# PRAVARA INSTITUTE OF MEDICAL SCIENCES

(DEEMED UNIVERSITY)

Established Under Section 3 of UGC Act 1956, Vide Govt. of India notification no. F-9-11/2000-U.3, dated 29<sup>th</sup> September 2003



# **B.Sc.** Nursing Syllabus

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College of Nursing
Loni – 413 736, Tal. Rahata. Dist. Ahmednagar,
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#### **PHILOSOPHY**

#### PIMS, COLLEGE OF NURSING BELIEVES THAT:

Health is a state of well-being that enables a person to lead a psychologically, socially, economically productive life. Nursing contributes to health services in vital and significant way in the health care delivery system. It aims at identifying health needs of the people; planning and providing quality care in collaboration with other health professionals and community groups and help individuals to attain independence in self care.

The Faculty assumes responsibility for teaching, service, research and the management. It recognizes the need for participation of teachers and students in all these areas of integrated service development through quality care in nursing. The teachers create learning environment that enables students to acquire inquiry driven, self-directed learning and foster an attitude for life-long learning.

The college believes in training professional nurses from all states on India to meet the great challenges of services in the field of nursing and prepares its students to become exemplary citizen by adhering to the code of ethics and professional conduct at all times in fulfilling personal, social and professional obligations so as to respond to national aspirations.

It also believes that an individual from rural areas learn to adopt in an environment where he/she develops awareness and achieves participation as a member of faculty, community and society by involving him/herself as part and parcel of health care delivery system.

#### AIM

#### THE AIM OF THE UNDERGRADUATE NURSING PROGRAM IS TO:

- Prepare graduates to assume responsibilities as professional, competent nurses and midwives in providing promotive, preventive, curative and rehabitative services.
- Prepare nurses who can make independent decisions in nursing situations, protect the
  rights of and facilitate individuals and groups in pursuit of health, function in the
  hospital, community nursing services and conduct research studies in the areas of
  nursing practice. They are also expected to assume the role of teacher, supervisor and
  manager in clinical / public health settings.

# **OBJECTIVES**

### On completion of the four year B.Sc Nursing program the graduate will able to:

- Apply knowledge from physical, biological and behavioral sciences, medicine including alternative systems and nursing in providing nursing care to individuals, families and communities.
- 2. Demonstrate understanding of life style and other factors which affect health of individuals and groups.
- 3. Provide nursing care based on steps of nursing process in collaboration with the individuals and groups.
- 4. Demonstrate critical thinking skill in making decisions in all situations in order to provide quality care.
- 5. Utilize the latest trends and technology in providing the health care.
- 6. Provide promotive, preventive and restorative health services in line with the National Health Policies and programmes.
- 7. Practice within the framework of Code of Ethics and professional conduct and acceptable standards of practice within the legal boundaries.
- 8. Communicate effectively with individuals and groups and members of the health team in order to promote effective interpersonal relationship and team work.
- 9. Demonstrates skills in teaching to individuals and groups in clinical/community health settings.
- 10. Participate effectively as members of the health team in health care delivery system.
- 11. Demonstrate leadership and managerial skills in clinical/community health settings.
- 12. Conduct need based research studies in various settings and utilize the research findings to improve the quality of care.
- 13. Demonstrate awareness, interest and contribute towards advancement of self and of the profession.

# **ADMISSION REQUIREMENTS**

- 1. The minimum age for admission shall be 17 years on or before 31<sup>st</sup> Dec of the year of admission.
- 2. The minimum educational requirements shall be the passing of: Higher Secondary School certificate Examination (12 Years course) or Senior School certificate Examination (10+2) pre-degree Examination (10+2) or An equivalent with 12 years schooling from a recognized board or University with Science (Physics, Chemistry, Biology) and English with minimum 45% aggregate marks (PCBE)and reservation categories with 40% aggregate marks (PCBE).
- 3. Candidate shall be medically fit.

### **ENTRANCE/SELECTION TEST**

Selection of the candidates should be based on the merit of the entrance examination held by University or Competent authority.

#### **Duration**

Duration of the course shall be four years including internship.

#### Vacation

8 weeks vacation shall be given in each year.

### Ragging

Ragging is totally banned within or outside the Institution. Ragging is a criminal offence as per Supreme Court and the Central/State Government directives. Anyone found guilty of ragging and or abetting ragging is liable to be punished appropriately as per "UGC REGULATION ON CURBING THE MENACE OR RAGGING IN HIGHER EDUCATIONAL INSTITUTIONS, 2009".

### COURSE DURATION 4 YEARS

Weeks available per year = 52 weeks
Vacation = 8 weeks
Gazetted Holidays = 3 weeks
Examination (Including preparatory) = 4 weeks
Available weeks = 37 weeks
Hours per week = 40 weeks

Practical = 30 hours per week
Theory = 10 hours per week
Internship practical = 48 hours per week
Hours available per academic year = 1480(37 wk x 40hr)

# FIRST YEAR B. SC. NURSING

Sr. No.	Subject	Theory (In hours)	Practical (In hours)	In Hrs.
- 101		(Class and Lab)	(Clinical)	
1	Anatomy	60		
2	Physiology	60		
3	Nutrition	60		
4	Biochemistry	30		
5	Microbiology	60		
6	Psychology	60		
7	Nursing Foundations	265+200	450	
8	*English	60		
9	Introduction to Computers	45		
10	Library work/Self Study			50
11	Co-curricular Activities			50
12	**Universal Human Value and Personality		30	
12	Development		30	
	Total hrs:	900	480	100
Tota	l Hours = 1480hrs			

Note:- \* College Examination

\*\* Not for qualifying exam

# SECOND YEAR B. SC. NURSING

Sr. No.	Subject	Theory(In hours) (Class and Lab)	Practical ( In hours) (Clinical)	In Hrs.	
1	Sociology	60	,		
2	Medical- Surgical Nursing (Adult including geriatric)- I	210	720		
3	Pharmacology	45			
4	Pathology and Genetics	30 + 15			
5	Community Health Nursing -I	90	135		
6	Communication and Education Technology	60 +30			
7	Library work/Self study			50	
8	Co-curricular Activities			35	
9	**Universal Human Values and Personality Development		30		
	Total hrs:	540	885	85	
Total Hours= 1510					

**Note:-** \*\* Not for qualifying exam

Third Year B. Sc. Nursing

Sr. No.	Subject	Theory (In hours) (Class & Lab)	Practical (In hours) (Clinical)	In Hrs.
1	Medical-Surgical Nursing Adult including	125	270	
	geriatric)-II	00	250	
2	Child Health Nursing	90	270	
3	Mental Health Nursing	100	270	
4	Midwifery and Obstetrical Nursing	90	180	
5	Library work/Self Study			50
6	Co-curricular activities			50
7	Total hrs:	405	990	100
Total 1	hours = 1495hrs			•

Fourth Year B. Sc. Nursing

Sr. No.	Subject	Theory (In hours) (Class & Lab)	Practical (In hours) (Clinical)	In Hrs.
1	Midwifery and Obstetrical Nursing		180	
2	Community Health Nursing -II	90	135	
3	* Nursing Research and statistics	45		
4	Management of Nursing Services & Education	60+30		
5	**Environmental Studies	30		
6	Total hrs:	255	315	
Total H	ours = 570hrs			•

**Note:-** \* College Examination

\*\* Not for qualifying exam

Internship (Integrated Practice)

Sr. No.	Subject	Theory	Practical (In hours)	In Week
1	Midwifery and Obstetrical Nursing	-	240	5
2	Community Health Nursing-II	-	195	4
3	Medical Surgical Nursing (Adult & Geriatrics)	-	430	9
4	Child Health	-	145	3
5	Mental Health	-	95	2
6	Research Project	-	45	1
	Total hrs:	-	1150	24
Total H	ours=1690hrs			

**Note-** 1. Project work to be carried out during internship

- 2. Internship means 8 hours of integrated clinical duties in which 2 weeks of evening and night shift duties are included.
- 3. Internship should be carried out as 8 hours per day @ 48 hours per week.
- 4. Students during internship will be supervised by nursing teachers.
- 5. Fourth year final examination to be held only after completing internship.

# **SCHEME OF EXAMINATION**

# FIRST YEAR B.SC NURSING

Sr. No.	Subject	Assessment			
	THEORY	Hours	Internal	External	Total
1	Anatomy & Physiology	3	25	75	100
2	Nutrition and Biochemistry	3	25	75	100
3	Microbiology	3	25	75	100
4	Psychology	3	25	75	100
5	Nursing Foundations	3	25	75	100
6	English	3	25	75	100
7	Introduction to Computer		25	75	100
	PRACTICAL& VIVAVOCE				
1	Nursing Foundations		100	100	200

# SECOND YEAR B.SC NURSING

Sr. No.	Subject	Assessment			
	THEORY	Hours	Internal	External	Total
1	Sociology	3	25	75	100
2	Medical Surgical Nursing-I	3	25	75	100
3	Pharmacology, Pathology and Genetics	3	25	75	100
4	Community Health Nursing-I	3	25	75	100
5	Communication and Education Technology	3	25	75	100
	PRACTICAL& VIVAVOCE				
	Medical-Surgical Nursing-I		100	100	200

# THIRD YEAR B.SC NURSING

Sr. No.	Subject	Assessment			
	THEORY	Hours	Internal	External	Total
1	Medical-Surgical Nursing-II	3	25	75	100
2	Child Health Nursing	3	25	75	100
3	Mental Health Nursing	3	25	75	100
	PRACTICAL& VIVAVOCE				
1	Medical-Surgical Nursing-II		50	50	100
2	Child Health Nursing		50	50	100
3	Mental Health Nursing		50	50	100

#### FOURTH YEAR B.SC NURSING

Sr. No.	Subject	Assessment			
	THEORY Hours Int		Internal	External	Total
1	Midwifery and Obstetrical Nursing	3	25	75	100
2	Community Health Nursing-II	3	25	75	100
3	Nursing Research and Statistics	3	25	75	100
4	Management of nursing Services and Education	3	25	75	100
	PRACTICAL& VIVAVOCE				
1	Midwifery and Obstetrical Nursing		50	50	100
2	Community Health Nursing		50	50	100

#### NOTE:

- 1. Anatomy and Physiology Question paper will consist of Section-A Anatomy of 37 marks and B Physiology of 38 marks.
- 2. Nutrition and Biochemistry Question paper will consist of Section A Nutrition of 45 marks and Section B Biochemistry of 30 marks.
- 3. Pharmacology, Genetics, Pathology: Section A Pharmacology of 38 marks, Section B Pathology of 25 marks and Genetics will be of 12 marks.
- 4. Nursing Research and Statistics Nursing Research of 50 marks and Statistics of 25 marks is college level examination.
- 5. Minimum pass marks shall be 40% for English only.
- 6. Theory and Practical exams, for Introduction to Computer to be conducted as College (Internal) Exam. and marks to be sent to the University for inclusion in the mark sheet.
- 7. Minimum marks for passing shall be 50% in each of Theory and Practical papers separately.
- 8. No student shall be allowed to appear for the Final University Examination conducted by P.I.M.S. unless he fulfills the requirement of attendance (80% Lectures), (100% in practical) and clinics in each subject / course. In case of sickness or any valid reasons, the candidate will be permitted to appear for examination if she/he has 75% attendance. However student will complete the expected clinical experience during vacation.
- 9. A candidate must have 100% attendance in each of the clinical areas before the award of the degree.
- 10. The candidate has to pass in theory and practical exam separately in each of the papers.

