



## DIPLOMA IN NURSING ASSISTANT

**DURATION :3 YEARS**

**ELIGIBILITY : 10<sup>TH</sup> PASS**

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S.NO	PAPER CODE	NAME OF PAPERS	CREDIT
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2 <sup>ND</sup> YEAR			
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### 101 HUMAN ANATOMY

#### Unit -1

Terminology and General Plan of the Body, Body Parts and Areas,  
Terms of Location and Position, Body Cavities and Their Membranes, Dorsal cavity, Ventral cavity,  
Planes and Sections

**Unit –II**

Cells: Structure, function and location, Prokaryotic and eukaryotic cells, Cell organelles, Cell division  
Tissue, Types, Structure, Location and Function of Epithelial Tissue, Connective Tissue, Muscle  
Tissue, Nerve Tissue, Membranes, Glandular tissue

The Integumentary System: structure and function of The Skin, Subcutaneous Tissue

**Unit-III**

Musculoskeletal System: Basic anatomy of important muscles and bones

**Unit-IV**

Respiratory system: Basic anatomy of nose, larynx, trachea, bronchi and lungs

**Unit – V**

Digestive system: basic anatomy of oesophagus, stomach, small intestine, large intestine, liver, gall  
bladder, pancreas

## 102 HUMAN PHYSIOLOGY

**Unit-I**

Cell physiology: Structure, membrane, transport across cell membrane, Active, Passive, Organization  
of the Body, Body Composition, Body Fluid Volumes and its measurement, Diffusion, Osmosis,  
Tonicity, Homeostasis

**Unit-II**

Blood-composition, function, cellular component & their function, haemoglobin & anaemia, blood  
groups and coagulation

Lymphatic system-Composition & function of lymph, lymphatic tissue, Immunity with the role of  
thymus

**Unit-III**

Cardiovascular system-general arrange, heart, arteries, veins and capillaries, heart structure and  
function, cardiac cycle, heart sounds, heart rate, blood pressure, mechanism of circulation, definition  
of hypertension & shock

**Unit-IV**

Respiratory system: parts of respiratory system, mechanism of respiration, pulmonary function,  
pulmonary circulation, lungs volume, Gas transport between lungs and tissues,

Definition of hypoxia, dyspnoea, cyanosis, asphyxia and obstructive airways diseases

**Unit- V**

Gastrointestinal physiology: Organs of GIT and their structure & function, secretion, digestion,  
absorption and assimilation, gastrointestinal hormones, physiology of digestion of carbohydrates,  
proteins & lipids, Structure & function of liver, spleen, gall bladder & pancreas, Jaundice, Cirrhosis  
& Pancreatitis

## 103 FUNDAMENTALS OF NURSING

**Unit- I**

**Introduction to Nursing**

Nursing – concept, meaning, definitions, scope and functions, History of nursing in India, Nursing as a  
profession

Nursing professional – qualities and preparation) Ethics in Nursing-roles and responsibilities of a nurse.

Health care agencies – hospital and community service – types and function of hospitals health team, Modern approaches to nursing care including holistic nursing care, Health and Disease- Definition of health, determinants

of health status.- Basic human needs- Illness and its effects on individual

### **Unit-II**

#### **Nursing care of the patient**

Patient Environment in the hospital: Patients unit, Therapeutic environment- Physical factors – lighting temperature, ventilation, humidity, noise, pestilence,- Safety needs, prevention of environmental hazard - Psychosocial and aesthetic factors. Patient's Adjustment to the Hospital. Understanding the patient as a person, socio-economic, and cultural background, health status etc. Effect of hospitalization on patient and family. Admission, transfer, discharge procedures. Basic Nursing Skills-Communication, Nursing interview Recording and reporting. Nursing Process- Meaning and importance Assessment, Nursing diagnosis Planning, Implementation and Evaluation Nursing care plan.

### **Unit-III**

#### **Meeting the Basic Needs of a patient**

Physical needs- Comfort, rest, sleep and exercise, Importance and its promotion, Body mechanics –moving, lifting, transferring Position and posture maintenance, Comfort devices, Beds and bed making – Principles of bed making, types and care of bed linen, Safety devices, restraints and splints, Exercises – Active and Passive Hygienic needs, Personal and environmental hygiene personal, Nurses note in maintaining personal and environmental hygiene. Care of eyes, nose, ears, hands and feet. Care of mouth, skin, hair and genitalia Care of pressure areas, bed sores. Elimination needs- Health and sickness Problems – constipation and diarrhea,

retention and incontinence of urine. Nurse's role in meeting elimination needs. Offering bed-pan and urinal, Observing and recording abnormalities. Preparation and giving of laxative, suppositories, enemas, bowel wash,

flatus tube. Perineal care, care of patient with urinary catheter, diapers. Maintenance of intake and output records

