and efficacy, testing of Autoclave, Hot air oven, Incinerator and, Koch's steamer

Concept of Central sterile supply Department (CSSD), Modes of action of chemical agents on microbes – Phenols, Halogens, Aldehydes, Acids, Alcohol, Heavy metals, Oxidizing agents and antiseptic policy. Universal Biosafety precautions.

Occupational hazards of health care workers and control (post exposure prophylaxis-PEP)

- **Chemotherapy:** Antimicrobial Susceptibility tests (disk diffusion test-Kirby- Bauer's method and Stoke's method.)
- **Waste Disposal:** Definition of waste, Classification and disposal.

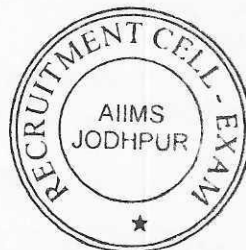
General characteristics of Bacteria

- **Morphology of Bacteria:** Bacterial cell, Morphological classification, method of studying of bacteria, staining methods and their principles, especially Gram & Ziehl Neelsen Staining their importance in presumptive diagnosis,
- **Physiology of Bacteria:** Nutritional requirements, growth curve. Culture media: - Definition, Classification and application, Constituents of culture media.
- **Identification of Bacteria:** Specimen collection-type of infection, nature of specimen, aseptic precautions to be taken while collecting the sample, Transportation and processing of specimen for microbiological diagnosis which includes culture methods, biochemical reactions and serological tests and animal pathogenicity.
- **Bacterial Genetics:** Definition, Basic structure of DNA and Drug Resistance Mutation, Transduction, Transformation, Conjugation and R factor. Mechanisms of Drug resistance and Transfer of resistance.
- **Normal Flora:** Introduction- various sites, types and role.

Systemic Bacteriology

Morphology, Classification, Pathogenesis, Laboratory diagnosis, Prevention & control, Treatment, National control and Eradication programme of:

- Gram Positive Cocci – Staphylococcus/ Streptococcus/ Enterococcus/ Pneumococcus
- Gram Negative Cocci - Neisseria.
- Gram Positive Bacilli
 - C. diphtheria
 - Mycobacterium tuberculosis
 - Atypical Mycobacteria, HIV and Mycobacteria.
 - M. leprae
- Cl. Welchii, Cl. Tetani and Cl. Botulinum
- Enterobacteriaceae
- Salmonella
- Vibrio,
- Pseudomonas
- Spirochete
- Rickettsiae, Chlamydia
- Actinomycetes, Nocardia
- Bacteriology of Air, Water, Milk and Food

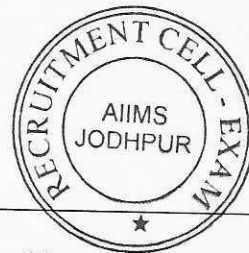


Parasitology

- Introduction: Parasite- their nature, classification, explanation of terminology, emerging parasitic infections.

Content

- Morphology, Classification, Pathogenesis, Laboratory diagnosis, Prevention & control, Treatment & Immunoprophylaxis of:
 - E. histolytica
 - Malaria
 - Pathogenic Protozoa: Toxoplasma, Trichomonas vaginalis,
 - Cestodes : Taenia saginata and T. solium, Echinococcus granulosus
 - Intestinal Nematodes: E. vermicularis
 - Tissue Nematodes: W. bancrofti



Mycology

- Introduction: Characterization of fungi Morphology and clinical classification of fungi.
- Morphology, Classification, Pathogenesis & Laboratory diagnosis of:
 - Systemic mycosis
 - Subcutaneous mycosis: Mycetoma
 - Superficial Mycosis: Candida, Cryptococcus
- Opportunistic fungal Infection: Classification, Predisposing factors, Morphology of Aspergillus, Pneumocystis carinii

Virology

- Introduction: Morphology, multiplication classification of viruses, Bacteriophage - Laboratory diagnosis of viral infections, Collection of samples, transport, cultivation and method of diagnosis.
- Morphology, Classification, Pathogenesis, Laboratory diagnosis, Prevention & control, Treatment & Immunoprophylaxis of:
 - Herpes Viruses
 - Hepatitis Viruses
 - Picorna Viruses: Immunoprophylaxis of poliomyelitis
 - Orthomyxo Viruses: Antigenic variation in influenza virus with relevance to vaccine efficacy
 - Paramyxo Viruses: measles, mumps and rubella
 - Arboviruses: List of arboviruses prevalent in India, Dengue, KFD, Japanese encephalitis
 - Rhabdoviruses: Antirabies vaccines
 - Retroviruses

Immunology

- Introduction: Definition of immunity, types of immunity, factors responsible, Mechanism of innate immunity, Active and passive immunity, local Immunity and can add note on herd immunity.
- Antigens: Definition, types, antigen determinants, properties of antigen.
- Antibodies: Definition nature, structure of immunoglobulin – immunoglobulin classes, Physical and biological properties of immunoglobulin.
- Serological Reactions: Definition of titre, sensitivity and specificity, prozone phenomenon, Principles, Types and application of precipitation, Gel diffusion, Agglutination, Complement fixation, ELISA, RIA, immunofluorocent Test, neutralization and opsonization.
- Structure and function of Immune System: Primary lymphoid organs, Secondary lymphoid organs, Cells of immune system, lymphocytes, T cells, B cells, Null cells, Antigen presenting cells (APC).
- Immune Response: Humoral, CMI
- Complement: Definition, Components, and biological functions.
- Hypersensitivity: Definition, Classification Difference between immediate and delayed reactions, mechanism and manifestation of anaphylaxis, types and tests for anaphylaxis.
- Vaccination: Principles of immunization, classification, National Immunization Programme, Immunoprophylaxis, Nature of vaccines, rationale and dosage storage, handling & cold chain. Future Vaccines.

Applied Microbiology

- Gastrointestinal infections (Diarrhea and Dysentery) and their laboratory diagnosis.
- Upper Respiratory tract infections (Patch and sore throat) and their laboratory diagnosis.
- Lower Respiratory Tract infections (Pneumonia, Bronchitis, Bronchiolitis etc.) and their laboratory diagnosis.
- Urinary tract infection and their laboratory diagnosis.
- Infection of Central Nervous System (Meningitis, Encephalitis, Brain abscess) and their laboratory diagnosis.

Content

- Pyrexia of unknown origin, organisms and their laboratory diagnosis.
- Sexually transmitted disease and their laboratory diagnosis.
- Hospital infections - definition, classification, type of infection, laboratory diagnosis, hospital infection control committee - role of nurse, protocol, collection of samples, preparation of report and status of rate of infection in the unit/ hospital, nurse's accountability, continuing education etc.
- Microbiological investigation of an outbreak.

PHARMACOLOGY

Content

Introduction to pharmacology

- Definitions
- Branches, Nature & Sources
- Terminology Used.
- Types: Classification
- Abbreviations, Prescription, Drug Calculation, Weights and Measures.
- Dosage Forms.
- Pharmacodynamics: Actions, Drug Antagonism, Synergism, Tolerance, Receptors, Therapeutic, adverse, toxic effects.
- Pharmacokinetics: Absorption, Bioavailability, Distribution, Metabolism, Interaction, Excretion
- Review: Factor Modifying Dose, Route and Principles of Administration of Drugs
- Indian Pharmacopoeia: Legal Issues, Drug Laws, Schedule Drugs.
- Rational Use of Drugs
- Principles of Therapeutics

Chemotherapy

- General Principles of use of antimicrobials etc.
- Pharmacology of commonly used drugs
Penicillin, Cephalosporin's, Amino glycosides, Macrolide & broad spectrum antibiotics, Sulfonamides quinolones, others. Antimicrobials, Anaerobic infections, Antimalarials, Anthelmintics, Anti scabies agents, Antiviral, Antifungal agents, Antitubercular drugs, Anti leprosy drugs, Anticancer drugs, Immuno-suppressants and Immunostimulants.
- Composition, action, dosage, route, indications, contraindications, Drug Interactions, side effects, adverse effects toxicity and role of nurse

Pharmacology of common used antiseptics, disinfectant and insecticides

- Antiseptics;
- Composition, action, dosage, route, indications, contraindications, Drug Interactions, side effects, adverse effects toxicity and role of nurse
 - Disinfectants
 - Insecticides

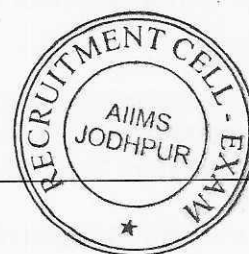
Drugs acting on G.I system

- Pharmacology of commonly used
 - Antiemetics
 - Emetics
 - Purgatives
 - Antacids and antipeptic ulcer drugs
 - Cholinergic
 - Anticholinergics
 - Fluid and electrolyte therapy
 - Anti diarrhoeals
 - Histamines

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

Drugs used on respiratory systems

- Pharmacology of commonly used
 - Antiasthmatics
 - Mucolytics



Content

- Decongestants
- Expectorants
- Antitussives
- Bronchodilators
- Broncho constrictors
- Antihistamines

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

Drugs used on urinary system

- Pharmacology of commonly used
 - diuretics and antidiuretics, urinary antiseptics
 - cholinergic and anticholinergics
 - acidifiers and alkalinizers
 - drugs toxic to kidney

Composition, action, dosage, route, indications, contraindications, Drug Interactions, side effects, adverse effects toxicity and role of nurse

Miscellaneous

- Drugs used in de-addiction
- Drugs used in CPR and emergency
- Vitamins and minerals
- Immunosuppressant
- Antidotes
- Vaccines & sera (immunization schedules, general principles of treatment of poisoning, antidotes, treatment of snake bite poisoning, & antivenom)

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

Drugs acting on nervous system

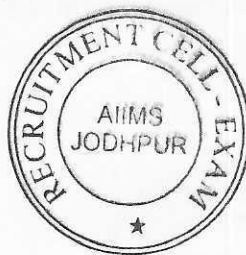
- Basic & applied pharmacology of commonly used:
- Analgesics and anaesthetics
 - Analgesics
- Non steroidal anti-inflammatory(NSAID)drugs
 - Antipyretics
 - Hypnotics and sedatives
- Hypnotics and sedatives
- Opioids & Non Opioids
- Tranquilizers
- General (techniques of GA, pre anesthetic medication) & local anesthetics
- Gases: local anesthetics
- Gases: oxygen, nitrous, oxide, carbon-dioxide & others
- Cholinergic and anti-cholinergic:
 - Muscle relaxants
 - Major tranquilizers
 - Anti-psychotics
 - Antidepressants
 - Anti-Anxiety Drugs
 - Anticonvulsants
 - Adrenergic
 - Nor-adrenergics
 - Mood stabilizers
 - Acetylcholine
 - Stimulants ethyl alcohol and treatment of methyl alcohol poisoning