- 11. If a candidate fails in either theory or practical papers he/she has to reappear for both papers (theory and practical) in the subsequent examination.
- 12. The maximum period to complete the course successfully should not exceed 8 years from the date of admission.
- 13. Maximum number of candidates for practical examinations should not exceed 20 per day.
- 14. All practical examination must be held in the respective clinical areas.
- 15. One internal and one external examiner should jointly conduct practical examinations for each student.
- 16. The examinations as first term, mid-term and pre-final are internals and the final examinations as university examination.
- 17. No student will be allowed to appear for the University Examination unless he/she obtains 50% marks in Internal Assessment for each subject / course separately.
- 18. The Dean / Principal should certify that the candidate appearing for University Examination satisfies the above conditions.
- 19. Fourth year, final examination to be held only after completing internship.

#### **ANATOMY**

**Placement:** First Year Time: Theory - 60 Hours

**Course Description:** The course is designed to enable students to acquire knowledge of the normal structure of various human body systems and understand the alterations in anatomical structures in disease and practice of nursing.

Unit - I 5 hours

#### 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,
  - o Alterations in disease
  - o Applications and implications in nursing

Unit - II 6 hours

### The Skeletal System

- Bones- types, structure, Axial & Appendicular Skeleton,
- Bone formation and growth.
- Description of bones.
- Joints classification and structure
  - Alterations in disease
  - o Applications and implications in nursing

Unit - III 7 hours

# The Muscular System

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

Unit - IV 6 hours

# The Nervous System

- Structure of neurologia & neurons
- Somatic Nervous system

Structure of brain, spinal cord, cranial nerves, spinal nerves, peripheral nerves

• Autonomic Nervous System - sympathetic, parasympathetic

# Structure, location

- o Alterations in disease
- o Applications and implications in nursing

Unit - V 6 hours

### The Sensory Organs

• Structure of skin, eye, ear, nose, tongue, (Auditory and olfactory apparatus)

- o Alterations in disease
- o Applications and implications in nursing.

Unit - VI 7 hours

### Circulatory and lymphatic system

The Circulatory System Blood - Microscopic structure, Structure of heart Structure of blood vessels - Arterial & Venous System, Circulation : systemic, pulmonary, coronary Lymphatic system Lymphatic vessels and lymph Lymphatic tissues - Thymus gland, Lymph nodes, Spleen, Lymphatic nodules

- Alternations in disease
- Applications and implications in nursing

Unit - VII 5 hours

# The Respiratory System

- Structure of the organs of respiration
- Muscles of respiration: Intercostals and Diaphragm
  - o Alterations in disease
  - o Applications and implications in nursing

Unit - VIII 6 hours

# The Digestive System

- Structure of Alimentary tract and accessory organs of digestion.
  - Alterations in disease
  - o Applications and implications in nursing

Unit - IX 4 hours

# The Excretory System (Urinary)

- Structure of organs of urinary
- System: Kidney, ureters, urinary bladder, urethra, structure of skin
  - o Alterations in disease
  - o Applications and implications in nursing

Unit- X 4 hours

# The Endocrine System

- Structure of Pituitary, Pancreas, thyroid, Parathyroid, thymus and adrenal glands.
  - o Alterations in disease
  - o Applications and implications in nursing

# Unit - XI The Reproductive system including breast

- Structure of female reproductive organs
  - Structure of male reproductive organs
  - Structure of breast
  - Alterations in disease
  - Applications and implications in nursing.

#### **PHYSIOLOGY**

**Placement**: First Year Time: Theory- 60 Hours

**Course Description**: The Course is designed to assist the students to acquire knowledge of the normal physiology of various human body systems and understand the alterations in physiology in diseases and practice of nursing.

Unit - I 4 hours

### Cell Physiology

- Tissue formation, repair,
- Membranes & glands functions
  - o Alterations in disease
  - Applications and implications in nursing

Unit - II 4 hours

# Skeletal System

- Bone formation & growth
- Bones Functions and movements of bones of axial and Appendicular skeleton, bone healing.
- Joints & joint movement
  - o Alterations in disease
  - Applications and implications in nursing

Unit - III 4 hours

# Muscular System

- Muscle movements, Muscle tone, Physiology of muscle contraction, levels and Maintenance of posture
  - Alterations in disease
  - o Applications and implications in nursing

Unit - IV 7 hours

# Nervous System

- Functions of Neurologia & 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
- Automatic functions- Pain: somatic, visceral, and referred Autonomic learning and biofeedback
  - o Alterations in disease
  - Applications and implications in nursing

Unit-V 8 hours

### **Circulatory System**

- Blood formation, composition, blood groups, blood coagulation
- Hemoglobin; Structure, Synthesis and breakdown, Variation of molecules, estimation
- Functions of Heart, Conduction, Cardiac cycle, circulation Principles, Control,
- Factors influencing BP and Pulse
  - o Alterations in disease
  - o Applications and implications in nursing

Unit - VI 6 hours

### The Respiratory System

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

Unit - VII 6 hours

# The Digestive System

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

Unit - VIII 6 hours

# The Excretory System

- 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
  - o Alterations in disease
  - o Applications and implications in nursing

Unit - IX 4 hours

# The Sensory Organs

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

Unit - X 5 hours

### The Endocrine System

Functions of Pituitary, pineal body, thymus, Thyroid, parathyroid, pancreas,

- Suprarenal, Placenta and ovaries & Testes
  - o Alterations in disease
  - Applications and implications in nursing

Unit - XI 5 hours

### The Reproductive System

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

Unit - XII 2 hours

# Lymphatic and Immunological System

- Circulation of lymph Immunity
- Formation of T-cells and B-cells
- Types of Immune response
- Antigens
- Cytokines
- Antibodies

### **NUTRITION**

**Placement:** First Year Time: Theory - 60 Hours

**Course Description:** The Course is designed to assist the students to acquire knowledge of nutrition for maintenance of optimum health at different stages of life and its application for practice of nursing.

Unit - I 4 hours

#### Introduction

Nutrition: History, Concepts

Role of nutrition in maintaining health Nutritional problems in India National nutritional policy

Factors affecting food and nutrition: socio-economic, cultural, tradition, production, system of distribution, life style and food habits etc

Role of food and its medicinal value Classification of foods Food standards

Elements of nutrition: macro and micro Calorie, BMR

Unit - II 2 hours

### Carbohydrates

Classification Caloric Value

Recommended daily allowances Dietary sources Functions

Digestion, absorption and storage, metabolism of carbohydrates

Malnutrition: Deficiencies and Over consumption

Unit- III 2 hours

#### **Fats**

Classification Caloric value

Recommended daily allowances

Dietary sources, Functions

Digestion, absorption and storage, metabolism

Malnutrition: Deficiencies and Over consumption

Unit - IV 2 hours

#### **Proteins**

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

Unit - V
Energy 3 hours

- Unit of Energy Kcal
- Energy requirements of different categories of people
- Measurements of energy
- Body Mass Index (BMI) and basic metabolism
- Basal Metabolic Rate (BMR) Determination and factors affecting.

Unit - VI 4 hours

#### **Vitamins**

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

Unit - VII 4 hours

#### Minerals

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

Unit - VIII 3 hours

### Water & electrolytes

- Water: Daily requirement, regulation of water, metabolism, distribution of body water.
- Electrolytes: Types, sources, consumption of body fluids
- Maintenance of fluid and electrolyte balance
- Over hydration, dehydration and water intoxication
- Electrolyte imbalances

Unit- IX 3 hours
Cookery rules and preservation of nutrients 15 hrs-practical

- Principles, methods of cooking and serving Preservation of nutrients Safe Food handling-toxicity, Storage of food
- Food preservation, food additives and its principles
- Prevention of food adulteration Act (PFA)
- Food standards
- Preparation of simple beverages and different types of food

Unit - X 7 hours
Balanced Diet 5hrs-Practical

- Elements Food groups
- Recommended Daily Allowances
- Nutritive value of foods
- Calculation of balanced diet for different categories of people
- Planning menu
- Budgeting of food
- Introduction of therapeutic diet: Naturopathy Diet

Unit - XI 4 hours

### Role of nurse in nutritional programmes

- National programmes related to nutrition
- Vitamin A deficiency programme, National iodine deficiency disorders (IDD) programme, Mid-day meal programme, Integrated child development scheme (ICDS)
- National and International agencies working towards food/nutrition
- NIPCCD, CARE, FAO, MIN CFTRI (Central food technology and research institute) etc.
- Assessment of nutritional status
- Nutrition education and role of nurse

#### **BIOCHEMISTRY**

**Placement:** First Year Time: Theory - 30 Hours

**Course Description:** The Course is designed to assist the students to acquire knowledge of the biochemical composition and functioning of human body and understand the alterations in biochemistry in diseases for practice of nursing.

Unit - I 3 hours

#### Introduction

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

Unit - II 6 hours

#### Structure and function of Cell membrane

- Fluid mosaic model tight junction, Cytoskeleton
- Transport mechanism: diffusion, osmosis, filtration, active channel, sodium pump
- Acid base balance-maintenance & diagnostic tests Ph Buffers

Unit -III 6 hours

### Composition and metabolism of Carbohydrates

• Types structure, composition and uses

Monosaccharides, Disaccharides, Polysaccharides, Oligosaccharides

- 1. Metabolism
- Pathways of glucose:
  - o Glycolysis,
  - o Gluconeogenesis: Cori's cycle, Tricarboxylic acid (TCA) cycle
  - o Glycogenolysis
  - o Pentose phosphate pathways (Hexose mono phosphate)
- Regulation of blood glucose level
- Investigations and their interpretations

Unit - IV 4 hours

# Composition and metabolism of lipids

- Types , structure, composition and uses of fatty acids Nomenclature, Roles and Prostaglandins
- Metabolism of fatty acid: Breakdown & Synthesis
- Metabolism of triacylglycerols
- Cholesterol metabolism
- Biosynthesis and its Regulation
- Bile salts and bilirubin
- Vitamin D
- Steroid hormones

- Lipoproteins and their functions:
- VLDLs- IDLs, LDLs and HDLs
- Transport of lipids
- Atherosclerosis
- Investigations and their interpretations

Unit - V 6 hours

### Composition and metabolism of Amino acids and proteins

- Types, structure, composition and uses of Amino acids and Proteins
- Metabolism of Amino acids and proteins
- Protein synthesis, targeting and glycosylation
- Chromatography
- Electrophoresis
- Sequencing
- Metabolism of Nitrogen
  - o Fixation Assimilation,
  - o Urea Cycle,
  - o Hemes and chlorophylls
  - o Enzymes and co-enzymes -
  - o Classification,
  - o Properties,
  - o Kinetics and inhibition,
  - Control
  - o Investigations and their interpretations

Unit - VI 2 hours

# Composition of Vitamins and minerals

• Vitamins and minerals: Structure, Classification, Properties, Absorption, Storage & transportation, Normal Concentration

• Investigations and their interpretations

Unit - VII 3 hours

# 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 immunolgobins ELISA etc
- Investigations and their interpretations

#### **MICROBIOLOGY**

**Placement:** First Year Time: Theory - 60 Hours

**Course Description:** The Course is designed to assist the students to acquire knowledge of the Fundamentals of Microbiology and identification of various micro – organisms. It also provides opportunities for practicing infection control measures in hospital and community settings.