Nutritional needs- Diet in health and disease- Factors affecting nutrition in illness,- Nurse's role in meeting patients nutritional needs.- Modification of diet in illness.- Diet planning and serving.- Feeding helpless patients including artificial methods of feeding. Psychological and spiritual needs- Importance- Nurse's role - Diversional and Recreational therapy, Care of terminally ill and dying patient- Dying patient's signs and symptoms needs of dying patient and family, Nursing care of dying-: special considerations; advance directives, euthanasia, will, dying declaration, organ donation etc. Medico legal issues, Care of the dead body, Care of unit- Autopsy- Embalming

### **Unit-IV**

#### **Assessment of patient/client**

Physical Assessment- Importance, principles, methods of assessment- Height, Weight, posture- Head to toe examination. Physiological Assessment- Vital signs, normal, abnormal Characteristics, factors influencing the variations,- Observation and collection of specimens-urine, stool, vomitus and sputum. Psychological Assessment

- Mood, Intelligence, Emotions Normal and Abnormal behavior.

### **Unit-V**

#### **Infection control**

Infection control :- Nature of infection- Chain of infection transmission- Defence against infection: natural and acquired- Hospital acquired infection( nosocomial infection) Concept of asepsis: Medical and surgical asepsis - Isolation precautions , barrier nursing- Hand washing : simple, hand asepsis, surgical asepsis (scrub) - Isolation – source and protection- Personal protective equipments types, uses and techniques of wearing and removing- Decontamination of unit and equipment- Transportation of infected patient-. Standard safety precaution

- Transmission based precautions, Bio-medical waste management- Importance- Types of hospital wastes

- Hazards associated with hospital waste- Decontamination of hospital waste- Segregation and transportation

- Disposal

## 104 ENGLISH COMMUNICATION & SOFT SKILLS

### UNIT-I: Introduction to English language

- a) Role and significance of English language in the present scenario
  - b) English Language: Its relevance for the Indian industry
  - c) Introduction to Listening, Speaking, Reading, Writing (LSRW) and benchmarking of the class
- [Note: As part of classroom activity, a guest lecture from an industry representative/Director (CRC) and maintaining progress card for each student on LSRW for future reference]

### UNIT-II: Phonetics & Functional Grammar

- a) Pronunciation and daily usage correction (speak with differences between p/b, s/sh, f/ph, t/d, v/w sounds)
- b) Parts of speech, articles, tenses, verbs and modals
- c) Practice of daily use words, numerals and tongue twisters
- d) Vocabulary building, Construction of simple sentences: Basic sentence pattern, subject and Predicate

[Note: As part of classroom activity, language games, tongue & jaw exercises, simple passages from the newspapers for oral drills in the classroom and practice tests (written and oral)]

### UNIT-III: English Communication- About Myself

- a) Let's talk, making conversation, meeting and greeting
  - b) Introducing myself, my family and my friends
  - c) My opinions, my likes and dislikes
  - d) Life at college, hostel and workplace
- [Note: As part of classroom activity, use the Workbook for reference for classroom and home assignments, carry out practice tests (written and oral)]

### UNIT-IV: Personality Development

- a) First impression: Dressing sense, good manners, speaking well and respectfully
  - b) Positive Attitude: Being happy and alert, a good listener and a good friend
  - c) Consultation among peers: Soliciting advice and giving advice
  - d) Goal setting, confidence building & handling rejection
- [Note: As part of classroom activity, refer Workbook for classroom and home assignments, carry out practice tests (written and oral)]

## 105 FIRST AID AND EMERGENCY IN NURSING

### Unit-I

#### Introduction

Definition, Aims and Importance of first aid, Rules/ General principles of First Aid, Concept of emergency

### Unit II

#### Procedures and Techniques in First Aid

Preparation of First Aid kit. Dressing, bandaging and splinting (spiral, reverse spiral, figure of 8 spica, shoulder, hip, ankle, thumb, finger, stump, single and double eye, single and double ear, breast, jaw, capelin), triangle bandage uses, abdominal binder and bandage, breast binder, T and many tail bandage, knots reef, clove. Transportation of the injured, CPR : Mouth to mouth, Sylvester, Schafer, External cardiac massage,

### Unit-III

#### First Aid in emergencies

Asphyxia, drowning, shock, Wounds and Bleeding, Injuries to the Bones, Joints and Muscle - fractures, sprains, strains, hanging, falls, Burns and scalds, Poisoning - ingestion, inhalation, bites and stings

Foreign body in eye, ear, nose and throat.

### Unit-IV

#### Community Emergencies & Community Resources

Fire, explosion, floods, earth-quakes, famines etc, Role of nurses in disaster management, Rehabilitation

Community Resources- Police, Ambulance services- Voluntary agencies-local, state national and international

## **106 COMPUTER FUNDAMENTALS**

### **Unit-I**

Introduction to computer: Introduction, characteristics of computer, block diagram of computer, generations of computer, computer languages. Input output devices: Input devices(keyboard, point and draw devices, data scanning devices, digitizer, electronic card reader, voice recognition devices, vision-input devices), output devices(monitors, pointers, plotters, screen image projector, voice response systems).