Content
<ul style="list-style-type: none"> ○ Drugs used in Parkinsonism & miscellaneous drugs <p>Composition, action, dosage, route, indications, contraindications, drug Interactions, side effects, adverse effects toxicity and role of nurse</p>
<p>Cardiovascular drugs</p> <ul style="list-style-type: none"> ● Haematinics ● Cardiotonics ● Anti anginals & Antiarrhythmics ● Anti-hypertensive & vasodilators ● Coagulants & Anticoagulants ● Antiplatelets & thrombolytics ● Hypolipidemics ● Plasma expanders <p>Composition, action, dosage, route, indications, contraindications, drug Interactions, side effects, adverse effects toxicity and role of nurse</p>
<p>Drugs used for hormonal, disorders and supplementation, contraception And medical termination of pregnancy</p> <ul style="list-style-type: none"> ● Insulin & oral hypoglycemic ● Thyroid supplements and suppressants ● Steroids, anabolics ● Uterine stimulants and relaxants ● Oral contraceptives ● Other estrogen progesterone preparations ● Corticotropin & gonadotropines ● Adrenaline ● Prostaglandins ● Calcitonin, parathormone, vit. D3, calcium metabolism. ● Calcium salts ● Calcium regulators <p>Composition ,actions dosage route indications contraindications, drugs interactions, side effects, adverse, effects, adverse effects, toxicity and role of nurse</p>
<p>Introduction to drugs used in alternative systems of medicine: Ayurveda, homeopathy, unani and siddha etc. Role of Nurse in alternative system of medicine.</p>

PATHOLOGY

Content
<ul style="list-style-type: none"> ● Introduction <ul style="list-style-type: none"> ○ 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 <ul style="list-style-type: none"> ○ Normal and Cancer cell ○ Benign and Malignant growths ○ In situ carcinoma ● Disturbances of fluid and electrolyte imbalance ● Immunity & its types ● Introduction to autoimmune diseases
<p>Special pathology</p> <ul style="list-style-type: none"> ● Pathological changes in disease conditions of various systems:



Content

- Respiratory tract
 - Tuberculosis, Bronchitis, Pleural effusion and pneumonia,
 - Lung abscess, emphysema, bronchiectasis
 - Bronchial asthma, Chronic obstructive Pulmonary disease & tumours
- Cardio-vascular system
 - Pericardial effusion
 - Rheumatic heart disease
 - Infective endocarditis, atherosclerosis
 - Ischemia, infarction & aneurysm
- Blood Disorders
 - Anemia and its types
 - Leukemia and its types
 - Bleeding disorders
- 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 & tumours
- 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

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 grouping and cross matching
 - Blood chemistry
 - Blood culture
 - Serological and immunological tests
 - Other blood test
 - Examination of Bone marrow
 - Methods of collection of blood specimen for various clinical pathology, biochemistry, microbiology tests, inference and normal values



Examination of body cavity fluids, transudates and exudates

Content

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

Genetics

Content

Introduction:

- Concept and basics of genetics
- Practical application of genetics in Nursing
- Impact of genetics 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 alleles and blood groups
 - Sex linked inheritance
 - Mechanism of inheritance
 - Errors in transmission (Mutations)

Maternal, prenatal and genetics

- Conditions affecting the mother: genetics and infections
- Consanguinity atopy
- Prenatal nutrition and food allergies.
- Maternal age
- Maternal drug therapy
- Prenatal testing and diagnosis
- Effects of radiation, drugs and chemicals
- Infertility
- Spontaneous abortion
- Neural tube defects
- Down syndrome (Trisomy 21)

Genetic testing in the neonates and children

- Meaning & purposes
- Newborn screening
- Genetic testing and screening in children
- Screening for:
 - Congenital abnormalities
 - Developmental delay
 - Dysmorphism



Genetic conditions of adolescents and adults

- Cancer genetics – familial cancer
- Inborn errors of metabolism

Content

- Blood group alleles and hematological disorder
- Genetic haemochromatosis
- Huntington's disease
- Mental illness
- Therapeutic approach for genetic disorders
- Nursing management in genetic disorders

Services related to Genetics

- Genetics testing
- Human genome project
- Gene therapy
- The Eugenics movement
- Genetic Counseling
- Role of nurse in genetic counseling

MEDICAL – SURGICAL NURSING– I

Content

Introduction :

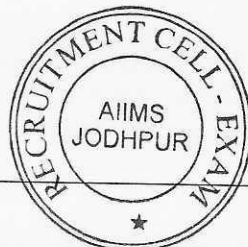
- Introduction to medical surgical nursing.
- Historical development s of medical and surgical nursing
- Current status of health and disease burden in India.
- Theory of Health and illness.
- International classification of disease.
- Holistic aspects of Healthcare by applying nursing process.
- Role of nurse, patient and family in care of adult patient.
- Role and responsibilities of a nurse in medical surgical settings:
 - Outpatient department
 - In-patient department
 - Intensive care unit
 - Perioperative Nursing care.
 - Pre-operative
 - Intraoperative
 - Postoperative

Common signs and symptoms and management:

- Fluid and electrolyte imbalance
- Vomiting
- Dyspnea and cough, respiratory obstruction
- Fever
- Shock
- Unconsciousness, syncope
- Pain
- Incontinence
- Edema
- Inflammation and Wound healing.
- Sleep disorder.
- Age related problems- geriatric

Nursing management of patients with respiratory problems

- Review of anatomy and physiology of respiratory system
- Nursing assessment- History and physical assessment
- Etiology, Pathophysiology, Clinical manifestation, diagnosis, medical and surgical treatment modalities, alternative therapies, dietetics and nursing management (Nursing process including nursing procedures).
 - ❖ Upper respiratory problems
 - ❖ Lower Respiratory tract
 - Asthma
 - Bronchitis
 - COPD

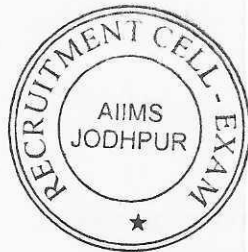


Content

- Bronchiectasis
- Atelectasis
- Pneumonia
- Pulmonary Tuberculosis
- Lung Abscess
- Pleural Effusion
- Pulmonary edema
- Pulmonary Embolism
- Pulmonary Hypertension
- Chest injuries
- Lung Tumors
- Acute Respiratory Failure
- Adult Respiratory Distress Syndrome
- Interstitial lung disease
- Sarcoidosis
- Occupational lung Disease
- Congenital Disorders

Nursing management of patients with disorders of digestive system

- Review of anatomy and physiology of digestive system
- Nursing assessment- History and physical assessment
- Etiology, Pathophysiology, Clinical manifestation, diagnosis, medical and surgical treatment modalities, alternative therapies, dietetics and nursing management (Nursing process including nursing procedures).
 - **Oral cavity-** Cheilitis, Stomatitis, Oral Cancer, Gingivitis, Parotiditis
 - **Oesophagus-** inflammation, obstruction, hiatal hernia, bleeding and tumours
 - **Stomach and duodenum-**gastritis, peptic ulcer, GI bleeding , Gastric cancer, pyloric stenosis
 - **Intestinal disorders-**
 - Malabsorption
 - Gastro enteritis and Dysentery
 - Protozoal Infection
 - Appendicitis
 - Peritonitis
 - Inflammatory Bowel Disease
 - Cancer of the small Bowel
 - Colon Cancer
 - Herniations
 - Diverticular Disorders
 - Obstruction
 - Irritable bowel Syndrome
 - Crohn's disease
 - **Anal and Rectum:**
 - Hemorrhoids
 - Pilonidal cyst
 - Fissure
 - Fistula
 - Rectal Abscess
 - Tumors of the Rectum
 - Abdominal Trauma
 - Congenital Disorders
 - **Pancreas;** Pancreatitis, cysts, abscess and tumours
 - **Liver:** Hepatitis, cyst, abscess, cirrhosis, portal hypertension, hepatic failure, tumours
 - **Gall bladder:** Cholecystitis, Cholelithiasis, obstruction and tumours



Nursing management of patients with cardiovascular problems

- Review of anatomy and physiology of cardiovascular system
- Nursing assessment- History and Physical assessment

Content

- Etiology, Pathophysiology, Clinical manifestation, diagnosis, medical and surgical treatment modalities, alternative therapies, dietetics and nursing management (Nursing process including nursing procedures).
- Vascular system
 - Hypertension
 - Aneurysms
 - Peripheral vascular disorders
 - Raynaud's disease
 - Thromboangitis Obliterans
 - Venous insufficiency
 - Varicose veins

Heart

- Coronary artery diseases
 - Ischemic Heart Disease
 - Coronary atherosclerosis
 - Angina pectoris
 - Myocardial infarction
- Valvular disorders of the heart
 - Congenital and acquired
 - Rheumatic Heart diseases
- Endocarditis, pericarditis and myocarditis
- Cardio Myopathies
- Cardiac dysrhythmias, Heart Block
- Congestive cardiac failure
 - Cor-pulmonale, pulmonary edema, cardiogenic shock, cardiac tamponade
- Cardiac arrest
- Basic Life Support: Advanced Cardiac Life Support

Nursing management of patients with haematologic problems

- Review of anatomy and physiology of haematologic system
- Nursing assessment- History and Physical assessment
- Etiology, Pathophysiology, Clinical manifestation, diagnosis, medical and surgical treatment modalities, alternative therapies, dietetics and nursing management (Nursing process including nursing procedures).
 - Anemias
 - Polycythemia
 - Disorders of clotting factor defects and platelets defects
 - Disorders of White Blood cells
 - Disorders of the lymphoidal system
 - Coagulation disorders
 - Congenital disorders
 - Blood transfusion
 - Blood bank functioning and hospital transfusion committee. Bio-safety and waste management in relation to blood transfusion
 - Bone marrow transplantation
 - Gene therapy in Haematological conditions
 - Role of a nurse in Organ donation, retrieval and banking.