Unit - I 5 hours

#### **Introduction:**

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

Unit-II 10hours
General characteristics of Microbes 5 hour (Practical)

- Structure and classifications of Microbes
- Morphological types
- Size and form of bacteria
- Motility
- Colonization
- Growth and nutrition of microbes o Temperature
- o Moisture
- o Blood and body fluids
- Laboratory methods for identification of Micro-organisms
- Staining techniques, Gram staining, Acid fast staining, Hanging drop preparation
- Culture: various medias

Unit- III 10 hours Infection control 2 Hour (Practical)

- Infection: Sources, portals of entry and exit, transmission
- Asepsis
- Disinfection; Types and methods
- Sterilization; Types and methods
- Chemotherapy and antibiotics
- Standard safety measures
- Biomedical waste management
- Role of Nurse
- Hospital acquired infection
- Hospital infection control programme
- Protocols, collection of samples, preparation of report and status of rate of infection in the unit/hospital, continuing education etc

# Unit - IV 12 hours Pathogenic organisms 4 hours (Practical)

- Micro-organisms
- Cocci- gram positive and gram negative
- Bacilli gram positive and negative
- Spirochaete
- Mycoplasma
- Rickettsiae
- Chalmydiae
- Fungi-Superficial and Deep Mycoses.
- Viruses
- Deep mycoses
- Parasites
- Rodents & vectors
- Characteristics, Source, portal of entry, transmission of infection
- Identification of disease producing micro-organisms
- Collection, handling and transportation of various specimens

# Unit- V 8 hours Immunity 4 hours (Practical)

- Immunity- Types, classification
- Antigen and antibody reaction
- Hypersensitivity skin test
- Serological tests
- Immunoprophylaxis
- Vaccines & sear Types & Classification, storage and handling, cold chain
- Immunization for various diseases
- Immunization Schedule

#### **PSYCHOLOGY**

**Placement:** First Year Time: Theory 60 Hours

**Course Description:** This course is designed to assist the students to acquire knowledge of fundaments of psychology and develop an insight into behaviour of self and others. Further it is aimed at helping them to practice the principles of mental hygiene for promoting mental health in nursing practice.

Unit - I 2 hours

#### Introduction

- History and origin and science of psychology
- Definitions & scope of Psychology
- Relevance to nursing
- Methods of Psychology

Unit - II 4 hours

# Biology of behaviour

- Body mind relationship modulation process in health and illness
- Genetics behaviour: Heredity and environment
- Brain and behaviour: Nervous System, Neurons and synapse,
- Association Cortex, Rt and Lt Hemispheres
- Psychology of Sensations
- Muscular and glandular controls of behaviour
- Nature of behaviour of an organism/integrated response

Unit III 20 hours

# Cognitive process

- Attention: Types, determinants, Duration & degree, alterations
- Preception: Meaning, Principles, factors affecting, Errors
- Learning: Nature, Types, learner and learning, Factors influencing, laws and theories, process, transfer, study habits
- Memory: Meaning, Types, Nature Factors influencing, Development Theories and methods of memorizing of Forgetting
- Thinking: Types and levels, stages of development, Relationship with language and communication
- Intelligence: Meaning, classification, uses, theories
- Aptitude: Concept, types, individual differences and variability
- Psychometric assessments of cognitive processes
- Alterations in cognitive process
- Applications

Unit-IV 8 hours

#### **Motivation and Emotional Processes:**

- Motivation: Meaning, Concepts, Types, Theories, Motives and behaviour, Conflicts and frustration, conflict resolution
- Emotions & stress o Emotion: Definition, components, Changes in emotions, theories, emotional adjustments, emotions in health and illness o Stress: stressors, cycle, effect, adaptation & coping
- Attitude: Meaning, nature, development, factors affecting
  - o Behaviour and attitudes
  - Attitudinal change
- Psychometric assessments of emotions and attitudes
- Alterations in emotions
- Applications

Unit-V 7 hours

# Personality

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

Unit-VI 7 hours

# **Developmental Psychology**

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

Unit-VII 8 hours

# Mental hygiene and mental Health

- Concepts of mental hygiene and mental health
- Characteristics of mentally healthy person
- Warning signs of poor mental health
- Promotive and Preventive mental health-strategies and services
- Ego Defence mechanisms and implications
- Personal and social adjustments
- Guidance and counselling
- Role of nurse

Unit-VIII 4 hours

# Psychological assessment & tests

- Types, development,
- Characteristics, Principles, Uses,
- Interpretations and Role of nurse in psychological assessment.

#### NURSING FOUNDATIONS

**Placement:** First Year **Time:** Theory- 265 Hours Practical- 650 Hour

(200 lab and 450 clinical)

Course Description: The Course is designed to assist the students to develop and understanding of the philosophy, objectives, theories and process of nursing in various Supervised Clinical settings. It is aimed at helping the students to acquire knowledge, understanding and skills in techniques of nursing and practice them in Supervised Clinical settings.

Unit - I 10 hours

#### Introduction

- Concept of Health: Health- Illiness continuum
- Factors influencing health
- Causes ad risk factors for developing illness
- Body defences: Immunity and immunization
- Illness and illness Behaviour:
- Impact of illness on patient and family
- Health Care Services: health Promotion and Prevention, Primary Care, Diagnosis, Treatment, Rehabilitation and Continuing Care
- Health Care teams
- Types of health care agencies:
- Hospitals: Types, Organisation and Functions
- Health Promotion and Levels of Disease Prevention
- Primary health care and its delivery: Role of nurse

Unit- II 16 hours

# Nursing as a profession

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

Unit- III 4 hours

### Hospital admission and discharge

- Admission to the hospital
- Unit and its preparation admission bed
- Admission procedure
- Special considerations
- Medico-legal issues
- Roles and Responsibilities of the nurse
- Discharge from the hospital
- Types: Planned discharge, LAMA and abscond, Referrals and transfers
- Discharge Planning
- Discharge procedure
- Special considerations
- Medico-legal issues
- Roles and Responsibilities of the nurse
- Care of the unit after discharge

Unit - IV 10 hours

### Communication and Nurse patient relationship

- Communication: Levels, Elements, Types, Modes, Process, Factors influencing Communication
- Methods of effective Communication
- Attending skills
- Report building skills
- Empathy skills
- Barriers of effective communication
- Helping, Relationships (NPR): dimensions of helping, Relationships, Phase of a helping relationship
- Communicating effectively with patient, families and team members and maintain effective human relations with special reference to communicating with vulnerable group (children, women, physically and mentally challenged and elderly)
- Patient Teaching: Importance, Purposes, Process, role of nurse and integrating teaching in Nursing Process.

Unit-V 15 hours

# **The Nursing Process**

- Critical Thinking and Nursing judgment
- Critical Thinking: Thinking and Learning
  - Competencies, Attitudes for Critical Thinking, Levels of critical thinking in Nursing
- Nursing Process Overview: Application in practice
- Nursing process format: INC, current format
- Assessment
  - o Collection of Data: Types, Sources, Methods

- o Formulating Nursing judgment: Data interpretation
- Nursing diagnosis
  - o Identification of client problems
  - o Nursing diagnosis statement
  - o Difference between medical and nursing diagnosis
- Planning
  - Establishing Priorities o Establishing Goals and Expected Outcomes o Selection of interventions: Protocols and standing Orders
  - Writing the Nursing Care Plan
- Implementation
  - Implementing the plan of care
  - Evaluation
  - Outcome of care o Review of Modify
- Documentation and Reporting

Unit - VI 4 hours

### **Documentation & Reporting**

- Documentation: Purposes of recording and reporting
- Communication within the Health Care, Team
- Types of records; ward records, medical/nursing records.
- Common Record- keeping forms, computerized documentation
  - Guidelines for Reporting: Factual Basis, Accuracy, Completeness, Currentness, Organization, confidentiality
- Methods of Recording,
- Reporting: Change-of shift reports: Transfer reports, Incident reports
- Minimizing legal Liability through effective record keeping.

Unit - VII 15 hours

# Vital signs

- Guidelines for taking vital signs:
- Body temperature:
  - o Physiology, Regulation, Factors affecting body temperature,
  - Assessment of body temperature: sites, equipments and technique, special considerations.
  - o Temperature alterations: Hyperthermia, Heatstroke, Hypothermia
  - Hot and cold applications

#### Pulse:

- o Physiology and Regulation, Characteristics of the pulse, Factors affecting pulse
- Assessment of pulse: sites, location, equipments and technique, special considerations
- o Alterations in pulse

### **Respiration:**

- Physiology and Regulation, Mechanics of breathing Characteristics of the respiration,
- Factors affecting respiration, Assessment of respirations: technique, special considerations,
- Alterations in respiration
- o Blood Pressure
- Physiology and Regulation, Characteristics of the blood pressure,

#### Factors affecting blood pressure,

- Assessment of blood pressure: sites, equipments and technique, special considerations,
- o Alterations in blood pressure,
- Recording of vital signs

Unit -VIII 30 hours

### **Health Assessment Purposes**

- Process of Health assessment Health history Physical Examination:
- Methods-Inspection, Palpation, Percussion, Auscultation, Olfaction
- Preparation for examination: patient and unit
- General assessment
- Assessment of each body system o Recording of health assessment

Unit – IX 5 hours

# Machinery, Equipment and linen

- Types: Disposables and reusable's Linen, rubber goods, glass ware, metal, plastics, furniture, machinery
- Introduction
  - Indent
  - o Maintenance & Inventory

Unit - X 60 hours

# Meeting needs of patient

- Basic needs (Activities of daily living)
- Providing safe and clean environment
  - o Physical- environment, Temperature, Humidity, Noise, Ventilation, light, odour, pests control
  - o Reduction of Physical hazards: fire, accidents
  - o Safety devices: Restraints, side rails, airways, trapez etc
  - o Role of nurse in providing safe and clean environment
- 1. Hygiene
  - Factors influencing Hygiene practice
  - Hygienic care: Care of the skin bath and pressure points, feet and nail, Oral cavity, Hair Care, Eyes, Ears and Nose

- 2. Assessment, Principles, Types, Equipments, Procedures, Special Considerations
- 3. Patient environment: Room Equipment and linen, making patient beds
- 4. Types of beds and bed making
- Comfort-
  - Factors influencing comfort
  - Comfort
  - Comfort devices
- 6. Physiological needs:
- 7. Sleep and Rest:
  - o Physiology of sleep
  - Factors affecting sleep
  - Promoting Rest and sleep
  - o Sleep Disorders
- 8. Nutrition:
  - Importance
  - o Factors affecting nutritional needs o Assessment of nutritional needs : Variables
  - o Meeting Nutritional needs: Principles, equipments, procedure and special consideration
  - o Oral
  - o Enteral: Naso/ Orgastric, gastrostomy
  - Parenteral.
- 9. Urinary Elimination
  - Review of Physiology of urine Elimination, Composition and characteristics of urine o Factors Influencing urination
  - o Alteration in Urinary Elimination
  - Types and Collection of urine specimen: Observation, urine testing o Facilitating urine elimination: assessment, types, equipments, procedures and special considerations
  - o Providing urinal/bed pan
  - Condom drainage
  - Perineal care o Catheterization
  - Care of urinary diversions
  - o Bladder irrigation
- 10. Bowel Elimination
  - Review of Physiology of Bowel Elimination, Composition and characteristics of faeces
  - o Factors affecting Bowel elimination
  - Alteration in Bowel Elimination
  - o Types and collection of specimen of faeces: Observation,
  - Facilitating bowel elimination: assessment, equipments, procedures and special considerations, Passing of Flatus tube, Enemas, Suppository, Sitz bath, Bowel wash, Care of Ostomies
- 11. Mobility and Immobility