Processor and memory: The Central Processing Unit (CPU), main memory. Storage Devices: Sequential and direct access devices, magnetic tape, magnetic disk, optical disk, mass storage devices.

### **Unit-II**

Introduction of windows: History, features, desktop, taskbar, icons on the desktop, operation with folder, creating shortcuts, operation with windows (opening, closing, moving, resizing, minimizing and maximizing, etc.).

### **Unit-III**

Introduction to MS-Word: introduction, components of a word window, creating, opening and inserting files, editing a document file, page setting and formatting the text, saving the document, spell checking, printing the document file, creating and editing of table, mail merge.

Introduction to Excel: introduction, about worksheet, entering information, saving workbooks and formatting, printing the worksheet, creating graphs.

Introduction to power-point: introduction, creating and manipulating presentation, views, formatting and enhancing text, slide with graphs.

### **Unit-IV**

Introduction of Operating System: introduction, operating system concepts, types of operating system, Computer networks: introduction, types of network (LAN, MAN, WAN, Internet, Intranet), network topologies (star, ring, bus, mesh, tree, hybrid), components of network.

Electronic Payment Systems: Introduction, Types of Electronic Payment Systems, Digital Token-Based, Electronic Payment Systems, Smart Card and Electronic Payment Systems, Credit Card- Based Electronic Payment Systems, Risk and Electronic Payment Systems.

### **Unit-V**

Internet and its Applications: definition, brief history, basic services (E-Mail, File Transfer Protocol, telnet, the World Wide Web (WWW)), www browsers, use of the internet.

## **107 PRACTICAL-I**

### **Practical Human Anatomy**

1. Demonstration of Major organs through models and permanent slides.
2. Demonstration of parts of circulatory system from models.
3. Demonstration of parts of respiratory system from models.
4. Demonstration of digestive system from models.
5. Demonstration of excretory system from models.
6. Demonstration of nervous system from models.
7. Structure of eye and ear
8. Demonstration of structural differences between skeletal, smooth and cardiac muscles.
9. Demonstration of various bones
10. Demonstration of various joints
11. Demonstration of various parts of male & female reproductive system from models

### **Practical Human Physiology**

1. To measure pulse rate
2. To measure blood pressure
3. Demonstration of ECG

4. To perform Hemoglobin by Sahli's Method
5. To perform Hemoglobin by CMG method.
6. Haemoglobin by CMG method.
7. To perform Total RBC count.
8. To perform total leucocyte count.
9. To perform differential leucocyte count.
10. To perform PCV

11. To calculate Red cell indices.

**Practical: Basics of Computer**

Computer fundamental and internet lab

1. Using basic DOS commands.
2. Using external DOS commands
3. Creating a email account
4. Using web browser for searching and surfing.
5. Creating and formatting a document in MS office
6. Using autocorrect, auto text and spell check operation in MS office .
7. Create tables in MS Word.
8. Inserting different kinds of object in MS word.
9. Use main merge options in MS office.
10. Create a Excel work sheet with following options rows and columns alignment..
11. Using excel formulas.
12. Create a graph with available data in MS excel.
13. Create a PPT presentation using auto content wizard.
14. Use Clip art animation effects and word art galleries in presentations.
15. Using transition and setting timings for slide show.
16. Use MS access to create data base and tables.

**108 Hospital Posting:**

**201 GENERAL PATHOLOGY**

**Unit I**

Introduction & History of pathology, Basic definitions and familiarization with the common terms used in pathology, Causes and mechanisms of cell injury, reversible and irreversible injury, Introduction of hyperplasia, hypoplasia, hypertrophy, atrophy, metaplasia, necrosis and apoptosis

**Unit II**

General features of acute and chronic inflammation: Vascular changes, cellular events, Cells and mediators of inflammation, Phagocytosis and its mechanism

**Unit III**

Tissue Renewal and Repair, healing and fibrosis, cirrhosis, introduction of oedema, hyperaemia, congestion, haemorrhage, haemostasis, thrombosis, embolism, infarction, shock and hypertension.

**Unit IV**

Protein energy malnutrition, deficiency diseases of vitamins and minerals, nutritional excess and imbalances. Role and effect of metals (Zinc, Iron and Calcium) and their deficiency diseases, Aetiology and pathophysiology of diabetes, arteriosclerosis, myocardial infarction, respiratory diseases (COPD), Parkinson disease

Infectious Diseases: pathogenesis & overview of modes of infections, prevention and control with suitable examples like Typhoid, Dengue

**Unit V**

Cancer: Definitions, nomenclature, characteristics of benign and malignant neoplasm, metastasis, Carcinogens and cancer, concept of oncogenes, tumour suppressor genes, DNA repair genes and cancers stem cells.

**Learning Outcome:** This curriculum will provide an introductory nature and build the concepts of how human system work in altered and diseased stage under the influence of various internal and external stimuli to the students.

## 202 GENERAL MICROBIOLOGY

### Unit-I

Development of microbiology as a discipline, Contributions of Anton von Leeuwenhoek, Louis Pasteur, Robert Koch, Joseph Lister, Alexander Fleming, Edward Jenner

Introduction to bacterial taxonomy, Classification of Bacteria, Morphology based on size, shape, arrangement, motility, flagella, spores, capsules, cell wall, plasma membrane, pili, ribosomes.