Nursing management of patients with genito-urinary problems

- Review of anatomy and physiology of genito-urinary system
- Nursing Assessment- History and Physical Assessment
- Etiology, Pathophysiology, Clinical manifestation, diagnosis, medical and surgical treatment modalities, alternative therapies, dietetics and nursing management (Nursing process including nursing procedures).
 - ❖ **Urological obstructions**
 - Urethral strictures
 - Renal calculi
 - Nephrosis
 - Benign prostrate hypertrophy



Content

- **Disorders of Kidney**
 - ❖ Glomerulonephritis
 - ❖ Nephrotic syndrome
 - ❖ Nephrosis
 - ❖ Acute renal failure
 - ❖ Chronic renal failure
 - ❖ End stage renal disease
 - ❖ Dialysis, renal transplant
 - ❖ Cancer of Kidney
 - ❖ Congenital disorders
- **Disorders of ureter, urinary bladder and urethra-**
 - Urinary Tract Infection
 - Cystitis
 - Urinary Incontinence
 - Urinary Retention
 - Urinary Reflux
 - Bladder Neoplasm
 - Urinary Bladder Calculi
 - Urethritis
 - Urethral Tumors
 - Ureteritis
 - Ureteral Calculi
 - Trauma of Ureter, Bladder, Urethra
 - Neoplasms of Ureter, Bladder, Urethra
 - Congenital Disorders of Ureter, Bladder, Urethra

Nursing management of disorders of male reproductive system

- Review of anatomy and physiology of male reproductive system
- Nursing Assessment – History and physical assessment
- Etiology, Pathophysiology, Clinical manifestation, diagnosis, medical and surgical treatment modalities, alternative therapies, dietetics and nursing management (Nursing process including nursing procedures).
- Prostate Disorders
 - Prostate Cancer
 - Prostatitis
- Infections of Testes, Penis and Scrotum
- Injury of Penis and Scrotum
- Disorders of Reproductive Ducts
- Disorders of seminal vesicle
- Tumors
- Congenital Malformations
- Erectile Dysfunctions
- Infertility
- Breast; gynecomastia, tumour
- Climacteric changes

Nursing Management of patient with disorders of endocrine system)

- Review of anatomy and physiology of endocrine system
- Nursing Assessment- History and Physical Assessment
- Etiology, Pathophysiology, Clinical manifestation, diagnosis, medical and surgical treatment modalities, alternative therapies, dietetics and nursing management (Nursing process including nursing procedures).
- ❖ **Disorders of Thyroid**
 - ✓ Hypert thyroidism
 - ✓ Hypothyroidism
 - ✓ Thyroiditis
 - ✓ Cancer Thyroid
 - ✓ Goiter
- ❖ **Disorders of Parathyroid**
 - ✓ Hyperparathyroidism



Content

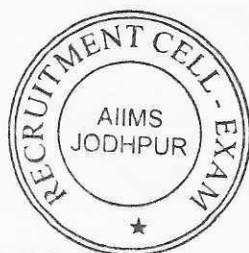
- ✓ Hypoparathyroidism
- ❖ **Disorders of Pituitary gland**
 - ✓ Hyperpituitarism
 - ✓ Gigantism and Acromegaly
 - ✓ Cushing's Diseases
 - ✓ Hypopituitarism
 - ✓ Diabetes Insipidus
 - ✓ Syndrome of inappropriate ADH
- ❖ **Disorders of adrenal gland**
 - ✓ Cushing's Syndrome
 - ✓ Addison's Disease
 - ✓ Pheochromocytoma (Adrenal Tumour)
 - ✓ Conn's Syndrome
- ❖ **Others**
 - ✓ Pre metabolic Syndrome
 - ✓ Diabetes Mellitus

Nursing management of patient with disorders of Integumentary system

- Review of anatomy and physiology of skin and its appendages
- Nursing Assessment- History and Physical Assessment
- Etiology, Pathophysiology, Clinical manifestation, diagnosis, medical and surgical treatment modalities, alternative therapies, dietetics and nursing management (Nursing process including nursing procedures)
 - Pruritus
 - Lesions & Abrasions
 - Eczematous Disorders
 - Pemphigus
 - Cellulites
 - Acne Vulgaris
 - Alopecia
 - Skin Cancer
 - Systemic Lupus Erythematosus
 - Dermatitis, dermatosis
 - Psoriasis
 - Melanomas

Nursing management of patient with musculoskeletal problems

- Review of Anatomy & Physiology of musculoskeletal systems
- Nursing Assessment – History and Physical assessment
- Etiology, Pathophysiology, Clinical manifestation, diagnosis, medical and surgical treatment modalities, alternative therapies, dietetics and nursing management (Nursing process including nursing procedures).
- ❖ **Disorders of musculoskeletal System**
 - Fractures
 - Strains & Sprains
 - Dislocations & Subluxations
 - Low Back Pain
 - Arthritis
 - Osteomyelitis
 - Osteomalacia
 - Osteoporosis
 - Scoliosis, Kyphosis, Lordosis
 - IVDP
 - Paget's Disease
 - Disorders of the hand
 - Disorders of the foot
 - Muscular Dystrophy
 - Congenital Disorders
 - THR/TKR
 - Rehabilitation



Content

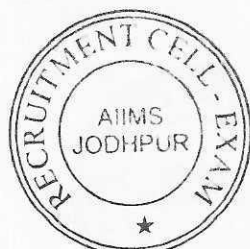
- Amputation
- Spinal disorders: pott's disease
- Gout

Nursing management of patient with Immunological problems

- Review of Immune system,
- Nursing Assessment-History and physical assessment
- Etiology, Pathophysiology, Clinical manifestation, diagnosis, medical and surgical treatment modalities, alternative therapies, dietetics and nursing management (Nursing process including nursing procedures).
- Altered immune disorders
 - Primary immuno deficiency
 - Phagocytic dysfunction
 - B-cell and T-cell deficiencies
 - Secondary immunodeficiencies
- **Immunodeficiency disorders**
- **HIV and AIDS**
 - Incidence of HIV and AIDS
 - Epidemiology
 - Transmission and Prevention of Transmission
 - Standard Safety precautions
 - Role of Nurse; Counselling
 - Health education and home care consideration
 - National AIDS control program (NACO), various national and international agencies
 - Auto Immune disorders
 - Infection control program
 - Rehabilitation

Peri operative nursing:

- Organization and physical set up of the operation theatre (OT);
 - Classification
 - O.T. Design
 - Staffing
 - Members of the OT team
 - Duties and responsibilities of nurse in O.T.
 - Principles of operating room attire.
 - Basic Instruments sets use in OT.
 - Sutures and suture materials
 - Equipment's in OT.
 - 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 sterilization
 - Biomedical waste management
 - Prevention of accidents and hazards in O.T.
- Anaesthesia
 - Types
 - Methods of administration
 - Effects and Stages
 - Equipment's
 - Drugs
- Cardio Pulmonary Resuscitation (CPR)
- Pain management techniques
- Legal Aspects in OT.



COMMUNITY HEALTH NURSING-I

Content

Introduction

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

Approaches, concepts and roles and responsibilities of Community Health Nursing personnel

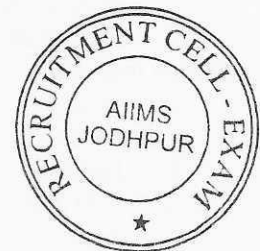
- Approaches
 - Nursing Process
 - concepts of primary health care
- Home visit: Concept, Principles, Process, Techniques: Bag Technique
- Qualities of Community Health Nurse

Determinants of health

- Eugenics
- Environment:
 - Physical: Air, light, Ventilation, Water, Housing, Sanitation; disposal of waste, disposal of dead bodies, forestation, Noise, Climate, Communication; infrastructure facilities and linkages
 - Acts regulating the environment; National pollution control board
 - Bacterial & 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

Content

- Measles
- Influenza
- Rubella
- ARI's & Pneumonia
- Mumps
- Diphtheria
- Whooping cough
- Meningococcal meningitis
- Tuberculosis
- SARS
- Intestinal Infections
 - Poliomyelitis
 - Viral hepatitis
 - Cholera
 - 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 forest disease
- Chiken gunya

Bacterial

- Brucellosis
- Plague
- Human salmonellosis
- Anthrax
- Leptospirosis

Rickettsial diseases

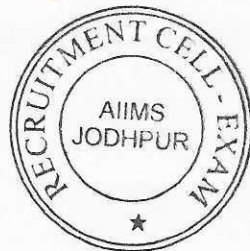
- Rickettsial diseases
- Scrub typhus
- Murine typhus
- Tick typhus
- Q fever

Parasitic zoonoses

- Taeniasis
- Hydatid disease
- Leishmaniasis

Surface infection

- Trachoma
- Tetanus
- Leprosy
- STD & RTI
- Yaws
- HIV/AIDS



Immunity, immunizing agents, Cold chain, National immunization schedule

Epidemiology and Nursing management of Non communicable diseases

- Malnutrition: under nutrition, over nutrition, nutritional deficiencies
- Anaemia

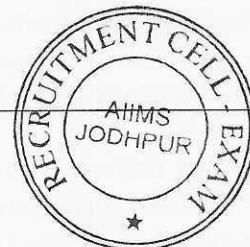
Content
<ul style="list-style-type: none"> • Hypertension • Stroke • Rheumatic Heart Disease • Coronary Heart Disease • Cancer • Diabetes mellitus • Blindness • Accidents • Mental illness • Obesity • Iodine Deficiency • Fluorosis • Epilepsy
Demography <ul style="list-style-type: none"> • Definition, concept and scope • Methods of collection, analysis and interpretation of demographic data • Demographic rates and ratios
Population and its control <ul style="list-style-type: none"> • Population explosion and its impact on social, economic development of individual, society and country • Population control: <ul style="list-style-type: none"> ○ Overall development: women empowerment, social, economic and educational development • Limiting family size: <ul style="list-style-type: none"> ○ Promotion of small family norm ○ Methods: spacing (natural, biological, chemical, mechanical method etc.) ○ Terminal: surgical methods ○ Emergency contraception

SOCIOLOGY

Content
Introduction <ul style="list-style-type: none"> • Definition of sociology • Nature and scope of the discipline • Social anthropology and sociology • Importance of Sociology in General • Importance of Sociology in Nursing.
Individual & society <ul style="list-style-type: none"> • Society –Meaning, Definitions & its Nature • Community- Meaning, Definitions & its elements • Difference between society and community • Process of socialization • Individualization • Personal disorganization-Meaning, types & its causes
Culture <ul style="list-style-type: none"> • Culture- Meaning & its Nature • Components of Culture • Evolution of culture • Diversity and uniformity of culture • Culture and socialization • Trans cultural society • Influence on health and disease
Social groups and processes <ul style="list-style-type: none"> • Social Groups- Meaning, Definitions & classifications of groups • Cooley's Classification-Primary & secondary group