- o Principles of Body Mechanics
- Maintenance of normal body Alignment and mobility
- Factors affecting body Alignment and mobility
- Hazards associated with immobility o 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 exercise
- Maintaining body alignment: Positions, Moving, Lifting, Transferring, Walking, Restraints
- 12. Oxygenation
  - o Review of Cardiovascular and respiratory Physiology
  - o Factors Affecting Oxygenation
  - Alterations in Oxygenation
  - o Nursing interventions in oxygenation: assessment, types, equipment used, procedure and special consideration
  - o Maintenance of patent airway o Oxygen administration
- 13. Suction
- 14. Inhalations: dry and moist
- 15. Chest physiotherapy and postural drainage
- 16. Care of chest drainage
- 17. Pulse oximetry
- 18. CPR Basic life support
- 19. Fluid, Electrolyte, and Acid- Base Balances
  - Review of physiological Regulation of Fluid , Electrolyte, and Acid- base Balances
  - o Factors Affecting Fluid, Electrolyte, and Acid-Base Balances
  - o Alterations in Fluid, Electrolyte, and Acid-Base Balances
  - o Nursing Interventions in Fluid, Electrolyte and Acid -Base Imbalances: assessment, types, equipment, procedure and special considerations
  - Measuring fluid intake and output
- 20. Correcting Fluid, electrolyte Imbalance:
  - o Replacement of fluids: Oral and Replacement of fluids: Oral and Parenteral-
  - Venipuncture, regulating IV Flow rates, changing IV solutions and tubing, Changing IV dressing
- 21. Administering Blood transfusion
- 22. Restriction of fluids
- 23. Psychosocial Needs
- 24. Concepts of Cultural diversity, Stress and Adaptation, Self -concept, Sexuality, Spiritual Health, Coping with loss, death and grieving
- 25. Assessment of psychosocial needs
- 26. Nursing intervention for psychosocial needs
  - o Assist with coping and adaptation

- Creating therapeutic environment
- 27. Recreational and diversional therapies

Unit - XI 20 hours

### Infection in Clinical settings

- 28. Infection control
  - Nature of infection
  - Chain of infection transmission
  - o Defenses against infection: natural and acquired
  - o Hospital acquired infection (Nosocomial infection)
- 29. Concept of asepsis: medical asepsis, and surgical asepsis
- 30. Isolation precautions (Barrier nursing)
- 31. Hand washing: simple, hand antisepsis and surgical antisepsis (scrub)
- 32. Isolation: source and protective
- 33. Personal protecting equipments: types, uses and technique of wearing and removing
- 34. Decontamination of equipment and unit
- 35. Transportation of infected patients
- 36. Standard safety precautions (Universal precautions)
- 37. Transmission based precautions
- 38. Biomedical waste management:
- Importance
  - Types of hospital waste o Hazards associated with hospital waste
  - Decontamination of hospital waste
  - Segregation and Transportation and disposal

Unit-XII 40 hours

#### Administration of Medications

- 40. General Principles/Considerations
- 41. Purpose of Medication
- 42. Principles: 5 rights, special considerations, prescriptions, safety in Administering Medications and Medication Errors
- 43. Drug forms
- 44. Routes of administration
- 45. Storage and maintenance of drugs and Nurses responsibility
- 46. Board classification of drugs
- 47. Therapeutic Effect, Side Effects, toxic effects, Idiosyncratic Reactions, Allergic Reactions, Drug Tolerance, Drug Interactions,
- 48. Factors Influencing drug Actions.
- 49. Systems of Drug Measurement: Metric System, Apothecary System, Household Measurements, Solutions
- 50. Converting Measurements Units: Conversion within one system, Conversion between systems, Dosage Calculation
- 51. Terminologies and abbreviations used in prescriptions of medications

- 52. Oral Drugs Administration: Oral, Sublingual and Buccal: Equipment, procedure
- 53. Parenteral
- 54. General Principles: decontamination and disposal of syringes and needles
- 55. Types of parenteral therapies
- 56. Types of syringes, needles, canula and infusion sets
- 57. Protection from Needlestick injuries: Giving Medications with a safety syringes
- 58. Routes of parenteral therapies
  - o Intradermal: Purpose, site, equipment, procedure, special considerations
  - o Subcutaneous : Purpose, site, equipment, procedure, special considerations
  - o Intramuscular: Purpose, site, equipment, procedure, special considerations
  - o Intra Venous: Purpose, site, equipment, procedure, special considerations
- 59. Advanced techniques: epidural, intrathecal, intraosseous, intraperitonial, intrapleural, intra-arterial -Role of nurse
- 60. Topical Administration:
  - o Purposes, site, equipment, procedure, special considerations for
- 61. Application to Skin
- 62. Application to mucous membrane
  - o Direct application of liquids- Gargle and swabbing the throat
  - o Insertion of Drug into body cavity: Suppository/ medicated packing in rectum/vagina
- 63. Instillations: Ear, Eye, Nasal, Bladder and Rectal
- 64. Irrigations: Eye, Ear, Nasal, Bladder and rectum.
- 65. Spraying: Nose and throat
- 66. Inhalation:
  - Nasal, Oral endotracheal/ tracheal (steam, oxygen and medications) purposes, types, equipment, procedure, special considerations
- 67. Recording and reporting of medications administered

Unit - XIII 10 hours

# Meeting needs of Perioperative patients

- 68. Definition and concept of Perioperative Nursing
- 69. Perioperative Phase
- 70. Preparation of patient for surgery
- 71. Intraoperative
- 72. Operation theatre Set up and environment
- 73. Role of nurse
- 74. Postoperative phase
- 75. Recovery unit
- 76. Post operative unit
- 77. Post operative care,
- 78. Wounds: types, Classifications, wound healing process, Factors affecting Wound, Complications of Wound Healing
- 79. Surgical Asepsis

- 80. Care of the wound: types, equipments, procedure and special considerations
- 81. Dressings, Suture Care,
- 82. Care of Drainage
- 83. Application of Bandages, Binders, Splints & Slings
- 84. Heat and Cold Therapy

Unit - XIV 15 hours

### Meeting special needs of the patient

- 85. Care of patients having alteration in
- 86. Temperature (hyper and hypothermia); Types, assessment, Management
- 87. Sensorium (Unconsciousness,) Assessment, management
- 88. Urinary Elimination (retention and incontinence); Assessment, management
- 89. Functioning of sensory organs: (Visual & hearing impairment)
- 90. Assessment of self-care ability
- 91. Communication methods and special considerations
- 92. Mobility (physically challenged, cast), assessment of Self-Care ability: communication methods and special considerations
- 93. Mental state (mentally challenged), assessment of Self Care ability;
- 94. Communication Methods and special considerations
- 95. Respiration (distress); Types, Assessment, Management
- 96. Comfort- (Pain) Nature, Types, Factors influencing Pain, Coping, Assessment, Management
- 97. Treatment related to gastrointestinsal system: naso-gastric suction, gastric irrigation, gastric analysis.

Unit - XV 5 hours

# Care Terminally ill patient

- 98. Concepts of Loss, Grief, grieving Process
- 99. Signs of clinical death
- 100. Care of dying patient: special considerations
- 101. Advance directives: euthanasia, will, dying, declaration, organ donation etc
- 102. Medico-legal issues
- 103. Care of dead body: equipment, procedure and care of unit
- 104. Autopsy
- 105. Embalming

Unit- XVI 6 hours

# **Professional Nursing Concepts and practices**

106. Conceptual and theoretical models of nursing practice: Introduction to modelsholistic model, health belief model, health promotion model etc

- 107. Introduction to Theories in Nursing: Peplau's, Henderson's, Orem's, Neuman's, Roger's and Roy's.
- 108. Linking theories with nursing process.

# **ENGLISH**

**Placement**: First Year Time: Theory - 60 Hours

**Course Description:** The course is designed to enable students to enhance the ability to comprehend spoken and written English required for effective communication in their professional work. Students will practice their skills in verbal and written English during clinical and classroom experiences.

		lassroom experiences.	
Unit -	I		10 hours
	109.	Review of Grammar	
	110.	Remedial study of Grammar.	
	111.	Building Vocabulary	
	112.	Phonetics	
	113.	Public Speaking	
Unit -	II		30 hours
	114.	Read and comprehend prescribed course books.	
Unit -	III		10 hours
	115.	Various forms of composition.	
	116.	Letter writing	
	117.	Note taking	
	118.	Precis writing	
	119.	Nurses notes	
	120.	Anecdotal records	
	121.	Diary writing	
	122.	Reports on health problems etc.	
	123.	Resume/CV	
Unit -	· IV		6 hours
	124.	Spoken English	
	125.	Oral report	
	126.	Discussion	
	127.	Debate	
	128.	Telephonic conversation	
Unit -	V		4 hours
	129.	Listening Comprehension	
	130.	Media, audio, video, speeches etc.	

### INTRODUCTION TO COMPUTERS

**Placement:** First Year Time: Theory - 45 Hours

**Course Description:** This course is designed for students to develop basic understanding of uses of computer and its applications in nursing

20hours (Practical)

Unit - I 3 hours

#### Introduction

- Concepts of Computers
- Hardware and software; trends and technology
- Application of computers in nursing

Unit-II 6 hours

### Introduction to disk-operating system

- o DOS
- Windows (all version)

#### Introduction

- MS-Word
- o MS-Excel with pictorial presentation
- o MS-Access
- o MS-Power point

Unit-III 2 hours

- Multimedia: types and uses 3 hours (Practical)
- Computer aided teaching & testing

Unit-IV 1 hours

Use of Internet and : email 3 hours (Practical)

Unit-V 2 hours

• Statistical packages: types and their features **2 hours (Practical)** 

Unit - VI 1 hours

Hospital Management System: Types and uses
 2 hours (Practical)

### UNIVERSAL HUMAN VALUES PERSONALITY DEVELOPMENT

Placement: First and Second Year Time: 30 Hours

#### **Contents**

- 1. Introduction
- 2. The Extended Family
- 3. Society and the Community
- 4. Managing one's Affairs with Rectitude of Conduct
- 5. Rectitude of Conduct
- 6. Creating Environments of Unity Built on Diversity
- 7. Unity of Action
- 8. Exercising Initiative in a disciplined and Creative Way
- 9. Fostering Initiative

#### **SOCIOLOGY**

**Placement:** Second Year Time: Theory 60 Hours

**Course Description**: This course is designed to introduce concepts of sociology related to community and social institutions in India and its relationship with health, illness and nursing.

Unit I 1 hours

#### Introduction

- Definition of sociology
- Nature and scope of the discipline
- Importance and application of sociology in Nursing

#### Unit II:

### **Individual and Society**

3 hours

- Society and community
- Nature of Society
- Difference between Society and community
- Process of Socialization and individualization
- Personal disorganization

Unit III 3 Hours

#### Culture

- Nature of culture
- Evolution of culture
- Diversity and uniformity of culture
- Culture and Socialization
- Transcultural Society
- Influence on health and disease.