### Unit-II

Microscopy: Study of compound microscope – magnification, numerical aperture, resolution and components of microscope. Dark ground illumination, care of microscope and common difficulties micrometry. Bright Field Microscope, Dark Field Microscope, Phase Contrast Microscope, Fluorescence Microscope, Transmission Electron Microscope, Scanning Electron Microscope

### Unit-III

Cell size, shape and arrangement, cell-wall, composition and detailed structure of Gram-positive and Gram-negative cell walls, Cell Membrane: Structure, function and chemical composition of bacterial cell membranes. Cytoplasm: Ribosome, mesosomes, inclusion bodies, nucleoid, chromosome and plasmids, Endospore: Structure, formation

### Unit-IV

General safety measures used in Microbiology laboratory, Sterilization and disinfection: Various physical methods of sterilization – heat, UV radiation, ionizing radiation, filtration, characters affecting sterilization, auto clave control and sterilization indicators.

Biomedical waste management in a Medical Microbiology laboratory: Types of the waste generated, Segregation, Treatment, Disposal

### Unit-V

Antiseptics & Disinfectants: Definition, types and properties, mode of action, use, qualities of good disinfectants

Chemical disinfectants – phenol and its compounds, alcohol, halogen, heavy metals and quaternary ammonium compounds, aldehyde, gaseous compound. use and abuse of disinfectants. precautions while using the disinfectants.

## 203 COMMUNITY HEALTH NURSING

### Unit -I

#### Introduction to Community Health

Definitions: Community, Community health, community health nursing, Concept of Health and disease, dimensions and indicators of health, Health determinants. History & development of Community Health in India & its present concept. Primary health care, Millennium Development Goals. Promotion and maintenance of Health

### Unit-II

#### Community Health Nursing

Philosophy, goals, objectives & principles, concept and importance of Community Health Nursing, Qualities and functions of Community Health Nurse. Steps of nursing process; community identification, population composition, health and allied resources, community assessment, planning & conducting community nursing care services.

### Unit -III

#### Health Assessment

Characteristics of a healthy individual. Health assessment of infant, preschool, school going, adolescent, adult, antenatal woman, postnatal woman, and elderly.

### Unit-IV

#### Principles of Epidemiology and Epidemiological methods

Definition and aims of epidemiology, communicable and non-communicable diseases. Basic tools of measurement in epidemiology. Uses of epidemiology. Disease cycle. Spectrum of disease. Levels of prevention

of disease. Disease transmission – direct and indirect. Immunizing agents, immunization and national immunization schedule. Control of infectious diseases. Disinfection.

#### **Unit-V**

##### **Family Health Nursing Care**

Family as a unit of health. Concept, goals, objectives. Family health care services. Family health care plan and nursing process. Family health services – Maternal, child care and family welfare services. Roles and function of a community health nurse in family health service. Family health records

### **204 ENVIRONMENTAL SCIENCE**

#### **Unit I**

Definition and Scope of environmental studies, multidisciplinary nature of environmental studies, Concept of sustainability & sustainable development.

**Ecology and Environment:** Concept of an Ecosystem-its structure and functions, Energy Flow in an Ecosystem, Food Chain, Food Web, Ecological Pyramid & Ecological succession, Study of following ecosystems: Forest Ecosystem, Grass land Ecosystem & Aquatic Ecosystem & Desert Ecosystem.

**Unit II :Natural Resources:** Renewable & Non-Renewable resources; Land resources and land use change; Land degradation, Soil erosion & desertification. **Deforestation:** Causes & impacts due to mining, Dam building on forest biodiversity & tribal population. **Energy Resources:** Renewable & Non-Renewable resources, Energy scenario & use of alternate energy sources, Case studies.

**Biodiversity:** Hot Spots of Biodiversity in India and World, Conservation, Importance and Factors Responsible for Loss of Biodiversity, Biogeographical Classification of India

**Unit III :Environmental Pollutions:** Types, Causes, Effects & control; Air, Water, soil & noise pollution, Nuclear hazards & human health risks, Solid waste management; Control measures of urban & industrial wastes, pollution case studies

**Unit IV :Environmental policies & practices: Climate change & Global Warming** (Green house Effect), Ozone Layer -Its Depletion and Control Measures, Photochemical Smog, Acid Rain  
Environmental laws: Environment protection Act; air prevention & control of pollution act, Water Prevention & Control of Pollution Act, Wild Life Protection Act, Forest Conservation Acts, International Acts; Montreal & Kyoto Protocols & Convention on biological diversity, Nature reserves, tribal population & Rights & human wild life conflicts in Indian context

#### **Unit V :Human Communities & Environment:**

Human population growth; impacts on environment, human health & welfare, Resettlement & rehabilitation of projects affected person: A case study, Disaster Management; Earthquake, Floods & Droughts, Cyclones & Landslides, Environmental Movements; Chipko, Silent Valley, Vishnoi's of Rajasthan, Environmental Ethics; Role of Indian & other regions & culture in environmental conservation, Environmental communication & public awareness; Case studies.