Content
<ul style="list-style-type: none"> • Sumner's Classification-In group vs. out group • Class, Caste & race: criteria • Economic political & religious groups • Mob crowd public and audience interaction • Social processes- Cooperation competition conflict • Accommodation assimilation & isolation
<p>Population</p> <ul style="list-style-type: none"> • Society and population • Population distribution in India demographic characteristics • Malthusian theory of population • Population explosion in India and its impact on health status • Family welfare programmes
<p>Family and marriage</p> <ul style="list-style-type: none"> • Family and marriage • Family- Meaning, Definitions, Features & functions • Types- Joint, Nuclear, Blended and Extended family. • Family in India- Joint Family - Meaning, Features, Merits & Demerits & changes, Legislation on Family. • <u>The modern family</u> – <ul style="list-style-type: none"> ✓ Nuclear-Meaning ,Features, Problems of Modern Family –Divorce etc. problems dowry etc., welfare services ,changes ✓ Factors responsible for changes in nuclear & joint family. • Marriages: Meaning, Forms and Functions of marriage, Rules of Mate choice. • Marriage in India-Marriage acts, forms of marriage. • Marriage & Family problems in India • Family, marriage and their influence on health and health practices.
<p>Social stratification</p> <ul style="list-style-type: none"> • Meaning & types of social stratification • The Indian caste system –Meaning, origin, Features, Merits & Demerits. • Features of caste in India today • Social class system and status • Social mobility meaning & types • Race as biological concept criteria of racial classification • Salient features of primary races racism • Influence of class, caste and race on Health & health practices
<p>Types of communities in India (rural, urban and regional)</p> <ul style="list-style-type: none"> • Features of village community & • Characteristics of Indian villages • Panchayat system -Social Dynamics • Community Development project & planning • Changes in Indian rural life • Availability of health facilities in rural and its impact on health & 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
<p>Social change</p> <ul style="list-style-type: none"> • Nature and process of social change • Factors influencing social change • Cultural Change: Ogburn's Theory of cultural lag • Introduction to theories of social change: linear , cyclical, Marxian & Functional • Role of nurse as change agents



Content
<p>Social organization and social system</p> <ul style="list-style-type: none"> • 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
<p>Social control</p> <ul style="list-style-type: none"> • Nature and process of social control • Political, legal, religious, educational, economic • Industrial and technological systems. • Norms & values - folkways & mores, customs, laws and fashion • Role of nurse
<p>Social problems</p> <ul style="list-style-type: none"> • 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, Female foeticide, dowry system • Social welfare programmes in India • Role of nurse in dealing with the social problems

MEDICAL SURGICAL NURSING-II

Content
<p>Nursing management of patient with disorders of ear, nose and throat</p> <ul style="list-style-type: none"> • Review of anatomy and physiology of the ear, nose and throat. • <i>Nursing Assessment</i>: history and physical assessment. • <i>Etiology, Pathophysiology, Clinical manifestation, diagnosis, medical and surgical treatment modalities, alternative therapies, dietetics and nursing management</i>(<i>Nursing process including nursing procedures</i>): <ul style="list-style-type: none"> ➤ Disorders of External ear: deformities otalgia, foreign bodies and tumour's. ➤ Disorders of Middle ear: impacted wax, tympanic membrane perforation, otitis media, otosclerosis, mastoiditis, tumours. ➤ Disorders of Inner ear: Meniere's disease, labyrinthitis, ototoxicity and tumours. ➤ Disorders of Nose: Epistaxis, Rhinitis, Sinusitis, Nasal obstruction, Nasal polyps, Deviated nasal septum ➤ Disorders of Throat: Common cold, pharyngitis, tonsillitis and adenoiditis, peritonsillar abscess, laryngitis, laryngeal obstruction, cancer of larynx • Cancer of oral cavity • Speech defects and speech therapy. • Deafness • Prevention, control and rehabilitation • Hearing aids, implanted hearing devices
<p>Nursing management of patient with disorders of eye</p> <ul style="list-style-type: none"> • Review of anatomy and physiology of eye. • Nursing assessment: history and physical assessment. • Etiology, Pathophysiology, Clinical manifestation, diagnosis, medical and surgical treatment modalities, alternative therapies, dietetics and nursing management (Nursing process including nursing procedures). <ul style="list-style-type: none"> ➤ Conjunctivitis ➤ Blepharitis ➤ Hordeolum ➤ Chalazion ➤ Keratitis ➤ Refractive Errors ➤ Myopia



Content

- Hypermetropia
- Astigmatism
- Presbiopia
- cataract
- Glaucoma
- Uveitis
- Ocular tumours
- Retinal Detachment
- Retinitis
- Blindness, National blindness control program
- Ocular Emergencies & its Problems
- Eye banking
- Eye prostheses and rehabilitation
- Role of nurse-communication with visual impaired patient, eye camps

Nursing management of patient with neurological disorders

- Review of anatomy and physiology of the neurological system.
- **Nursing Assessment:** history, physical and neurological assessment.
- Etiology, Pathophysiology, Clinical manifestation, diagnosis, medical and surgical treatment modalities, alternative therapies, dietetics and nursing management (Nursing process including nursing procedures).
- ❖ **Disorders of Spine & Spinal Cord**
 - **Spinal Injury:** Paraplegia, Hemiplegia, Quadriplegia
 - Spinal Cord Compression
 - **Peripheral Neuropathies:** Guillain Bare'e Syndrome
 - Herniation Of Intervertebral Disc
 - Cranial, Spinal Neuropathies- Bell's Palsy, Trigeminal Neuralgia
 - Tumours of spinal cord
- ❖ **Disorders of Brain**
 - Tumours of brain
 - Intracranial & cerebral aneurysms
 - Cerebro vascular accident(CVA)
 - Degenerative diseases
 - Headache
 - Head injury
 - Altered level of consciousness
 - Congenital malformation
- ❖ **Infections**
 - meningitis,
 - encephalitis,
 - brain abscess,
 - neurocysticercosis
- ❖ **Movement disorder**
 - chorea
 - seizures
 - epilepsy
- ❖ **Myasthenia gravis**
- ❖ Multiple sclerosis
- ❖ Disorders of Elderly
 - Delirium
 - Dementia
 - Alzheimer's disease
 - Parkinson's disease
- Role of nurse in communicating with the patients with neurological deficit
- Rehabilitation of patients with neurological deficit
- Role of nurse in long stay facility(institutions) and at home



Nursing Management Of Patient With burns, reconstructive and cosmetic surgery

- Review of anatomy and physiology of the skin, connective tissues and various deformities.

Content

- Nursing assessment: history and physical assessment and assessment of burns and fluid and electrolyte loss.
- Etiology, Pathophysiology, Clinical manifestation, diagnosis, medical and surgical treatment modalities, alternative therapies, dietetics and nursing management (Nursing process including nursing procedures).
- Types of reconstructive and cosmetic surgery for burns, congenital deformities, injuries and cosmetic purposes.
- Role of nurse
- Legal aspects
- Rehabilitation

Nursing Management Of Patients With oncological conditions

- Structure & characteristics of normal & cancer cells
- **Nursing assessment** – history & physical assessment
- Prevention, screening, early detection, warning signs of cancer
- Etiology, Pathophysiology, Clinical manifestation, diagnosis, medical and surgical treatment modalities, alternative therapies, dietetics and nursing management (Nursing process including nursing procedures).
- *Common malignancies of various body systems ;*
 - Oral Cancer
 - Cancer Larynx
 - Cancer Lungs
 - Cancer Stomach
 - Cancer Liver
 - Cancer Colon
 - Hodgkin's Lymphoma
 - Leukemia
 - Cancer Breast
 - Cancer Cervix
 - Cancer Ovary
 - Cancer Uterus
 - Cancer Bladder
 - Cancer Prostrate
 - Glioma
 - Cancer Of Kidney
 - Sarcoma
- Oncological emergencies
- Modalities of treatment
 - ❖ Immunotherapy
 - ❖ Chemotherapy
 - ❖ Radiotherapy
 - ❖ Surgical interventions
 - ❖ Stem cell & bone marrow transplants
 - ❖ Gene therapy
 - ❖ Other forms of treatment
- Psycho social aspects of cancer
- Rehabilitation
- Palliative care ; symptom & pain management , nutritional support
- Home care
- Hospice care
- Stomal therapy



Nursing management of patient in emergency and disaster situations.

- Concepts and principles of disaster nursing
- Causes and types of disaster : natural and man made
 - ❖ Earthquakes, floods, epidemics, cyclones.
 - ❖ Fire , explosions, accidents
 - ❖ Violence, terrorism; biochemical, war
- Policies related to emergency / disaster management at international, national, state, institutional level.

Content

• **Disaster Management :**

- ❖ Team, guidelines, protocols, equipments, resources.
- ❖ Coordination & involvement of; community, various govt., department, non-govt. organization & international agencies.
- ❖ *Role of nurse* : working
- ❖ Legal aspects of Disaster Nursing
- ❖ Impact on health & after effects ; Post Traumatic Stress Disorder
- ❖ Rehabilitation ; Physical, Psychosocial, Financial, Relocation

• **Emergency Nursing :**

- ❖ Concept, priorities, principles & scope of emergency nursing
- ❖ Organization of emergency services: physical set up, staffing, equipment & supplies, protocols, Concepts of triage & role of triage nurse.
- ❖ Coordination & involvement of different departments & facilities
- ❖ *Nursing assessments* – history & physical assessments.
- ❖ Etiology, Pathophysiology, Clinical manifestation, diagnosis, medical and surgical treatment modalities, alternative therapies, dietetics and Nursing Management (Nursing process including nursing procedures) of medical and surgical emergencies.
 - Principles of emergency management
 - Common Emergencies
 - Respiratory Emergencies
 - Cardiac Emergencies
 - Shock & Haemorrhage
 - Pain
 - Poly-Trauma, road accidents, crush injuries, wound.
 - Bites
 - Poisoning; food, gas, drugs & chemical poisoning.
 - Seizures
 - *Thermal Emergencies* ; Heat Strokes & Cold Injuries
 - Paediatric emergencies
 - Psychiatric emergencies
 - Obstretical emergencies
 - Violence, abuse, sexual assault
 - Cardiopulmonary resuscitation
 - Crisis intervention
- ❖ Role of the nurse ; communication & interpersonal relations
- ❖ Medico-Legal Aspects

Nursing management of patient in critical care units

- ***Nursing assessment*** : history and physical assessment
- Classification
- Principles of critical care nursing
- ***Organization*** : physical set up, policies, staffing norms
- Protocols, equipment and supplies
- ***Special equipments***: ventilators, cardiac monitor, defibrillators
- Resuscitation equipment
- Infection control protocols
- Nursing management of critically ill patient
- BLS, Advance Cardiac Life support
- Treatments and procedures
- Transitional care
- Ethical and legal aspects in CCU
- Communication with patient and family.
- Intensive care records
- Crisis intervention
- Death and dying – coping with
- Drugs used in critical care unit.