Unit IV: 4 hours

### Social groups and processes

- The meaning and classification of groups
- Primary & Secondary group.
- In-group V/s Out-group, Class, Tribe, Caste
- Economic, Political, Religious groups, Mob, Crowd, Public and Audience interaction & Social Processes
- Co-operation, Competition, Conflict
- Accommodation, Assimilation & Isolation

Unit V: 6 hours

### **Population**

- Society & population
- Population distribution in India-Demographic characteristics.
- Malthusian theory of populations
- Population explosion in India & its impact on health status
- Family welfare programmes

Unit VI 5 hours

### Family and Marriage

- Family- functions
- Types-Joint, Nuclear, Blended and extended family
- Characteristics
- The modern family-changes, Problems-Dowry etc, Welfare Services
- Changes and legislations on family and marriage in India-marriage acts
- Marriage: forms and functions of marriage
- Marriage and family problems in India
- Family, marriage and their influence on health and health practices

Unit VII: 7 hours

#### Social Stratification

- Meaning and types of social stratification
- The Indian caste system-origin and features
- Features of caste in India Today
- Social class system and status
- Social Mobility-meaning and types
- Race as a biological concept, Criteria of racial classification
- Salient features of Primary races-Racism
- Influence of class, caste and race on health and health practices

Unit VIII: 6 hours

### Types of communities in India-Rural, Urban and Regional

- Features of village community and characteristics of Indian villages- Panchayat system, Social dynamics
- Community Development project and planning
- Changes in Indian Rural life
- Availability of health facilities in rural and its impact on health and health practices
- Urban-Community-Features
- The growth of cities: urbanization and its impact on health and health practices
- Major Urban problems-Urban slums
- Region: Problems and impact on health

Unit-IX 4 hours

### **Social Change**

Nature and process of Social Change

- Factors influencing social change: Cultural change, Cultural lag
- Introduction to Theories of social change: Linear, Cyclical, Marxian, Functional
- Role of nurse-change agents

Unit X 4 hours

### Social organization and social system

- Social organization: Elements, Types
- Demographic 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

Unit-XI 2 hours

#### Social control

- Nature and process of social control
- Political, Legal, Religious, Educational, Economic, Industrial and Technological systems, Norms and values-Folkways and more customs, Laws and fashion
- Role of nurse

Unit XII: 15 hours

#### **Social Problems**

- Social disorganization
- Control and planning: Poverty, Housing, Illiteracy, Food supplies, Prostitution, Rights of women and children, Vulnerable groups: Elderly, Handicapped, Minority groups and others marginalized groups, Child labor, Child abuse, Delinquency and crime, Substance abuse, HIV/AIDS
- Social welfare programmes in India
- Role of nurse

#### PHARMACOLOGY

**Placement:** Second Year Time: Theory 45 Hours

**Course Description:** This course is designed to enable the students acquire the understanding of pharmaco-dynamics, pharmacokinetics, principles of therapeutics & nursing implications.

Unit -I 3 Hours

### Introduction to Pharmacology

- Definition Sources
- Terminologies used Types: Classification
- Pharmacodynamics: Actions, Therapeutics Adverse, Toxic
- Pharmacokinetics: Absorption, Distribution, Metabolism, Interactions, and Excretion.
- Review: Routes and Principles of administration of drugs. Indian Pharmacopoeia: Legal issues. Rational use of drugs Principles of therapeutics.

Unit II: 6 Hours

### Chemotherapy

- Pharmacology of commonly used; Penicillin Cephalosporins Amino glycosides
- Macrolide & Broad Spectrum Antibiotics Sulfonamides Quinolones Ant amoebic Antimalarials Antihelmintics Antiscabies agents Antiviral & anti fungal agents Anti tubercular drugs Anti leprosy drugs Anticancer drugs Immuno-suppressants
- Composition, action, dosage, route, indications, contraindications, drug interactions, side effects, adverse effects, toxicity and Nurses responsibilities

Unit: III 2 hours

### Pharmacology of commonly used antiseptics, disinfectants & insecticides

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

Unit: IV 2 hours

### Drugs acting on G.I. System

- Pharmacology of commonly used Antiemetics, Emetics, Purgatives, Antacids, Cholinergics, Anti Cholinergics, Fluid and electrolyte therapy, Antidiarrhoeals, Histamine
- Composition, action, dosage, route, indications, contraindications, drug interactions, side effects, adverse effects, toxicity and role of nurses.

Unit: V 2 hours

### **Drugs used on Respiratory system**

• Pharmacology of commonly used Antiasthmaticss Mucolytics Decongestants Expectorants Antitussives Bronchodilators Bronchoconstrictors Antihistamines

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

Unit: VI 2 hours

### Drugs used on Urinary system

- · Pharmacology of commonly used
- Diuretics & antidiuretics
- Urinary antiseptics
- Cholinergics and anticholinergics
- Acidifiers & alkalinizers
  - Composition, action, dosage, route, indications, contraindications, drug interactions, side effects, adverse effects, toxicity and role of nurse..

Unit :VII 4 hours

#### Miscellaneous

- Drug used in de-addiction
- Drugs used in CPR & emergency.
- Vitamins and minerals
- Immunosuppressant
- Antidotes
- Anti venom
- Vaccines and sera

Unit: VIII 1 hours

### Drugs used on skin & mucous membranes

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

Unit: IX 8 hours

### Drugs acting on Nervous system

- Basic & applied Pharmacology of commonly used
- Analgesics and Anaesthetics
- Analgesics
- Non steroidal Anti Inflammatory Drugs (NSAID)
- Antipyretics
- Hypnotics and sedatives
- Opioids
- Nonopioids
- Tranquilizers

- General & local anesthetics
- Gases: Oxygen, Nitrous oxide, carbon-dioxide
- Cholinergics & anticholinergics:
- Muscle relaxants
- Major Tranquilizers
- Antipsychotics
- Antidepressants
- Anticonvulsants
- Adrenergics
- Noradrenergics
- Mood stabilizers
- Acetylcholine
- Stimulants
- Composition, action, dosage, route, indications, contraindications, drug interactions, side effects, adverse effects, toxicity and role of nurse.

Unit: X 5 hour

### Cardiovascular Drugs

- Haematinics, Cardiotonics
- Anti anginals
- Anti hypertensives and Vasodilators
- Anti arrhythmics
- Plasma expanders
- Coagulants and anticoagulants
- Antiplatelets & thrombolytics
- Hypolipidemics, Composition, action, dosage, route, indications, contraindications, drug interactions, side effects, adverse effects, toxicity and role of nurse.

Unit: XI 4 hours

Drugs used for Hormonal disorders and supplementation, Contraception, and Medical Termination of Pregnancy

- Insulins & oral hypoglycemics Thyroid supplements & suppressants Steroids, Anabolics Uterine stimulants & relaxants Oral contraceptives
- Other estrogen-Progesterone Preparations Corticotrophin & Gonadotrophines Adrenaline, Prostaglandins, Calcitonins, Calcium Salts, Calcium regulators
- Composition, action, dosage, route, indications, contraindications, drug interactions, side effects, adverse effects, toxicity and role of nurse.

Unit: XII 6 hours

### Introduction to Drugs used in alternative systems of Medicine:

Ayurveda, Homeopathy, Unani and Siddha etc.

### PATHOLOGY AND GENETICS SECTION- A - PATHOLOGY

Placement: Second Year Time: Theory: 30 Hours

**Course Description:** This course is designed to enable students to acquire knowledge of Pathology of various disease conditions & apply this knowledge in practice of Nursing.

**Time:** Theory: 45 Hours

Unit: I 3 hours

### Introduction

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

### Unit: II 10 hours Special pathology 5 hours (Practical)

- Pathological changes in disease conditions of various systems:
- 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
- Gastro intestinal tract
- Peptic ulcer, typhoid
- Carcinoma of GI tract- buccal, Esophageal
- Gastric and intestinal
- Liver, Gall bladder & pancreas
- Hepatitis, Chronic liver abscess, cirrhosis
- Tumours of liver, gallbladder and pancreas
- Cholecystitis

- Kidneys and 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
- · Vasicular mole, choriocarcinoma
- Ectopic gestation
- Ovarian cyst & tumors
- Cancer breast
- Central nervous system
- Hydrocephalus, meningitis, encephalitis
- Vascular disorders- thrombosis, embolism
- Stroke, paraplegia, quadriplegia
- Tumours, meningiomas- gliomas
- Metastatic tumor
  - Skeletal system
- Bone healing, osteoporosis, osteomyelitis
- Arthritis and tumors

### Unit III: Clinical pathology

3 hours (Practical)

4 hours

- Various blood and bone marrow tests in assessment and monitoring of disease conditions
- Hemoglobin
- RBC, WBC and platelet counts
- Bleeding time, clotting time and prothrombin time
- Blood grouping and cross matching
- Blood chemistry
- Blood culture
- Serological and immunological tests
- Other blood tests
- Examination of bone marrow
- Methods of collection of blood specimen for various clinical pathology, biochemistry, microbiology tests, inferences and normal values

Unit: IV 2 hours

### Examination of body cavity fluids, transudate and exudates 1 Hr (Practical)

- 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

Unit: V 1 hour Urine and Faeces 1 hour (Practical)

- 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.

#### **SECTION- B GENETICS**

**Placement:** Second Year **Time:** Theory -15 Hours

**Course Description:** This course is designed to enable students to acquire understanding of Genetics, its role in causation and management of defects and diseases.

Unit:I 3 hours

#### Introduction

• Practical application of genetics in Nursing Impact of genetic condition on families Review of cellular division mitosis and meiosis Characteristics and structure of genes Chromosomes- sex determination Chromosomal aberrations patterns of inheritance Mendalian theory of inheritance Multiple allots and blood groups Sex linked inheritance Mechanism of inheritance Errors in transmission (mutation)

Unit:II 3 hours Maternal, prenatal and genetic influences on development of defects and diseases

- Conditions affecting the mother: Genetic 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 and the role of folic acid in lowering the risks
- Down syndrome (Trisomy 21)

Unit: III 2 hours

### Genetic testing in the neonates and children

- Screening for
- Congenital abnormalities
- Developmental delay
- Dysmorphism

Unit: IV 2 hours

#### Genetic conditions of adolescents and adults

- Cancer genetics- Familial cancer
- Inborn errors of metabolism
- Blood group alleles and haematological disorders
- Genetic hematochromatosis
- Huntingtons disease
- Mental illness

Unit: V 5 hours

### **Services related to Genetics**

- Genetic testing
- Human genome project
- Gene therapy The Eugenics movement
- Genetic counselingLegal and Ethical issues
- Role of Nurse

# MEDICAL-SURGICAL NURSING-I (ADULT INCLUDING GERIATRICS)

**Placement:** Second Year **Time:** Theory.- 210 Hours. Practical- 720 Hours

**Course Description:** The purpose of this course is to acquire knowledge and develop proficiency in caring for patients with medical and disorders in varieties of health care settings and at home.