### **205 CHILD HEALTH NURSING**

#### **Unit-I**

##### **Introduction**

Modern concept in child health care. Trends in pediatric nursing. Role of pediatric nurses in child care .Emerging challenges, nursing process related to pediatric nursing. Concept of preventive pediatric. Vital statistics related to pediatrics as per the NRHS and GoI

#### **Unit-II**

##### **Growth & Development**

Definition, principles, factors affecting growth & development, techniques of assessment, plotting of growth chart

##### **Infant:**



Growth & Development, health promotion, breast feeding & weaning, immunization, infant and young child feeding

**c) Toddler :**

Growth & Development, nutrition counselling, toilet training, safety, prevention of accidents, play.

**d) Preschoolers**

Growth & development Daycare centers Role of Parents in sex education

**e) School ager**

Growth & development, rest,sleep, physical exercises & activity, dental health, sex education

**f) Adolescent**

- Growth &development,adaptation to puberty,menstrual hygiene, nutritional guidance, sex education,  
- Role of Parents in health promotion of adolescents. Control of iron deficiency anemia (WIFS guidelines)

**Unit-III**

**The sick child**

Child's reaction to hospital. Effect of hospitalization on the family of the child. Role of nurse in helping child & family in coping, with stress of hospitalization & illness

**Pediatric procedures:**

Preparation of child for diagnostic tests, collection of specimens. Calculation & Administration of oral & parenteral medication. Procedures related to feeding. Katori & Spoon. Ryle's tube & gastrostomy . Procedures relating to

Elimination. Enema. Colostomy irrigation. Administration & analysis of oxygen concentration, steam inhalation, nebulization, Other procedures: Pediatric Resuscitation- Surgical dressing

**Unit-IV**

**Disorders and health problems of a child**

a) Infancy :- Failure to thrive- Diarrhea & Vomiting

b) Childhood- Communicable diseases- Tonsillitis- Otitis media- Child abuse- Breath holding spasms- Enuresis, nail biting, thumb sucking, somnambulism- Protein Energy Malnutrition- Helminthic infections- Bites and stings- Pica- Tics

c) Adolescent- Precocious puberty- Gynecomastia- Accident, sport injuries- Obesity & anorexia nervosa- Juvenile delinquency

**Unit-V**

**Child with congenital disorders:**

Etiology, signs and symptoms,diagnosis, complications and medical, surgical & nursing management of children with:- Malformations of CNS, cranial deformities, spina bifida,hydrocephalus, cerebral palsy,meningocoele.

Skeletal defects, cleft lip & cleft palate- Gastro intestinal tract defects, fistula, anorectal malformations, hernia

Congenital hypertrophied pyloric stenosis- Defects of Genito-urinary Tract-hypospadiasis & epispadiasis, extrophy of bladder,phimosis & paraphimosis,cryptorchidism, polycystic kidney- Sexual abnormalities, ambiguous genitalia- Defects of cardio vascular system, cyanotic and acyanotic- TOF (Tetralogy of Fallouts), TGV (Transposition of Great Vessels), TAPVC,ASD, VSD, Coactation of aorta, PDA

Orthopedic abnormalities -congenital talipusequinovarus,congenital dislocation of hips- Chromosomal abnormalities

- Down's syndrome, Turner's syndrome.

**206 FAMILY & COMMUNITY NUTRITION**

**UNIT I:**

**BASICS OF MEAL PLANNING** • Definition of Balanced diets, RDA, Factors affecting RDA, ICMR recommendations. • Food pyramid, my food plate. • Food Exchange List (raw), food composition tables. • Principles& objectives of meal planning • Nutrient requirement & meal planning for adults, changes in nutrient requirement according to sex, age & activity.

**UNIT II:**

**NUTRITIONAL REQUIREMENT DURING PREGNANCY, LACTATION & INFANCY** Nutrient requirement & RDA for • Expectant mother- physiological changes, dietary modification & complications. • Lactation- general dietary guidelines & role of special foods. • Infancy- growth & development, breast feeding v/s artificial feeding, factors to be considered while preparing & introducing supplementary foods.

**UNIT III:**

NUTRIENT REQUIREMENT FOR PRE SCHOOLERS, SCHOOL GOING CHILD & ADOLESCENT Nutrient requirement & RDA for • Preschoolers- problems in feeding, factors affecting nutritional status. • School going child- importance of breakfast, packed lunch & mid-day meal programs- ICDS, SNP. • Adolescence- eating disorder, anemia, anemia prophylaxis program.

UNIT IV:

NUTRITION REQUIREMENT FOR GERIATRIC GROUP & NUTRITIONAL ASSESSMENT • Geriatrics- RDA & nutritional requirement during old age, physiological changes & dietary modification. • Nutritional Assessment- Methods of Assessment of Nutritional status, Anthropometric, Biochemical, Clinical methods & Diet surveys.