Nursing care of the elderly

- ***Nursing assessment*** : history and physical assessment
- Ageing

Content

- **Demography** ; myths and realities
- Concepts and theories of ageing
- Cognitive aspects of ageing
- Normal biological ageing
- Age related body systems changes
- Psychosocial aspects of ageing
- Medications and elderly
- Stress and coping in older adults
- Common health problems and nursing management
- Cardiovascular, respiratory, musculoskeletal
- Endocrine, genito-urinary, gastro intestinal
- Neurological, skin and other sensory organs
 - psychosocial and sexual
 - abuse of elderly
- Role of nurse in care of elderly: ambulation, nutritional, communicational, psychosocial and spiritual
- role of nurse for care givers 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 programs for elderly, privileges, community programs and health services
- Home and institutional care.

CHILD HEALTH NURSING

Contents

Introduction: Modern concepts of child care

- Introduction
- Historical development of child health
- Philosophy & Modern concept of child care.
- Cultural and religious considerations in child care.
- National policy and legislations in relation to child health and welfare.
- National programmes and agencies related to welfare services to the children.
- Internationally accepted rights of the child
- Changing trends in hospital care, preventive, promotive and curative aspect of child health.
- Child morbidity and mortality rates.
- Difference between an adult and child which affect response to illness.
 - Physiological
 - Psychological
 - Social
 - Immunological
- Hospital environment for sick child.
- Impact of hospitalization on the child and family.
- Communication techniques for children.
- Methods of pain assessment in children.
 - FACES pain rating scale
 - FLACC scale
 - Numerical scale
- Principles of pre and postoperative care of infants and children.
- Grief and bereavement.
- The role of a child health nurse in caring for a hospitalized child.

The healthy child

- Definition and principles of growth and development.
- Factors affecting growth and development.
- Growth and development from birth to adolescence.
- Growth and developmental theories. (Freud, Erickson, Jean Piaget, Kohlberg)
- The need of normal children through the stages of developmental and parental guidance.
- Nutritional needs of children and infants.



Contents

- breast feeding
- exclusive breast feeding
- Supplementary / artificial feeding and weaning.
- Baby friendly hospital concept.
- Accidents; causes and prevention
- Types and value of play and selection of play material
- Preventive immunization, immunization programme and cold chain.
- Preventive paediatrics
- Care of under-five and Under-five Clinics /Well-baby clinics.

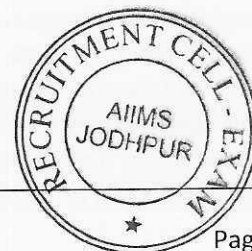
Nursing care of neonate:

- Appraisal of New-born
- Nursing care of a normal new born / essential new born care.
- Neonatal resuscitation
- Nursing management of low birth weight baby.
- Kangaroo mother care
- Nursing management of common neonatal disorder.
 - Hyperbilirubinemia
 - Hypothermia hyperthermia
 - Metabolic disorder
 - Neonatal infections
 - Neonatal seizures
 - Respiratory distress syndrome
- Organization of neonatal care unit.
- Identification and Nursing management of congenital malformations.

Integrated management of neonatal and childhood management.

Nursing management in common childhood diseases.

- Respiratory system:
 - a) Congenital disorder :Tracheoesophageal fistula, Diaphragmatic hernia
 - b) Others: - Acute naso-pharyngitis, Bronchitis, bronchiolitis, Tonsillitis, Bronchopneumonia, asthma
- Cardiovascular system:-
 - a) Congenital heart diseases: Cyanotic and Acyanotic.
 - b) Others: - Rheumatic fever and Rheumatic heart disease, Congestive cardiac failure.
- Digestive system:-
 - a) Congenital: Cleft lip, Cleft palate, Congenital hypertrophic pyloric stenosis, Megacolon, Malabsorption syndrome, Imperforate anus
 - b) Others: Gastroenteritis, Diarrhoea, Vomiting, Intestinal obstruction, Hepatic diseases, intestinal parasites.
- Genitourinary urinary system:
 - a) Congenital : Wilms tumor, Extrophy of bladder, Hypospadiasis, Epispadiasis
 - b) Others: Nephrotic syndrome, Acute glomerulo nephritis, renal failure
- Nervous system:
 - a) Congenital: Spinabifida, Hydrocephalous.
 - b) Others: Meningitis, Convulsive disorders (convulsions and seizures), Cerebral palsy, Reye's syndrome, Mental deficiency, Encephalitis, head injury.
- Orthopedic disorders: Club foot, Hip dislocation and Fracture.
- Disorder of eye, ear and skin,: Otitismedia, ROP, atopic dermatitis
- Child health emergencies: Poisoning, Foreign bodies, Hemorrhage, Burns and Drowning.
- Nursing care of infant and children with HIV/AIDS.
- Endocrine system: Growth hormone insufficiency, Adrenal insufficiency, Juvenile Diabetes mellitus, Hyper and Hypo-thyroidism.
- Hematological condition
 - a) Congenital: Hemophilia, thalassemia.
 - b) Others: Anemia, Leukemia, Idiopathic thrombocytopenia, purpura
- Genetic Disorders:
Down's syndrome, Klinefelters and Turners syndrome



Contents

- Nutritional deficiency diseases:
Malnutrition, Vitamin deficiencies, Rickets, Scurvy and Vit A deficiency.
- Inborn error of metabolism :
Phenylketonuria, galactosemia, Congenital hypothyroidism.
- Communicable diseases in children, their identification, nursing management in hospital, in home and prevention: Measles, Small pox, Chickenpox, Mumps, Poliomyelitis, Diphtheria, Tetanus, Pertussis, and Tuberculosis.

Management of behavior and social problems in children.

- Child Guidance clinic
- Common behavior disorders in children and management
 - Enuresis and Encopresis
 - Nervousness
 - Nail biting
 - Thumb sucking
 - Temper tantrum
 - Stealing
 - Aggressiveness
 - Juvenile delinquency
 - School phobia
 - Learning disability
- Psychiatric disorders in children and management.
 - Childhood schizophrenia
 - Childhood depression
 - Conversion reaction
 - Posttraumatic stress disorder
 - Autism
- Eating disorder in children and management.
 - Obesity
 - Anorexia nervosa
 - Bulimia
- Management of challenged children.
 - Mentally
 - Physically
 - Socially
 - Child abuse
- Welfare services for challenged children in India.

MENTAL HEALTH NURSING

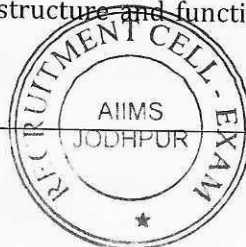
Content

Introduction

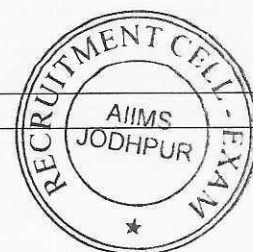
- Perspective of Mental Health and Mental Health Nursing: evolution of Mental Health Services, treatments and Nursing practices.
- Prevalence and incidence of mental health problems and disorders.
- Nature and scope of mental health nursing
- Role and functions of mental health nurse in various setting and factors affecting the level of nursing practice.
- Concept of normal and abnormal behavior.

Principles & concept of Mental Health Nursing

- Definition: Mental Health Nursing and terminology used
- Classification of mental disorder: ICD-10/DSM IV
- Review of personality development, defense mechanisms
- Maladaptive behaviour of individuals and groups: stress, crisis and disaster(s)
- Etiology : bio-psycho-social factors
- Psychopathology of mental disorders: review of structure and function of brain, limbic system abnormal neuro transmission
- Principles of mental health nursing
- Standards of mental health nursing practice



Content
<ul style="list-style-type: none"> • Conceptual models and the role of nurse: <ul style="list-style-type: none"> ○ Existential model ○ Psycho-analytical models ○ Behavioural models ○ Interpersonal model
<p>Assessment of mental health status</p> <ul style="list-style-type: none"> • History taking • Mental status examination • Mini mental status examination • Neurological examination review • Investigation: Related Blood chemistry, EEG, ECT MRI & PET • Psychological tests • Role & responsibilities of nurse
<p>Therapeutic communication & nurse relationship</p> <ul style="list-style-type: none"> • Therapeutic communication: Types, techniques, characteristics • Types of relationship • Ethics & responsibilities • Elements of nurse patient contract • Review of technique of IPR – Johari window • Goals, phases tasks, therapeutic techniques • Therapeutic impasse & its intervention
<p>Treatment modalities & therapies used in mental disorders</p> <ul style="list-style-type: none"> • Psycho pharmacology • Psychological therapies: Therapeutic community, psychotherapy – individual: psycho – analytical, cognitive & supportive, family group, behavioural, play, psycho – drama, Music, dance, recreational & 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
<p>Nursing management of patient with schizophrenia, & other psychotic disorders</p> <ul style="list-style-type: none"> • Classification: ICD • Etiology, psycho-pathology, types, clinical manifestations, diagnosis • Nursing assessment – History, physical & mental assessment • Treatment modalities & nursing management of patients with schizophrenia & other psychotic disorders • Geriatric considerations • Follow up & home care & rehabilitation
<p>Nursing management of patient with mood disorders</p> <ul style="list-style-type: none"> • Mood disorders: Bipolar affective disorder, Mania depression & dysthymia etc • Etiology, psycho-pathology, clinical manifestations, diagnosis • Nursing assessment – history, physical, mental assessment • Treatment modalities & nursing management of patients with mood disorders • Geriatric considerations • Follow – up & home care & rehabilitation
<p>Nursing management of patient with neurotic, stress related & somatoform disorders</p> <ul style="list-style-type: none"> • Anxiety disorder, phobias, dissociation & conversion disorder, obsessive compulsive disorder, somatoform disorders, post-traumatic stress disorder • Etiology, psycho-pathology, clinical manifestations, diagnosis • Nursing assessment – History, physical & mental assessment • Treatment modalities & nursing management of patient with neurotic, stress related & somatization disorders • Geriatric considerations • Follow up & home care & rehabilitation
<p>Nursing management of patient with substance use disorders</p>