Unit: I 15 hours

#### Introduction

- •Introduction to medical surgical nursing-Evolution and trends of medical and surgical nursing
- •Review of concept of health and illness, disease concepts, causations, classification-International classification of diseases (ICD 10 or later version), Acute illness & terminal illness, stages of illness.
- •Review of concepts of comprehensive nursing care in medical surgical conditions based on nursing process.
- Role of nurse, patient and family in care of adult patient
- Role and responsibilities of a nurse in medical settings
- Outpatient department
- In-patient unit
- Intensive care unit
- Home and community settings
- Introduction to medical-surgical asepsis
- Inflammation and infection
- Immunity
- Wound healing.
- Care of surgical patient
- Pre-operative
- Intra-operative
- Postoperative

Unit II: 15 hours

### Common signs and symptoms and management

- Fluid and electrolyte imbalance
- Vomiting
- Dyspnea and cough, respiratory obstruction
- Fever
- Shock
- Unconsciousness, Syncope
- Pain incontinence

- Edema
- Age related problems- geriatric

Unit III: 20 hours

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

- •Review of anatomy and physiology of respiratory system
- Nursing assessment History and physical assessment
- •Etiology pathophysiology, clinical manifestations, diagnosis, treatment modalities and medical, surgical, dietetics & nursing management of adult including elderly with
- •Upper respiratory tract infections
- Bronchitis
- Asthma
- •Emphysema
- •Empyema
- Atelectasis
- •Chronic obstructive pulmonary diseases (COPD)
- Brochiectasis
- Pneumonia
- •Pulmonary tuberculosis
- •Lung abscess Pleural effusion
- Cysts and tumors
- Chest injuries
- •Respiratory arrest and insufficiency
- •Pulmonary embolism
- •Special therapies, alternative therapies
- Nursing procedures
- •Drugs used in treatment of respiratory disorders

Unit: IV 30 hours

### Nursing management of patient (adult including elderly) with disorders of digestive system

- •Review of anatomy and physiology of digestive system
- •Nursing assessment- History and physical assessment
- •Etiology, pathophysiology, clinical manifestations, diagnosis, treatment, modalities, & nursing management Disorders of
- Oral cavity- Lips, gums, tongue, salivary glands and teeth
- Oesophagus- inflammation, stricture, obstruction, bleeding and tumors
  - •Stomach and duodenum- hiatus hernia, gastritis, peptic and deudenal ulcer, bleeding, tumors, pyloric stenosis
  - •Small intestinal disorders- inflammation and infection, entritis, malabsorption, obstruction, tumor and perforation
  - •Large intestinal disorders- colitis, inflammation and infection, obstruction and tumor and lump
- Hernias
  - Appendix- inflammation, mass, abscess, rupture

- Anal and rectum; hemorrhoids, fissure, fistulas
- Peritonitis/acute abdomen
- Pancreas; inflammation, cyst, abscess and tumors
- Liver; inflammation, cyst, abscess, cirrhosis, portal hypertension, hepatic failure, tumors
- Gall bladder; inflammation, obstruction, stones and tumors
- Special therapies, alternative therapies
- Nursing procedures
- Drugs used in treatment of digestive system

Unit V: 30 hours

Nursing management of nations (adult including elderly) with blood and card

## Nursing management of patient (adult including elderly) with blood and cardiovascular problems

- Review of anatomy and physiology of blood and cardiovascular system
- Nursing assessment-History and physical assessment
  - Etiology, pathophysiology, clinical manifestations, diagnosis, treatment, modalities, & nursing management Etiology, pathophysiology, clinical manifestations, diagnosis, treatment, modalities and medical, surgical, dietetics & nursing management of
- Vascular system
- Hypertension, hypo tension
- Atherosclerosis
- · Raynaud's disease
- Aneurysm and Peripheral vascular disorders
- 1. Heart
- Coronary artery diseases
- Ischemic heart disease
- Coronary atherosclerosis
- Angina pectoris
- Valvular disorders of the heart
- Congenital and acquired
- Rheumatic heart diseases
- Endocarditis, pericarditis, myocarditis
- Cardiomyopathies
- Cardiac dysrhythmias, Heart block
- Congestive cardiac failure
  - Cor-pulmonale, pulmonary edema, cardiogenic shock, cardiac tamponade
- Cardiac emergencies and arrest
- Cardio-pulmonary resuscitation (CPR)
- 1. Blood
- 2. Anaemia
- Polycythemia
  - Bleeding disorders; clotting factor defects and platelet defects

- Thalassemia
- Leukemia
- Leukopenias and agranulocytosis
- Lymphomas
- Myelomas
- Special therapies
- •Blood transfusion, safety checks, procedure and requirements, management of adverse transfusion reaction, records for blood transfusion
- •Management and counselling of blood donors, phlebotomy procedure, and post donation management. Blood bank functioning and hospital transfusion committee. Biosafety and waste management in relation to blood transfusion
- Role of nurse in organ donation, retrieval and banking
- Alternative therapies
- Nursing procedures
- Drugs used in treatment of blood and cardiovascular disorders

### Unit VI: 10 hours

### Nursing management of patient (adult including elderly) with genito-urinary problems

- Review of anatomy and physiology of genito-urinary system
- Nursing assessment-History and physical assessment
  - •Etiology, pathophysiology, clinical manifestations, diagnosis, treatment modalities, and medical, surgical, dietetics and nursing management of
- 1. Nephritis
- Nephrotic syndrome
- 1. Nephrosis
- Renal calculus
- 1. Tumours
- Acute renal failure
- Chronic renal failure
- End stage renal disease
- Dialysis, renal transplant
- Congenital disorders, urinary infections
- Benign prostate hypertrophy
  - •Disorders of ureter, urinary bladder and urethra- inflammation, infection, stricture, obstruction, tumor, prostate
- Special therapies, alternative therapies
- Nursing procedures
- · Drugs used in treatment of genito-urinary disorders

Unit VII: 5 hours

### Nursing management of disorders of male (adult including elderly) reproductive system

- Review of anatomy and physiology of male reproductive system
- Nursing assessment- History and physical assessment
- Etiology, pathophysiology, clinical manifestations, diagnosis, treatment modalities, and medical, surgical, dietetics and nursing management of disorders of male reproductive system
- Congenital malformations; cryptochidism
- Hypospadiasis, Epispadiasis
- Infections
- Testis and adjacent structures
- Penis
- Prostate:Inflammation, infection, hypertrophy, tumor
- Sexual dysfunction
- Infertility
- Contraception
- Breast; gynecomastia, tumor
- Climacteric changes
- Special therapies, alternative therapies
- Nursing procedures
- Drugs used in treatment of disorders of male reproductive system

### Unit VIII: 10 hours

Nursing management of patient (adult including elderly) with disorders of endocrine system

- Review of anatomy and physiology of endocrine system
- Nursing assessment-History and physical assessment
- Etiology, pathophysiology, clinical manifestations, diagnosis, treatment modalities, and medical, surgical, dietetics and nursing management of
- Disorders of thyroid and parathyroid
- Diabetes mellitus
- Diabetes insipidus
- Adrenal tumor
- Pituitary disorders
- Special therapies, alternative therapies
- Nursing procedures
- Drugs used in treatment of disorders of endocrine system

Unit IX: 10 hours

Nursing management of patient (adult including elderly) with disorders of Integumentary system

- Review of anatomy and physiology of Skin and its appendages
- Nursing assessment- History and Physical assessment
- Etiology, pathophysiology, clinical manifestations, diagnosis, treatment modalities, and medical, surgical, dietetics and nursing management of disorders of skin and its appendages-
- Lesions and abrasions
- Infection and infestations; Dermatitis
- Dermatoses; infectious and Non-infectious
- "Inflammatory dermatoses"
- Acne Vulgaris
- Allergies and Eczema
- Psoriasis
- Malignant melanoma
- Alopecia
- Special therapies, alternative therapies
- Nursing procedures
- Drugs used in treatment of disorders of Integumentary system

### Unit X 15 hours

### Nursing management of patient (adult including elderly) with musculoskeletal problems

- Review of anatomy and physiology of musculoskeletal system
- Nursing assessment- History and physical assessment
- Etiology, Pathophysiology, clinical manifestations, diagnosis, treatment modalities, and medical, surgical, dietetics and nursing management of disorders of Muscles, Ligaments and Joints- inflammation, infection, trauma
- Bones- inflammation, infection, dislocation, fracture, tumour and trauma
- Osteomalacia and osteoporosis
- Arthritis
- Congenital deformities
- Spinal column- defects and deformities, tumor, Prolapsed intervertebral disc, pott's spine
- Paget's disease
- Amputation
- Prosthesis
- Transplant and replacement surgeries
- Rehabilitation
- Transplant and replacement surgeries
- Rehabilitation
- Special therapies, alternative therapies
- Nursing procedures

Drugs used in treatment of disorders of musculoskeletal system

Unit XI 10 hours

### Nursing management of patient (adult including elderly) with immunological problems

- •Review of immune system
- Nursing assessment- History and Physical assessment
- •Etiology, Pathophysiology, clinical manifestations, diagnosis, treatment modalities, and medical, surgical, dietetics and nursing management of
- Immuno deficiency disorders
- Primary immune deficiency
- Phagocytic dysfunction
- B-cell & T-cell deficiencies
- Secondary immunodeficiencies
- Acquired immunodeficiency syndrome (AIDS)
- Incidence of HIV & AIDS
- Epidemiology
- Transmission-Prevention of Transmission
- Standard safety precautions
- Role of nurse; Counseling
- Health education and home care consideration
- National AIDS control programme- NACO, various national and international agencies
- Infection control programme
- Rehabilitation
- Special therapies, alternative therapies
- Nursing procedures
- Drugs used in treatment of disorders of immunological system

**Unit XII** 20 hours

### Nursing management of patient (adults including elderly) with Communicable diseases

- Overview of infectious disease, the infectious process
- Nursing assessment -History and Physical assessment
  - •Epidemiology, infectious process, clinical manifestations, diagnosis, treatment, prevention and dietics Control and eradication of common communicable diseases-
- **Tuberculosis**
- Diarrhoeal diseases
- Hepatitis A-E
- Herpes
- Chicken pox
- Small pox
- **Typhoid**
- Meningitis
  - Gas gangrene
  - Leprosy
  - Dengue

- •Plague
- •Malaria
- Diphtheria
- Pertusis
- Poliomyelitis
- Measles
- •Mumps
- Influenza
- Tetanus
- Yellow fever
- Filariasis
- •HIV, AIDS
- •Reproductive tract infections
- •Special infection control measures: Notification, isolation, quarantine, immunization, infectious disease, hospitals
- •Special therapies, alternative therapies
- Nursing procedures
- •Drugs used in treatment of communicable diseases

Unit XIII 25 hours

### **Preoperative Nursing**

- •Organization and Physical set-up of the operation theatre(OT):
- Classifications
- •O. T. design
- Staffing
- Members O.T.team
- Duties and responsibilities of nurse in O.T.
- Principles of health and operating room attire.
- Instruments
- Sutures and suture materials
- Equipments
- •O.T. tables and sets for common surgical procedures
- Positions and draping for common surgical procedures
- Scrubbing procedures
- Gowning and gloving
- •Preparation of O.T. sets
- •Monitoring the patient during surgical procedures
- Maintenance of therapeutic environment in O.T.
- •Standard safety measures
- •Infection control; fumigation, disinfections and sterilization
- •Biomedical waste management
- Prevention of accidents and hazards in O.T.
- Anesthesia
- Types