## 207 PRACTICAL-II

### COMMUNITY HEALTH NURSING(P)

- a) Organize home visit b) Prepare bag and demonstrate bag technique. c) Build up and maintain rapport with family. d) Identify needs of community e) Practice procedure f) Make referrals. g) Plan and conduct health education on identified health needs. h) Set up clinics with help of staff. i) Maintain records and reports j) Collect and record vital health statistics. k) Learn about various organizations of community health importance. l) Health Assessment family m) Identify the health needs of various age groups. n) Assess the environment o) Maintain family folders. p) Assessment nutritional needs q) Demonstrate different method of preparing food according to the nutritional need of family.

### Fundamentals of Microbiology

1. Demonstration of Microscope and its parts
2. Demonstration of glassware used in microbiology.
3. Demonstration of autoclave and sterilization of glass wares.
4. Demonstration of Hot air oven and sterilization of glass wares.
5. To perform Gram staining
6. To perform Acid fast staining (Ziehl Neelsen staining)
7. To perform Indian ink staining
8. To perform Hanging drop method
9. Demonstration of capsule
10. Staining of bacterial spores
11. To demonstrate agglutination reaction.
12. To perform RA test
13. To perform WIDAL test
14. To perform RPR test.
15. To perform CRP test.

### CHILD HEALTH NURSING(P)

Taking pediatric History- Perform physical examination and assessment of children- Administration of oral, I/M, & I/V, medicine/ fluid- Calculation of fluid requirements- Prepare different strengths of I.V. fluids- Apply restraints- Administer O<sub>2</sub> inhalation by different methods - Feed children by katori (bowl) and spoon, pallada etc.- Collect specimens for common investigations - Assist with common diagnostic procedure - Teach mothers/parents on balance diet for child of different age group- Oral rehydration therapy - Feeding & weaning- Play therapy- Check vital signs- Give enema- Insert suppositories

## 208 HOSPITAL POSTING

## 301 MEDICAL SURGICAL NURSING

### Unit-I

#### Introduction

Brief history of evolution of modern medicine and surgery. Theories of illness and its causation -Illness as human experience. Review of Nursing process and Nursing care plan.

### Unit-II

#### Nursing assessment

Health Assessment- Health history- Physical examination- Nutritional assessment- General clinical investigations

### Unit-III

#### Operation theatre technique:

Physical Environment- Operation theatre room - cleaning of tables,trolleys, lights and other equipments - Pre-operative holding areas. Theatre Technique- Scrubbing – Hand washing- Gowning- Gloving- Positioning of patient for various surgical procedures.- Draping of patient. Preparation of theatre, equipment and supplies- Cleaning- Needles, sutures – types and their uses.- Carbolization, ETO sterilization,fumigation, OT swab, Bacillocid sterilization.- Packing and sterilization of dressings, linen rubber ware suture material, instruments, needles and other materials.

### Unit-IV

#### Management of patient undergoing surgery

Pre operative preparation and care- Physical- Psychological,- Pre-medications- Legal and ethical. Intra operative management- Surgical Team- Nursing activities and responsibilities- Anesthetic agents - Role of nurse in anesthesia. Post operative Management- Immediate care- Transferring patient from operation theatre- Patient in recovery room- Recovery from Anesthesia- Post operative observation and nursing management- Carryout the post operative orders.- Postoperative complication observation, prevention & management.

### Unit-V

#### Nursing management of the elderly

Assessment of the elderly- Ageing process- Helping and care of elderly in promoting wellness and self care. Conditions associated with ageing- Dementia- Osteoporosis- Incontinence – urinary- Sensory deprivation. Home and Institutional care

## 302 MIDWIFERY AND GYNECOLOGICAL NURSING

### Unit-I

#### Introduction:

Definition of midwifery and obstetrical nursing. Scope of midwifery. Basic competencies of a midwife. History of midwifery. Trends of maternity services in India. Vital statistics related to maternal health in India.

### Unit – II

#### Reproductive system

Review of structure and function of female reproductive system. Female pelvis –structure, types and diameters

### Unit-III

#### Embryology and foetal development

Oogenesis, spermatogenesis,fertilization and implantation. Embryology and Fetal development. Placenta and membranes:- Structure- Functions- Abnormalities- Liquor amni- Umbilical cord. Fetal skull:- Structure- Diameters- Fontanel and sutures. Fetal circulation

### Unit-IV

#### Gynaecological disorders

Retroversion, retro flexion. Fistulas. Uterine displacement & prolapse(Procidentia). Uterine malformations. Cysts and fibroids. Uterine polyps. Tumors of the reproductive tract –benign and malignant. Palliative care and rehabilitation

### Unit-V

#### Breast disorders

Review mastitis, breast engorgement, breast abscess. Tumors of the breast benign and malignant

### **Menopause**

Definition and physiological changes. Signs and symptoms. Health education and counselling