Content

- Commonly used psychotropic substance: classification, forms, routes, action, intoxication & withdrawal
- Etiology of dependence, tolerance, psychological and physical dependence, withdrawal syndrome, diagnosis
- Nursing assessment – History, physical, Mental assessment & drug assay
- Treatment (detoxification antabuse & narcotic antagonist therapy & harm reduction) & nursing management of patient with substance used disorders
- Geriatric considerations
- Follow up & home care & rehabilitation

Nursing management of patient with personality, sexual & eating disorders

- Classification of disorders
- Etiology, psycho-pathology characteristics, diagnosis
- Nursing assessment – History, physical, mental assessment.
- Treatment modalities & nursing management of patients with personality, sexual & eating disorders
- Geriatric considerations
- Follow up & home care & rehabilitation

Nursing management of childhood & adolescent disorders including mental deficiency

- Classification
- Etiology, psycho-pathology characteristics, diagnosis nursing assessment – History, physical, mental & IQ assessment
- Treatment modalities & nursing management of childhood disorders including mental deficiency
- Follow up & home care & rehabilitation

Nursing management of organic brain disorders

- Classification: ICD
- Etiology, psycho-pathology, clinical features, diagnosis & differential diagnosis (Delirium, Dementia, Parkinsons, Alzheimers & Seizures disorder)
- Nursing assessment – History, physical, mental & neurological assessment
- Treatment modalities & nursing management of organic brain disorders
- Geriatric considerations
- Follow up & home care & rehabilitation

Psychiatric emergencies & crisis intervention

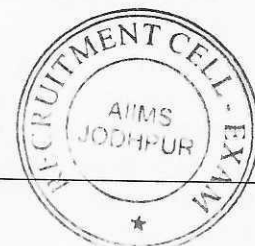
- Type of psychiatric emergencies & their management
- Stress adaptation model: stress & stressor, coping, resources & mechanism
- Grief: theories of grieving process, principles, techniques of counselling
- Types of crisis
- Crisis intervention: principles, techniques & process
- Geriatric considerations role & responsibilities of nurse

Legal issues in mental health nursing

- The mental health Act 1987: Act, sections, articles & their implications etc.
- Indian Lunacy Act 1912
- Rights of mentally ill clients
- Forensic psychiatry
- NDPS Act
- Admission & discharge procedures
- Role & responsibilities of nurse

Community mental health nursing

- Development of community mental health services
- Institutionalization versus deinstitutionalization
- Model of preventive psychiatry: Levels of prevention
- Mental health services available at the primary, secondary, tertiary levels including rehabilitation & role of nurse
- Mental health agencies: Government & voluntary, National & International
- Mental health nursing issues for special populations: Children, Adolescence, Women, Elderly, Victims of violence & Abuse, Handicapped, HIV/ AIDS etc



OBSTETRICAL & GYNECOLOGICAL NURSING INCLUDING MIDWIFERY

Contents

Introduction to midwifery and obstetrical nursing:

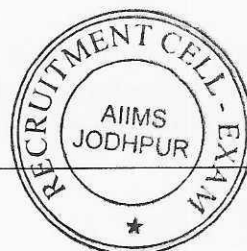
- Introduction to concepts of midwifery and obstetrical nursing.
- Trends in midwifery and obstetrical nursing.
 - Historical perspectives and current trends.
 - Legal and ethical aspects.
 - Preconception care and preparing for parenthood.
 - Role of nurse in midwifery and obstetrical care.
- National policy and legislation in relation to maternal health and welfare.
- Maternal morbidity, mortality and fertility rates.
 - Peri-natal morbidity and mortality rates.
- Concept of family centered maternity care.

Review of anatomy and physiology of female reproductive system and fetal development

- Female organs of reproduction –external genitalia, internal genital organs and their anatomical relations, musculature –blood supply, nerves, lymphatic, pelvic cellular tissue, pelvic peritoneum.
- Physiology of menstrual cycle
- Human sexuality
- Fundamental of reproduction-gametogenesis ,ovulation, fertilization , implantation (embedding of the ovum),
- Development of the embryo
- Development of placenta at term , structure ,functions and placental circulation, fetal sac
- Amniotic cavity ,amnion and amniotic fluid
- Umbilical cord
- Anatomical variations of the placenta and the cord
- Fetus- fetal physiology ; time scale of fetal development ,
- Fetal circulation
- Fetal skull ,bones ,sutures and measurements
- Female pelvis-general description of the bones, joints, ligaments , planes of the pelvis, diameters of the true pelvis, important landmarks, variations in pelvis shape
- Review of genetics : genetics ,principles of heredity ,genetic disorders and counseling ,prevention and prediction of congenital malformation ,embryology related to congenital malformation
- Role of nurse in rendering sex education

Assessment and management of pregnancy in antenatal period

- **Normal Pregnancy**
- Physiological changes during pregnancy
 - Reproductive system.
 - Cardio vascular system.
 - Respiratory system.
 - Urinary system.
 - Gastro intestinal system
 - Metabolic changes.
 - Skeletal changes.
 - Skin changes.
 - Endocrine system.
 - Psychological changes
 - Discomfort of pregnancy
- Signs and symptoms of pregnancy- differential diagnosis.
- Diagnosis of pregnancy- Sign and symptoms at first ,second and third trimester, Confirmatory test-immunological tests, presenting part, ,denominator
- Obstetrical examination confirmatory test, invasive and non-invasive procedures.
- Minor ailments during pregnancy and its management.
- Antenatal care
 - Objectives.
 - Assessment.
 - History taking
 - Physical examination
 - Antenatal examination

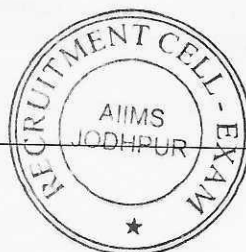


Contents

- Sign of previous child birth
- Relationship of fetus to uterus and pelvis: lie, attitude, presentation, presenting part, position.
- Per vaginal examination.
- Screening and assessment of high risk and risk approach.
- Antenatal preparation
 - Diet.
 - Exercise.
 - Substance use
 - Education for child birth
 - Preparation for safe -confinement
 - Prevention from radiation
 - Husband and families
 - Counselling and teaching.
- Psycho-social and cultural aspects of pregnancy – assessment and support.
 - Adjustment to pregnancy.
 - Teenage pregnancy.
 - Unwed mother.
 - Single parent.
 - Sexual violence.
- Adoption.

Assessment and management of intra-natal period

- Physiology of labour.
- Mechanism of labour.
- Management of first stage of labour
 - Signs and symptoms of labour.
 - Duration.
 - Preparation of labour room and women.
 - Assessment and observation of women in labor.
 - Partogram-Maternal and fetal monitoring
- Assessment of pain and anxiety during labour – pain management and comfort in labour.
- Induction of labour.
- **Active management of labor.**
- Management of second stage of labour
 - Signs and symptoms normal and abnormal.
 - Duration.
 - Conduction of delivery-principles and techniques.
 - Episiotomy(only if required)
 - Receiving the newborn.
 - Neonatal resuscitation; initial steps and subsequent resuscitation.
 - Care of umbilical cord.
 - Bonding
 - Initiate feeding.
 - Screening and transportation of neonate.
- Neonatal resuscitation and immediate care of the newborn after delivery.
- Management of third stage of labour
 - Signs and symptoms.
 - Duration
 - Method of placental expulsion.
 - Management – principles and techniques.
 - Active management of labour.
- Examination of placenta and perineum.
- Management of fourth stage of labour.
- Maintenance of reports and records.
- Concept of water birth



Contents

Assessment and management of women during postnatal period

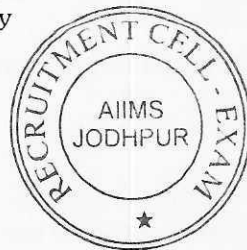
- Normal puerperium. Physiological changes and its management
- Involution of uterus and other pelvic structure, lochia
- Lactation and physiology of lactation with its management.
- Episiotomy (if present) different types and its care
- Postnatal care: episiotomy care, postnatal exercise, immunization, promoting physical and emotional wellbeing.
- Mother infant bonding
- Family dynamics after child birth.
- Family welfare services- methods, counselling, follow up.
- Maintenance of records and reports.

Assessment and management of normal neonates

- Normal neonates
 - Physiological adaptation.
 - Assessment and management
- Physiological adaptation of new born
- Characteristics of new-born,
- Immediate appraisal of new-born
- Apgar score care of new-born
- Initial and daily assessment.
- Identification of congenital abnormalities and referral.
- Essential new-born care, Thermal regulation and prevention of infection.
- Breast feeding.
- Immunization.
- Minor disorders of new-borns and its management.
- Levels of neonatal care and maintenance of records and reports.

Assessment and management of high-risk pregnancy

- Screening and assessment
 - History taking
 - Physical examination
 - Ultrasonic
 - Cardiotomography
 - NST, CST
 - Invasive procedure
 - Non-invasive procedure
 - Latest modalities of diagnosis: CVS, Amniography, Radiology in obstetrics, etc)
- High-risk approach
- Levels of care: primary, secondary & tertiary
- Disorders of pregnancy
 - Hyperemesis Gravidarum
 - Bleeding in early pregnancy
 - Abortion
 - Ectopic pregnancy
 - Vesicular mole
- Antepartum haemorrhage
- Uterine abnormality and displacement
- Diseases complicating pregnancy
 - Medical and surgical conditions: haematological disorders in pregnancy , tuberculosis, heart disease, diabetes mellitus, thyroid dysfunction
 - n, jaundice, asthma, proteinuria, haematuria in pregnancy, general surgery during pregnancy. .
 - Infections -viral hepatitis, syphilis, leprosy, bacteria, parasitic and protozoal infestation in pregnancy, pyelonephritis in pregnancy, SLE Epilepsy, viral infections, HIV and AIDS, RTI, UTI, TORCH, STD.
 - Gynaecological disorders in pregnancy – abnormal vaginal discharge, congenital malformations, carcinoma cervix, fibroid , ovarian tumour, retroverted gravid uterus, genital prolapsed.
 - Mental disorders



Contents

- ✓ Postpartum blues
- ✓ Postpartum depression
- ✓ Postpartum psychosis
- Toxaemia of pregnancy
 - Pre-eclampsia
 - Eclampsia
 - Hydramnios
- Rh-incompatibility
- Multiple pregnancy and IUGR
- Nursing management of the mother's with high-risk pregnancy
- Adolescent pregnancy, elderly primigravida and grand multipara.
- Maintenance of records and reports.