- •Methods of administration
- •Effects and stages
- •Equipments
- •Drugs
- •Cardio Pulmonary Resuscitation (CPR)
  •Pain management technique
- •Legal aspects

#### COMMUNITY HEALTH NURSING-I

Placement: SecondYear Time: Theory - 90 Hours

**Practical-135 Hours** 

**Course Description:** This course is designed for students to appreciate the principles of promotions and maintenance of health

Unit I 2 hours

#### Introduction

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

Unit II 20 hours

#### **Determinants of health**

- Eugenics
- Environment:
- Physical: Air, light, ventilation, water, housing, sanitation; disposal of dead bodies, forestation, noise, climate, communication: infrastructure facilities and Linkages
- Acts regulating the environment: National Pollution control board
- Bacterial and viral: Agents, host carriers and immunity
- Arthropods and rodents
- Food hygiene: Production, preservation, purchase, preparation, consumption
- Acts regulating food hygiene- prevention of food adulteration act, Drugs and cosmetic act
- Socio cultural
- Customs, taboos
- Marriage system
- Family structure
  - Status of special groups; females, children, elderly, challenged groups and sick persons
- Life style
- Hygiene
- Physical activity
- Recreation and sleep
- Sexual life
- Spiritual life philosophy
- Self reliance
- Dietary pattern
- Education
- Occupation
- Financial management

- Income
- Budget
- Purchasing power
- Security

Unit: III 10 hours

### **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
- Descriptive
- Analytical: Epidemic investigation
- Experimental

Unit: IV 25 hours

### Epidemiology and Nursing management of common communicable diseases

- Respiratory infections
- Small pox
- Chicken pox
- Measles
- Influenza
- Rubella
- ARI's & Pneumonia
- Mumps
- Diphtheria
- Whooping cough
- Meningococcal meningitis
- Tuberculosis
- SARS
- Intestinal infections
- Poliomyelitis
- Viral hepatitis
- 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
- Bacterial
- Brucellosis
- Plague
- Human salmonellosis
- Anthrax
- Leptospirosis
- Rickettsial diseases
- Rickettsial Zoonoses
- Scrub typhus
- Murine typhus
- Tick typhus
- Q fever
- Parasitic zoonoses
- Taeniasis
- Hydatid disease
- Leishmaniasis
- Surface infections
- Trachoma
- Tetanus
- Leprosy
- STD and RTI
- Yaws
- HIV/AIDS
- Any other

Unit:V 10 hours

### Epidemiology and Nursing management of non-communicable diseases

- Malnutrition: Under nutrition, over nutrition, Nutritional deficiencies
- Anaemia
- Hypertension
- Stroke
- Rheumatic heart disease
- Coronary heart disease
- Cancer

- Diabetes mellitus
- Blindness
- Accidents
- Mental illness
- Obesity
- Iodine deficiency
- Flurosis
- Epilepsy

Unit :VI 6 hours

### Demography

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

Unit :VII 17 hours

### Population and its control

- Population explosion and its impact on social, economic development of individual, society and country
- Population control:
- Over all development: women empowerment, social, economic and educational development
- Limiting family size:
- Promotion of small family norm
- Methods: Spacing (Natural, Biological, Chemical, Mechanical methods etc.)
- Terminal: Surgical methods
- Emergency contraception

### **COMMUNICATION & EDUCATIONAL TECHNOLOGY**

#### **Placement-Second Year**

**Course Description:** This course is designed to help the students to acquire an understanding of the principles and methods of communication and teaching. It helps to develop skills in communicating effectively, maintaining effective interpersonal relations, individuals and groups in clinical, community health and educational settings.

Time: Theory -90 Hours

Unit I: 5 hours

### Review of communication process

- Process; elements channel
- Facilitators
- Barriers and methods of overcoming
- Techniques

Unit II: 5 hours

### **Interpersonal relations**

- Purpose & types
- Phases
- Barriers and method Mental Health Nursing-Practicals of overcoming
- · Johari window

Unit III: 5 hours

#### **Human Relation**

- Understanding self
- Social behavior, motivation, social attitude
- Individual and groups
- Groups and individual
- Human relation in context of nursing
- Group dynamics
- Team work

Unit IV: Th.10Hrs, Pr.5Hrs

### Guidance and counseling

- Definition
- Purpose, scope and need
- Basic principles
- Organization of counseling services
- Types of counselling approaches
- Role and preparation of counselor
- Issues for counseling in nursing: students and practitioners
- Counseling process- steps & techniques, tools of counselor
- Managing disciplinary problems
- Management of crisis and referral

Unit V: 5 hours

### Principles of education & teaching learning process

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

#### **Unit VI:**

#### Th.10Hrs, Pr.10Hrs

### Methods of teaching

- Lecture, demonstration, group discussion, seminar, symposium, panel discussion, role play, project, field trip, workshop, exhibition, programmed instruction, computer assisted learning, micro-teaching, problem based learning, self instructional module and simulation etc.
- Clinical teaching methods: case method, nursing round & reports, bedside clinic, conference (individual and group) process recording

Unit VII: Th.10Hrs, Pr.8Hrs.

#### **Educational** media

- Purpose and types of A.V. aids, principles and sourcesetc.
  - Graphic aids: chalk board, chart, graph, poster, flash cards, flannel graph, bulletin, cartoon
- Three dimensional aids: objects, specimens, models, puppets
- Printed aids: pamphlets & leaflets
- Projected aids: slides, overhead projector, films, microscope, LCD
- Audio aids: tape recorder, public address system
- Computer

Unit VIII: Th.5Hrs, Pr.7Hrs

#### Assessment

- Purpose and scope of evaluation and assessment
- Criteria for selection of assessment technique and methods
  - Assessment of knowledge: essay type questions, short answer questions (SAQ), multiple type questions (MCQ)
  - Assessment of skills: Observation checklist, practical exam, viva, objective structured clinical examination (OSCE)
  - Assessment of attitudes; Attitude scales

Unit IX 5 hours

### Information, education & communication for health (IEC)

- Health behavior & health education
- Planning for health education
- Health education with individuals, groups and communities
- Communicating health messages
- Methods and media for communicating health messages
- Using mass media

### MEDICAL-SURGICAL NURSING-II (ADULT INCLUDING GERIATRICS)

Placement: Third Year Time: Theory-125 Hours
Practical - 270hrs

**Course Description :** The purpose of this course is to acquire knowledge and develop proficiency caring for patients with medical and surgical disorders in varieties of health care settings at home.

Unit:I 15 hours

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

- Review of anatomy and physiology of the Ear Nose and Throat
- Nursing Assessment-History and Physical assessment
- Etiology , Pathophysiology, clinical manifestations, diagnosis treatment modalities and medical and surgical nursing management of Ear, Nose and Throat disorders:
- External ear: Deformities ,Otalgia, foreign bodies and tumours
- Middle ear: Impacted wax, Tympanic membrane perforation, otitis
  - media, otosclerosis, mastoiditis, tumours
  - Inner ear: Meniere's disease, labyrinthitis, ototoxicity, tumours
  - Upper airway infection:
  - Common cold, sinusitis, ethinitis, rhinitis, phargngitis, tonsilitis and adenoiditis,
- peritonsilar abscess, laryngitis
- Upper respiratory airway Epistaxis
- Nasal obstruction, laryngeal obstruction, cancer of the larynx
- Cancer of the oral cavity
- Speech defects and speech therapy
- Deafness: Preventions, Control and Rehabilitation
- Hearing Aids, Implanted hearing devices
- Special Therapies
- Nursing procedures
- Drugs used in treatment of disorders of Ear Nose and Throat
- Role of nurse Communicating with hearing impaired and muteness

Unit :II 15 hours

### Nursing management of Patient with disorders of eye

- · Review of anatomy and physiology of the Eye
- Nursing Assessment-History and Physical assessment
  - Etiology, Pathophysiology, clinical manifestations, diagnosis treatment modalities and medical and surgical nursing management nursing management of eye disorders:
- Refractive errors

- Eyelids Infection, tumours and deformities
- Conjunctiva Inflammation and infection
- Cornea- inflammation and infection
- Lens- Cataracts
  - Glaucoma
  - Disorders of the uveal tract
  - Ocular tumours
  - Disorders of posterior chamber and retina
  - Retinal and vitreous problems
  - Retinal detachment
  - Ocular emergencies and their prevention
  - Blindness
  - National blindness control programme.
  - Eye Banking
  - Eye prosthesis and Rehabilitation
  - Role of a nurse- Communication with visually impaired patient, Eye camps
  - Special Therapies
  - Nursing procedures
  - Drugs used in treatment of disorders of Eye

### Unit: III 16 hours

### Nursing management of patient with neurological disorders

- Review of anatomy and physiology of the neurological system
- Nursing Assessment- History and Physical and neurological assessment and Glasgow coma scale
- Etiology, Pathophysiology, clinical manifestations, diagnosis, treatment modalities and medical and surgical nursing management nursing management of neurological disorders:
- Congenital malformations
- Headache
- Head Injuries
- Spinal Injuries
- Paraplegia
- Hemiplegia
- Quadraplegia
- Spinal cord compression Herniation of Intervertebral Disc
- Tumours of the brain and spinal cord
- Intra cranial and cerebral aneurysms
  - Infections: Meningitis, Encephalitis, Brain abscess, neurocysticercosis
- Movement disorders: Chorea, Seizures, Epilepsies
- Cerebro Vascular Accidents (CVA)
- Cranial, Spinal Neuropathies: Bell's palsy, Trigeminal neuralgia

- Peripheral Neuropathies: Guillain-Barr'e Syndrome
- Myasthenia gravis
  - Multiple sclerosis
  - Degenerative diseases
  - Delirium
  - Dementia
  - Alzheimer's disease
  - Parkinson's disease
  - Management of unconscious patients and patients with stroke
  - Role of the nurse in communicating with patient having neurological deficit
  - Rehabilitation of patients with neurological deficit
  - Role of nurse in long stay facility (institutions) and at home
  - Special Therapies
  - Nursing procedures
  - Drugs used in treatment of neurological disorders.

Unit IV:

### Nursing management of patients with disorders of female reproductive system

- Review of anatomy and physiology of the female reproductive system
- Nursing assessment History and physical assessment
- Breast self Examination
  - Etiology , Pathophysiology , Clinical manifestations , diagnosis treatment modalities and medical & Surgical nursing management of disorders of female reproductive system
- Congenital abnormalities of female reproductive system
- Sexuality and Reproductive Health
- Sexual Health assessment
- Menstrual Disorders
- Dysmenorrhea Amenorrhea, Premenstrual syndrome
- Abnormal uterine bleeding menorrhagia
- Pelvic inflammatory disease
- Ovarian and fallopian tube disorders, infection, cysts tumors
  - Uterine and cervical disorders Endometriosis polyps Fibroids Cervical and Uterine tumors, Uterine displacement cystocele / Urethocele / Rectocele
- Vaginal disorders , infection and discharge Fistulas
- · Vulval disorders; infection cysts tumors
- Diseases of breasts: Deformities infection, Cysts and Tumors
- Menopause and Hormonal Replacement Therapy
- Infertility
- Contraception types Methods Risk and effectiveness
  - Spacing Methods
  - o Barrier Methods, Intra Uterine Devices, Hormonal ,Post Conceptional methods etc.