Hormone replacement therapy. Surgical menopause

## **303 HEALTH CENTRE MANAGEMENT**

### **UNIT I**

- Perform immunization
- Perform immunization Safely for infants and children-
- DPT, measles, BCG, oral DPT, polio, hepatitis and hepatitis oral polio and maintains record in health maintains record centre or hospital.
- Plans and conducts two immunization sessions in the village and sub-centre and records.
- Injection safety measures

### **UNIT II**

- Give care to sick people
- Assess and take care of in the health centre \ sick patients at home/hospital.
- Integrate accepted

### **UNIT III**

- Provide first aid in various emergencies
- Practice bandaging,
- Provide first aid in the . splints, slings health center/ clinic and maintain records.
- Provide primary medical
- Administers medication
- Conduct health camps care.
- Treatment of minor ailments and refers patients if required

### **UNIT IV**

- Organize and manage Intensive experience at a sub centre sub -centre and participate
- Indenting
- Maintaining stock books
- Management information and evaluation system (MIES)  
: vital statistics, family folders / eligible couple registers, records and reports etc.- Providing emergency care.- Home visits and pre, post and intranatal care at home

## **304 MENTAL HEALTH NURSING**

### **Unit-I**

#### **Introduction**

Concept of mental health and mental illness. Misconceptions related to mental illness. Principles of Mental Health nursing. Definition of terms used in psychiatry. Review of defense mechanisms. Mental Health Team

### **Unit- II**

#### **Mental Health Assessment**

- a) Psychiatry history taking
- b) Mental status examination
- c) Interview technique

### **Unit-III**

#### **Therapeutic nurse-patient relationship:**

Therapeutic nurse patient relationship: Definition, components and phases, Importance. Communication skills  
Definition elements, types, factors influencing communication, barriers (therapeutic impasse)

### **Unit-IV**

#### **Mental Disorders and Nursing Interventions**

- a) Psycho-Pathophysiology of human behavior. Etiological theories (genetics, biochemical, psychological etc).  
Classification of mental disorders. Disorders of thought, motor activity, perception, mood, speech, memory, concentration, judgment. Prevalence, etiology, signs and symptoms, prognosis, medical and Nursing management. Personality & types of personality related to psychiatric disorder. Organic mental disorders: Delirium, Dementia. Psychotic disorders:- Schizophrenic disorders- Mood (affective) disorders: Mania depression, Bipolar affective disorders (BPAD). Neurotic disorders: Phobia, anxiety. disorders, obsessive compulsive disorders, depressive neurosis, conversion disorders, dissociative reaction, psychosomatic disorders, post traumatic stress disorder. Substance use and de-addiction: alcohol, tobacco and other psychoactive substance. Child and adolescent psychiatric disorder;- Sleep disorder- Eating disorders.- Sexual

disorders. Nursing Management: Nursing process and. process recording in caring for patients with various psychiatric disorders

#### **Unit-V**

#### **Community Mental Health**

Concept, importance, scope. Attitudes , Stigma and discrimination related to the mentally ill. Prevention of mental illness(Preventive Psychiatry) during childhood, adolescent, adult hood and old age. Community Mental Health Services.Role of Nurse in national mental health programme and Psychiatric care in Community

### **305 NURSING ADMINISTRATION AND WARD MANAGEMENT**

#### **Unit-I**

#### **Introduction**

Administration and management- Meaning- Philosophy- Elements and principles- Significance

#### **Unit-II**

#### **Management process**

Planning- Importance- Purpose- Types of planning. Organization- Principles of organization- Organization chart of hospital/ward/PHC/ Sub center. Staffing- Scheduling- Recruitment, selection, deployment,retaining, promotion, superannuation- Personnel management- Job description- Job specification- Staff development and staff welfare. Directing. Co-ordination and control- Quality management. Budgeting. Policies of hospital and various department of the hospital

#### **Unit-III**

#### **Administration of hospital/department/unit/ ward**

Health centre/ unit physical layout. Safety measures for prevention of accidents and infections  
Legal responsibilities of a nurse. Leadership styles. Problem solving : process and approach, steps and methods of dealing with complaints of patients and other health team members. Records and reports: meaning, types,importance.

#### **Unit-IV**

#### **Management of equipment supplies.**

Maintenance of supplies & equipment(preventive maintenance). Handing over and taking over of Inventory. Indent and ordering of supplies and equipment. Problem solving : process and approach, steps and methods of dealing with supplies and equipment.

#### **Unit-V**

#### **Cost and financing of health care**

Cost of health care. Health financing. National health plans (annual and fiveyear plans) and outlays, role of state and central government in allocation of funds. Health insurance- types, issues etc.