Assessment and management of abnormal labour

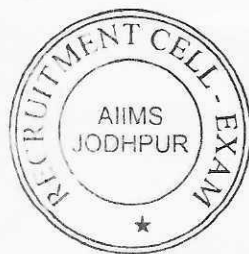
- Disorders in labour
 - CPD and Contracted pelvis
 - Mal-presentations and mal-positions
 - Disorders in uterine contractions
 - Precipitated labour, premature labour and prolonged labour
 - Complications of 3rd stage of labour and injury to birth canal
- Obstetrical emergencies and their management
 - Cord prolapse & presentation
 - Vasa praevia
 - Amniotic fluid embolism
 - Rupture of the uterus
 - Shoulder dystocia
 - Obstetrical shock
- Obstetrical operations and techniques
 - Caesarean section
 - Forceps
 - Vacuum
 - Destructive operations
 - Manual removal of placenta
- Nursing management of the woman undergoing obstetrical operation and procedures

Abnormalities during post-natal period

- Assessment and management of women with postnatal complications
 - Puerperial sepsis
 - Breast complications (abscess, engorgement, cracked nipple, etc)
 - UTI
 - Thrombo-embolic disorders
 - Sub-involution of uterus
 - Eclampsia
- Post-partum hemorrhage

Assessment and management of high-risk newborn

- Protocol for admission of neonates in NICU
- Assessment and nursing management of high risk newborn:
 - small for date, large for date, infant of diabetic mother, prematurity, postmature babies, IUGR, Asphyxia neonatrum, Respiratory distress syndrome, Hyaline membrane disease, birth injuries, congenital anomalies, congenital syphilis, newborn with HIV positive Hemolytic diseases of newborn, Infections, TORCH neonatal seizures, matabolic disorders still birth - causes and management.
- Nursing management of
 - LBW
 - Pre-mature baby
 - Neonatal infections
 - Respiratory problems
 - Haemolytic disorders
 - Birth injury
 - Malformations



Contents

- Maintenance of records and report
- Monitoring and feeding of high-risk neonates
- Organization and management of the NICU
- Infection control in NICU

Pharmaco-therapeutics in Obstetrics

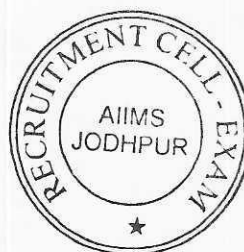
- Indication, Doses, Action, Contra-indication and side-effects of drugs
- Effect of drugs on pregnancy, labour and puerperium
- Nursing responsibilities in the administration of drugs in obstetrics
 - Oxytocin
 - Anti-hypertensive
 - Diuretics
 - Tocolytic agents
 - Anti-convulsants
 - Anticoagulants
- Analgesia and anesthetics use in obstetrics
- Effects of maternal medication on fetus and neonates
- Alternative therapies in Obstetrics

Family welfare Programme

- Population dynamics in India
- Concepts, Aims, Importance and History of Family Welfare Programme, National Population dynamics Policy and National Education Policy
- National Family Welfare Programme
 - MCH
 - Safe Motherhood
 - ICDS
 - RCH-I
 - RCH-II
- Organization and administration of Family Welfare Programme at
 - Village level
 - Block level
 - District level
 - State level
 - National level
- Method of contraception, spacing, temporary, permanent and Emergency contraception
- Infertility and its management
- Motivation and counseling for Family Welfare
- Maintenance of vital statistics and latest research in contraception
- Role of national, International, voluntary and NGOs in Family Welfare Programme
- 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)

Nursing Management of Patient With Disorders of female reproductive system (Gynecological disorders)

- Review of anatomy and physiology of the female reproductive system
- Nursing Assessment: History and physical assessment.
- Etiology, pathophysiology, clinical manifestations, diagnosis, treatment modalities and medical and surgical nursing management of disorders of female reproductive System
 - Menstrual disorders
 - Ovarian & fallopian tube disorders
 - Endometriosis
 - Polyps, fibroids
 - Cervical & uterine tumors
 - Uterine displacement
 - Vaginal disorders
 - Vulval disorders ;
 - Menopause & hormonal replacement therapy



Contents

- Abortion – natural, medical & surgical abortion – MTP act
- Toxic shock syndrome
- Congenital abnormalities of female reproductive system
- Drugs used in treatment of gynecological disorder

COMMUNICATION & EDUCATIONAL TECHNOLOGY

Content

Review of communication Process

- Definitions of communication
- Meaning of communication
- Process of communication: Elements and channels
- Types of communication
- Facilitators of communication
- Barriers of communication
- Methods to overcome barriers of communication
- Techniques of effective communication
- Techniques of therapeutic communication

Interpersonal relations

- Definitions of interpersonal relations
- Dynamics of interpersonal relationship
- Purposes of interpersonal relations
- Types of interpersonal relationship
- Phases of interpersonal relationship
- Barriers of interpersonal relationship
- Methods to overcome barriers of interpersonal relations
- Johari Window

Human relations

- Definitions of human relations
- Human relation in context of nursing
- Understanding self
- Social behavior
- Social attitude
- Motivation
- Individual and groups
- Group dynamics
- Team work

Guidance & counselling

- Definitions of guidance & counseling
 - Difference of guidance
 - Definition of counseling
- Difference between guidance and counseling
- Purpose of guidance & counseling
- Characteristics of guidance and counseling
- Scope of guidance & counseling
- Need of guidance & counseling
- Basic principles of guidance & counseling
- Types/ areas of guidance approaches
- Types of counseling approaches
- Organization of counseling services
- Types of counseling approaches
- Role & preparation of counselor
- Counseling process: steps
- Techniques & tools of counseling
- Issues for counseling in nursing
- Managing disciplinary problems
- Crisis interventions



Content

Principles & philosophies of Education

- Meaning of education
- Aims of education
- Functions of education
- Educational philosophies

Teaching-Learning Process

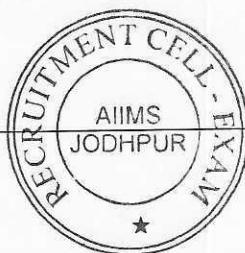
- Meaning of learning
- Definitions of learning
- Concept of learning
- Nature of learning
- Characteristics of learning
- Principles of learning
- Domains of learning
- Factors influencing learning
- Meaning of teaching
- Concept of teaching
- Nature of teaching
- Characteristics of good teaching
- Principles of teaching
- Maxims of teaching
- Formulation of educational objectives: general & Specific
- Lesson planning
- Class room management

Methods of teaching

- Definition of method of teaching
- Lecture method
- Demonstration method
- Group discussion
- Seminar
- Symposium
- Panel discussion
- Role play
- Project method
- Field trip
- Workshop
- Exhibition
- Programmed instruction
- Computer assisted learning
- Micro-teaching
- Problem based learning
- Outcome based learning
- Problem solving as method of teaching
- Self-directed learning or self-instructional module
- Simulation
- Clinical teaching methods
- Case method
- Nursing rounds
- Nursing Bedside clinics
- Morning & afternoon reports
- Group conference
- Nursing care conference
- Individual conference
- Health team
- Process recording

Educational media

- Definitions of audio-visual aids
- Concept of audio-visual aids
- Importance of audio-visual aids
- Purposes of Audio visual aids

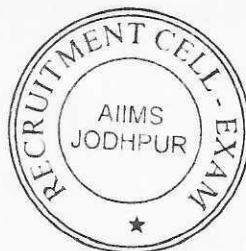


Content

- Characteristics of good audio-visual aids
- Sources of audio-visual aids
- Principles in use of audio-visual aids
- Types of teaching aids
- Graphical teaching aids
 - o *Chalk board/ Black board*
 - o *Chart*
 - o *Graph*
 - o *Poster*
 - o *Flash cards*
 - o *Flannel graph*
 - o *Bulletin board*
 - o *Cartoons*
- Three-dimensional aids:
 - o *Objects and specimens*
 - o *Models*
 - o *Puppets*
 - o *Exhibition*
 - o *Museum*
 - o *Dioramas*
- Printed educational aids:
 - o *Pamphlets*
 - o *Leaflets*
- Projected audio-visual aids:
 - o *Slide projector*
 - o *Overhead projector*
 - o *Opaque projector*
 - o *Filmstrips*
 - o *Television*
 - o *VCR/ VCD*
 - o *Camera*
 - o *Microscope*
 - o *LCD projector*
- Audio educational aids:
 - o *Tape recorder*
 - o *Public address system*
 - o *Computer*
- Guidelines for effective use of audio-visual aids

Assessment

- Concept of measurement, assessment and evaluation
- Meaning of assessment/evaluation
- Types of assessment/ evaluation
- Purposes of assessment/ evaluation
- Scope of assessment/ evaluation
- Criteria for selection of evaluation technique/ method
- Classification assessment tools and techniques
- Essay type questions
- Short answer questions
- Multiple choice questions
- Item analysis
- Observation checklist
- Rating scale
- Practical examination
- Viva-voce
- Objective structured clinical examination (OSCE)
- Attitude scale
- Likert's scale
- Semantic differential scale



Information, Education & communication for health (IEC)

Content

- Health behaviors
- Health education
- Planning for health education
- Health education with individual, group & communities
- Communicating health messages
- Methods and media for communicating health message
- Media for communicating health message
- Using mass media

COMMUNITY HEALTH NURSING – II

Contents

Introduction

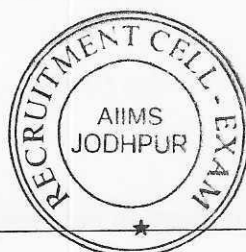
- Definition, concept & scope of Community Health and Community Health Nursing
- Historical development of
 - Community Health
 - Community Health Nursing
 - Pre-independence
 - Post-independence

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)
 - 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
 - Family Health Care & Family health Nursing Process
 - Health education
 - Vital statistics
 - M.C.H. antenatal, natal, postnatal, MTP Act, female foeticide act, child adoption act
 - Family Welfare
 - National health programmers
 - School health services
 - Occupational health and hazards
 - Defence services
 - Institutional services
- Systems of Medicine and health care
 - Allopathy
 - Indian system of Medicine and homeopathy



Contents

- Alternative health care system 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
- Working with families :
- Applying 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 system (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.
- Job description of community health nursing personnel

Assisting individuals and groups to promote and maintain their health

- Empowerment for self-care of individuals, families and groups in -

A. Assessment of individual 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

B. Seek health services for

- Routine checkup
- Immunization
- Counseling
- Diagnosis
- Treatment
- Follow up

C. Maintenance of health records for individual and family

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

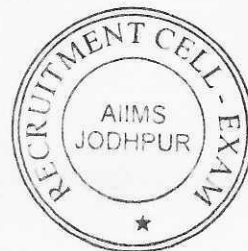
E. Carryout therapeutic procedures as prescribed/ required for individual and family

F. Waste management

- Collection and disposable of waste at home & community

G. Sensitize and handle social issues affecting health and development for self and family

- Women Empowerment
- Women and child abuse



Contents

- Abuse of elders
- Female foeticide
- Commercial sex workers
- Food adulteration
- Substance abuse

H. Utilize community resources for self and family

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

National health and family welfare programmes and the role of a nurse

- 1) National ARI programme
 - 2) Revised National tuberculosis control programme (RNTCP)
 - 3) National vector borne disease control programme (Malaria, Filaria, Kalazar, Japanese Encephalitis, Dengue, Chikungunya)
 - 4) National Guinea worm eradication programme
 - 5) National leprosy eradication programme
 - 6) National AIDS control programme
 - 7) STD control programme
 - 8) National programme for control of blindness
 - 9) Iodine deficiency disorder programme
 - 10) Expanded programme on immunization
 - 11) National family welfare programme – RCH programme historical development, organization, administration, research, constraints
 - 12) National water supply and sanitation programme
 - 13) Minimum need programme
 - 14) National programme for prevention and control of diabetes, cardiovascular disease and stroke
 - 15) National programme for control and treatment of occupational diseases
 - 16) Polio eradication; Pulse Polio programme
 - 17) National Cancer Control Programme
 - 18) Yaws Eradication Programme
 - 19) National mental health programme
 - 20) Minimum needs programme
 - 21) 20 point programme
 - 22) National nutritional programme, ICDS program
 - 23) Millennium development goals
 - 24) Community development programme
 - 25) National Rural Health Mission (NRHM)
 - 26) National Urban Health Mission (NUHM)
- Health schemes
 - 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.

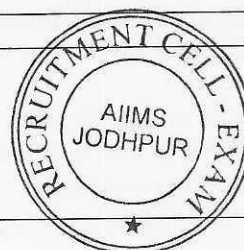
National – Indian Red cross, Indian council for child welfare, Family planning Association of India (FPAI), Tuberculosis Association of India, Hindu Kusht Nivaran Sangh, Central Social Welfare Board, All India women's conference, Blind Association of India etc.

Nursing Research

Content

Research and research process

- Introduction and Definition of Research & Nursing research
- Need & significance of Nursing research
- Steps of scientific method
- Characteristic of good research



Content

- Steps of research process overview

Research problem/ question

- Identification of problem area
- Criteria for selecting a good research problem
- Formulating a problem statement
- Writing research objective
- Hypothesis and assumptions

Review of literature

- Definition & Purposes
- Location, Sources
- On line search;
- CINHALL, COCHRANE etc.
 - Method of review of literature
 - Developing conceptual or theoretical framework & models

Research approaches and designs

- Introduction and definition of research designs
- Elements of research design
- Types of research design
 - Quantitative designs
 - Qualitative designs

Population, Sample and Sampling

- Definition of population, sample
- Sampling criteria
- Factors influencing Sampling process
- Types of sampling techniques.
- Sample Size
- Problems of Sampling

Data collection methods and tools:

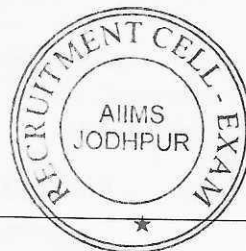
- Methods and tools of data Collection
- Selection of methods of data collection
- Criteria for evaluation/assessment of data collection methods
- Commonly used tools & methods of data collection in nursing research
- Validity & Reliability of tools
- Pilot study
- Data collection procedure

Analysis of data:

- Compilation
Tabulation
Classification,
Summarization,
Presentation,
Interpretation of data

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

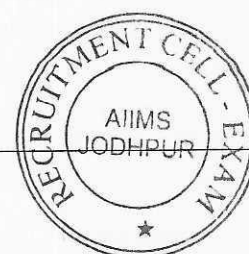


Statistics

Content
Introduction to statistics <ul style="list-style-type: none">• Definition, use of statistics, scales of measurement.• Frequency of distribution and graphical Presentation of data• Measures of central tendency: Mean, median, mode.• Measures of Variability : Standard deviation• Co-efficient of correlation• Normal probability• Tests of significance : 't' test , chi square• Statistical packages and its application - SPSS

NURSING MANAGEMENT

Content
Introduction to management & Administration in nursing <ul style="list-style-type: none">• Definition, nature & Philosophy of Management and Administration• Concepts of management• Theories of management• Principles of management• Functions of management• Comparison of administration and management• Need of Nursing Management and Administration• Role of Nurse as a manager
Management Process <ul style="list-style-type: none">• Planning: Meaning, definition, importance, Nature, Characteristics, philosophy, objectives, Principles, Components, steps, types, operational plan and change.• Organization: Meaning, definition, importance, nature, levels of organization, organizational effectiveness and organizational climate.• Human resource management: Staffing; Meaning, definition, objectives, philosophy, types of staff, factors affecting staffing, norms. Recruiting, selecting, deployment, retaining, promoting, super annuation etc• Directing : Definition features, importance, principles and elements role and functions, creativity and innovations.• Controlling: Quality management, control process, definition, importance, limitations, characteristics, elements, type of control• Budgeting: concept ,steps , principles, types, cost benefit analysis, audit,• Material management: equipment and supplies, ABC analysis, VED analysis, Principles of good material management.• Program Evaluation Review Technique (PERT), Bench marking, activity plan (Gantt Chart)
Management of nursing services in the Hospital and Community <ul style="list-style-type: none">• Nursing Management<ul style="list-style-type: none">○ Concept, types, principles and techniques.○ Vision, mission and statement.○ Philosophy, aims and objectives.○ Theories and models.○ Current trends and issues in Nursing Management.• Planning:<ul style="list-style-type: none">○ Formation of mission, philosophy, aims and objectives of Nursing services and Hospital and community.○ Strategic Planning.○ Innovation in Nursing.• Organization:<ul style="list-style-type: none">○ Hospital and patient care units including ward management



Content

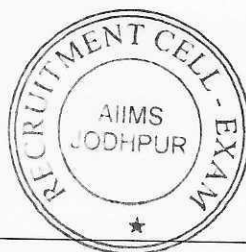
- Emergency and disaster management
- **Human resource management:**
 - Staffing:
 - Recruiting, selecting, deployment, retaining, promoting, superannuation etc
 - Categories of nursing personnel including job description of all levels
 - Patients/ population classification systems
 - Patients/ population assignment and Nursing care responsibilities
 - Personnel Policies.
 - Staff development and welfare: Adult Education, Career Development
- **Directing and leading:** delegation, participatory management
 - Assignments, rotations, delegations
 - Implement standards, policies, procedures and practices
 - Managing Conflict.
- **Controlling/ Evaluation:**
 - Supervision and guidance.
 - Maintenance of discipline.
 - Nursing Rounds/ Visits, Nursing protocols, Manuals
 - Quality Assurance: Continuous Quality Improvement, Standards, Models, Audit
 - Documentation
 - Records and reports
 - Performance appraisal
- **Budgeting;** proposal, projecting requirements for staff, equipments and supplies for
 - Patient care units, Hospital and community services.
 - Emergency and disaster management
- **Material Management:** Planning and procurement procedures, equipment and supplies, inventory control, auditing and maintenance in
 - Hospital and patient care units
 - Emergency and disaster management

Organizational behavior and human relations

- Concepts and theories of organizational behaviors
- Review of channels of communication
- Leadership styles
- Review of motivation; concepts and theories
- Group dynamics
- **Techniques of:**
 - Communication; and
 - Interpersonal relationships
 - Human relations:
- Public relations in context of nursing
- Relations with professional associations and employee unions and collective bargaining

Management of nursing educational institutions

- Planning
- Establishment of nursing educational institution INC norms and guidelines
- **Co-ordination with-**
 - Regulatory bodies
 - Accreditation
 - Affiliation
- **Formulation of Philosophy/ objectives**
- **Organisation of college/School**
 - Structure
 - Committees
 - Physical facilities
 - Clinical facilities
 - Hostel Facilities
 - Transport Facilities
 - Curriculum planning



Content

- **Recruitment of Faculty and staff**
 - Selection
 - Recruitment
 - Job description
 - Placement
 - Performance appraisal
 - **Development and welfare :**
 - In service education
 - Nature & scope of in service education program,
 - Principles of adult learning,
- **Budgeting**
- **Equipments and supplies;** audio visual equipments, laboratory equipment, books, journals etc
 - College/ School
 - Hostel
- **Students selection and admission**
 - Selection
 - Admission
 - Guidance and Counseling
 - Maintaining discipline
- **Maintenance of Records:** College/School.
- Institutional Records and reports- administrative, faculty, staff and students

Regulatory Bodies, Legal and Ethical Issues

- **Regulatory bodies;** Indian Nursing Council (INC), State Nursing Council Acts; - constitution, functions.
- Current trends and issues in Nursing
- **Professional ethics**
 - Code of ethics; Indian Nursing Council, International Council for Nurses (ICN).
 - Code of professional conduct; INC, ICN
- **Legal aspects in Nursing**
 - Legal terms related to practice; registration and licensing
 - Laws related to nursing practice; Breach and penalties
 - Malpractice and negligence
- **Practice standards for Nursing :** INC
 - Professional responsibilities and accountability.
- **Patient Rights.**
- **Consumer protection act**
- **Clinical Establishment Act.**