### **306 APPLIED NUTRITION AND DIETETICS**

#### **Unit-I**

#### **Introduction to Nutrition**

*Concepts:* Definition of Nutrition & Health

- Malnutrition- Under Nutrition & Over Nutrition
- Role of Nutrition in maintaining health
- Factors affecting food and nutrition

#### *Nutrients*

Classification

- Macro & Micronutrients
- Organic & Inorganic
- Energy Yielding & Non-Energy Yielding

#### **Food**

- Classification-Food groups
- Origin

#### **Unit-II**

## **Carbohydrates**

- Composition -starches, sugar and cellulose
- Recommended Daily Allowance (RDA)
- Dietary sources
- Functions

## **Energy**

- Unit of energy-Kcal
- Basal Metabolic Rate (BMR)
- Factors affecting BMR

## **Proteins**

- Composition
- Eight essential amino acids
- Functions
- Dietary sources
- Protein requirements-RDA

## **Fats**

- Classification-saturated & unsaturated
- Calorie value
- Functions
- Dietary sources of fats and fatty acids
- Fat requirements-RDA

## **Vitamins**

- Classification-fat soluble & water soluble
- Fat soluble-Vitamins A, D, E, and K
- Water soluble-Thiamine (vitamin B1), Riboflavin (vitamin B2), Nicotinic acid, Pyridoxine ( vitamin B6), Pantothenic acid, Folic acid, Vitamin B12, Ascorbic acid (vitamin C)
- Functions, Dietary Sources & Requirements-RDA of every vitamin

## **Minerals**

- Classification- Major minerals (Calcium, phosphorus, sodium, potassium, and magnesium) and Trace elements
- Functions
- Dietary Sources
- Requirements- RDA

## **Unit-III**

### **Balanced diet**

- Definition, principles, steps
- Food guides – Basic Four Food Groups
- RDA – Definition, limitations, uses
- Food Exchange System
- Calculation of nutritive value of foods
- Dietary fibre

### **Nutrition across life cycle**

- Meal planning/Menu planning – Definition, principles, steps
- Infant and Young Child Feeding (IYCF) guidelines- breast feeding, infant foods
- Diet plan for different age groups- Children, adolescents and elderly
- Diet in pregnancy- nutritional requirements and balanced diet plan
- Anemia in pregnancy-diagnosis, diet for anemic pregnant women, iron & folic acid supplementation and counseling
- Nutrition in lactation-nutritional requirements, diet for lactating mothers, complementary feeding/weaning

## **Unit-IV**

### **Nutritional deficiency disorders**

- Protein energy malnutrition- magnitude of the problem, causes, classification, signs & symptoms, Severe acute malnutrition (SAM), management & prevention, nurses' role
- Childhood obesity-Signs & symptoms, assessment, management & prevention and nurses' role
- Vitamin deficiency disorders- vitamin A, B, C & D deficiency disorders: causes, signs & symptoms, management & prevention and nurses' role
- Mineral deficiency diseases-iron, iodine and calcium deficiencies: causes, signs & symptoms, management & prevention and nurses' role

#### **Unit-V**

#### **National Nutritional Programmes and role of nurse**

- Nutritional problems in India
- National nutritional policy
- *National nutritional programmes: Vitamin A Supplementation, Anemia Mukht Bharat*

Programme, Integrated Child Development Services (ICDS), Mid-day Meal Scheme (MDMS), National Iodine Deficiency Disorders Control Programme (NIDDCP), Weekly Iron Folic Acid Supplementation (WIFS) and others as introduced

- Role of nurse in every programme

### **307 PRACTICAL**

#### **MEDICAL SURGICAL NURSING(P)**

Perform scrubbing, gowning, gloving- Identify instruments, suturing materials for common operations. Disinfection, carbolization sterilization & fumigation- Prepare the OT table depending upon the operation- Positioning and monitoring of patient- Assisting with minor & major operations  
 - Handling specimens - Segregation and disposal of biomedical waste as per guidelines - Connect and monitor ECG & pulse oxymetry- Assist in endo-tracheal intubation- Suctioning -provide care for a patient on ventilator  
 - Handling emergency drug trolley / crash cart.- Assisting in insertion of central line and monitoring Central venous pressure. - Assessment of the geriatric- Identify the health problems among the elderly (psychological, social and spiritual needs of the elderly) and provide specific care- Health promotion of the Elderly

#### **Midwifery and Gynaecological Nursing(P)**

- Diagnose pregnancy using pregnancy detection kit (preg-card)- Antenatal history taking- Physical examination- Antenatal examination -abdomen and breast- Recording weight and BP- Hemoglobin estimation- Urine testing for sugar and albumin- Immunization- Assessment of risk status- Antenatal counselling- Maintenance of antenatal records - Assessment of woman in labour- Vaginal examinations (PV) and their interpretation- Monitoring women in labour using the partograph- Caring for women in labour  
 - Setting up of the labour unit including the newborn corner- Conduct normal delivery including active management of third stage of labour (AMTSL)- Provide essential newborn care- Immediate newborn assessment- Resuscitation of the newborn.- Assessment of the risk status of the newborn- Preparation for caesarean section and other surgical procedures- Assist in caesarean section- Prepare and assist in MTP procedures- Prepare and assist for Tubectomy

#### **MENTAL HEALTH NURSING(P)**

History taking- Perform mental status examination- Assist in psychometric assessment- Observe and assist in therapies- Teach patients and family members

### **308 CLINICAL POSTING**