- o Terminal Methods
- Sterilization
- Emergency Contraception Methods
- Abortion Natural , Medical and Surgical abortion MTP Act
- Toxic shock syndrome
  - Injuries and Trauma Sexual Violence
  - Special therapies
  - Nursing Procedures
  - Drugs Used in treatment of gynecological disorders
  - National Family Welfare Programme

### Unit: V 10 hours

### Nursing management of patients with Burn's reconstructive and cosmetic surgery

- Review of anatomy and physiology of the skin and connective tissues and various deformities
- Nursing Assessment-History and Physical assessment and Assessment of burns and fluid and electrolyte loss
- Etiology , Pathophysiology, clinical manifestations, diagnosis, treatment modalities and medical and surgical nursing management nursing management of Burns and Re-constructive and Cosmetic surgery.
- Types of Re-constructive and Cosmetic surgery for burns, congenital
- deformities, injuries and cosmetic purposes
- Role of Nurse
- Legal aspects
- Rehabilitation
- Special therapies
- Psycho social aspects
- Nursing procedures
- Drugs used in treatment of Burn, reconstructive and cosmetic surgery

### Unit: VI 10 hours

### Nursing management of patients with oncological conditions

- Structure and characteristics of normal and cancer cells
- Nursing Assessment-History and Physical assessment
- Prevention, Screening, Early detection, Warning signs of Cancer
  - Etiology, Pathophysiology, clinical manifestations, diagnosis, treatment modalities and medical and surgical nursing management nursing management of oncological conditions
- · Common malignancies of various body systems; Oral, Larynx, Lung,
- Stomach and Colon, Liver, Leukemia's and Lymphomas, Breast, Cervix,
- Ovary, Uterus, Sarcoma, Brain, Renal, Bladder, Prostate etc

- Oncological emergencies
- Modalities of treatment
- Immunotherapy
- Chemotherapy
- Radiotherapy
- Surgical Interventions
- Stem cell and Bone marrow transplants
- Gene therapy
- Other forms of treatment
- · Psychological aspects of cancer
- Palliative care; Symptom and Pain Management, Nutritional support
- Home care
- Hospice care
- Stomal care
- Special therapies
- Psycho social aspects
- Nursing procedures

### Unit VII: 10 hours

### Nursing management of patients in emergency & disaster situations disaster nursing

- Concepts and principals of Disaster Nursing
- Causes and Types of Disaster Natural and Man -Made
- Earthquakes floods Epidemics Cyclones
- Fire explosion ,accident
- Violence; terrorism; biochemical war
- Policies related to emergency\disaster management; international, national state institution
- Disaster preparedness;
- Team guidelines protocols equipments, resources
- Coordination and involvement of community various govt; departments, non-govt. organization and international agencies
- Role of nurse working
- Legal aspects of disaster nursing
- Impact on health and after effects; post traumatic stress disorder
- Rehabilitation; physical psychosocial financial, relocation
- Emergency nursing
- Concept, priorities, principles and scope of emergency nursing
- Organization of emergency services ;physical setup staffing equipment and supplies, protocol Concepts of triage and role of triage nurse
- Coordination and involvement of different departments and facilities
- Nursing assessment history and physical assessment
- Etiology, pathophysiology clinical manifestation ,diagnosis treatment modalities and medical & surgical Emergency
- Principles of emergency management

- Common Emergencies
- Respiratory Emergences
- Cardiac Emergencies
- Respiratory Emergencies
- Cardiac Emergencies
- Shock and Hemorrhage
- 1. Pain
- Poly- Trauma ,Road accident , Crush Injuries wound Theory -30 hours
- 1. Bites.
- 2. Poisoning: food gas Drugs & Chemical Poisoning
- 3. Seizures
- 4. Thermal Emergencies; Heat Stroke & Cold.
- 5. Pediatric Emergencies
- 6. Psychiatric Emergencies
- 7. Obstetrical Emergencies .Violence ,Abuse , Sexual Assault
- 8. Cardio pulmonary Resuscitation
- 9. Crisis Intervention
- 10. Role of the nurse; communication and inter personal relations
- 11. Medico legal aspects.

Unit: VIII 10 hours

### Nursing care of the elderly

- Nursing Assessment History and Physical assessment
- Ageing;
- Demography; Myths and realities
- Concepts and theories of ageing
- Cognitive Aspects of Ageing
- Normal biological ageing
- Age related body systems changes
- Psychosocial Aspects of Aging
- Medications and elderly
- Stress and coping in older adults
- Common Health Problems and Nursing Management:
- Cardiovascular; Respiratory; Musculoskeletal; Endocrine; Genito-urinary,
- Gastrointestinal; Neurological; Skin and other Sensory organs
- Psychosocial and Sexual
- Abuse of elderly
- Role of nurse for care of elderly:ambulation, nutritional, communicational,
- psychosocial and spiritual
- Role of nurse for caregivers of elderly
- Role of family and formal and non formal caregivers
- Use of aids and prosthesis (hearing aids, dentures)
- Legal and Ethical Issues
  - Provisions and Programme for elderly; privilege, Community Programs and

health services

Home and Institutional care

Unit IX 10 hours

### Nursing management of patients in critical care units

- Nursing Assessment-History and Physical assessment
- Classification
- Principles of critical care nursing
- Organization; Physical setup, Policies staffing norms
- Protocols, equipment and supplies
- Special equipments; ventilators; cardiac monitors; defibrillators
- Resuscitation equipments
- Infection Control Protocols
- Nursing management of critically ill patient
- Monitoring of critically ill patient
- CPR Advanced Cardiac Life Support
- Treatments and procedures
- Transitional care
- Ethical and Legal Aspects
- Communication with patient and family
- Intensive care records
- Crisis Intervention
- Death and Dying-coping with
- Drugs used in critical care unit

## Unit X 8 hours Nursing management of patients adults including elderly with Occupational and Industrial

disorders

- Nursing Assessment-History and Physical assessment
- Etiology , Pathophysiology, clinical manifestations, diagnosis, treatment modalities and medical and surgical nursing management nursing management of occupational and industrial health disorders
- Role of nurse
- Special therapies, alternative therapies
- Nursing procedures
- Drugs used in treatment of Occupational and Industrial disorders

#### **Unit XI: Complementary and Alternative therapy**

05 hours

- Alternative Medicine system
- Mind Body Interaction
- Manipulation and Body Based Methods

- Biologically Based Therapies
- Energy Therapies Nurses role

#### CHILD HEALTH NURSING

**Placement** -Third year

**Time** :Theory - 90 Hours Practical- 270 Hours Internship- 145 Hours

**Course Description:** This course is designed for developing an understanding of the modern approach to childcare identification prevention and nursing management of common health problems of neonates and children.

Unit: I 5 hours

#### Introduction

# Modern concepts of childcare

- International accepted rights of the Child
  - National policy and legislations in relations to child health and welfare
  - National program related to child health and welfare
  - Agencies related to welfare services to the children
  - Changing trends in hospital care, preventive, promotive and curative aspects of child health
  - Child morbidity and mortality rates
  - Difference between an adult and child
  - Hospital environment for a sick child
  - Impact of hospitalization on the child and family
  - Grief and bereavement
  - The role of child health nurse in caring for a hospitalized child
  - Principles of pre and post operative care of infants and children
  - Child health nursing procedures

Unit II: 20 hours

#### The healthy child

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

Unit III: 15 hours

# Nursing care of a neonate

- Nursing care of a normal newborn / essential newborn care
- Neonatal resuscitation
- Nursing management of a low birth weight baby
- Kangaroo mother care
- Nursing management of common neonatal disorder
- Organization of neonatal unit.
- Identification & nursing management of common congenital malformation

Unit IV: 10 hours

Integrated management of neonatal and childhood illnesses (IMNCI)

Unit V: 20 hours

# Nursing management in common childhood diseases

- Nutritional deficiency disorders
  - Respiratory disorders and
  - Infection
  - Gastrointestinal infections infestation and congenital disorder
  - Cardio vascular problem congenital defects and rheumatic fever, rheumatic heart disease
  - Genito-urinary disorders acute glomerulo nephritis, nephritic syndrome, Wilms' tumors, infection and congenital disorders
  - Neurological infection and disorders; convulsion epilepsy, meningitis, hydrocephalus spina bifida.
  - Hematological disorders anemias, thalassemia, ITP, leukemia, hemophilia
  - Endocrine disorders ; juvenile diabetes mellitus
  - Orthopedic disorders; club feet, hip dislocation and fracture.
  - Disorders of skin; eye and ear
  - Common communicable diseases in children , their identification, nursing management in hospital and home and prevention
  - Child health emergencies ; poisoning, foreign bodies, hemorrhage, burns and drowning .
  - Nursing care of infant and children with HIV and AIDS

Unit VI: 10 hours

# Management of behavioral & social problems in children

- Management of common behavioral disorders
- Management of common psychiatry problem.
- Management of challenged children; mentally, physically, and socially challenged
- Welfare services for challenged children in India.
- Child guidance clinic

#### MENTAL HEALTH NURSING

**Placement:** Third year **Time:** Theory - 100 Hours

Practical- 270 Hours Internship- 95 Hours

#### COURSE DESCRIPITION

This course is designed for developing an understanding of the modern approach to mental health. Identification, prevention, and nursing management of common mental health problems with special emphasis on therapeutic intervention for individuals, family and community.

Unit I- 5 hours

#### Introduction

- Perspectives of mental health and mental health nursing; evolution of mental health services, treatment and nursing practices
- Prevalence and incidence of mental health problems and disorders.
- Mental health Act
- National mental health policy vis a vis national health policy
- National mental health Programme
- Mental health team
- Nature and scope of mental health nursing
- Role and function of mental health nurse in various setting and factors affecting the level of nursing practice
- Concepts of normal and abnormal behavior.

Unit II- 5 hours

# Principles and concepts of mental health nursing

- Definition: mental health nursing and terminology used
- Classification of mental disorders: ICD
- Review of personality development, defense mechanisms
- Maladaptive behavior of individuals and groups: stress crisis and disasters
- Etiology: bio-psycho- social factors
- Psychopathology of mental disorders: review of structure and function of brain, limbic system and abnormal neurotransmission
- Principles of mental health nursing
- Standards of mental health nursing practice
- Conceptual models and the role of nurse
- Existential models
- Psycho analytical models
- Behavioral model
- Interpersonal model

Unit III- 8 hours

#### Assessment of mental health status

• History taking Mental status examination Mini mental status examination Neurological examination review Investigation; related blood chemistry. Neurological examination review Investigations related blood chemistry, EEG; CT &MRI Psychological tests role and responsibilities of nurse

Unit:IV 6 hours

# Therapeutic communication and nurse patient relationship

- Therapeutic communication; types techniques, characteristics
- Types of relationship,
- Ethics and responsibilities
- Element of nurse patient contract
- Review of techniques of IPR -Johari Window
- Goals, phases, tasks therapeutics techniques
- Therapeutic impasse and its intervention

Unit V-

# Treatment modalities and therapies used in mental disorders

- Psycho pharmacology
- Psychological therapies
- Therapeutics community, psycho therapy individual; psycho analytical, cognitive and supportive, family group, behavioral, play, psycho drama, music, dance, recreational and light therapy, relaxation therapies; yoga, meditation, bio feedback
- Alternatives systems of medicine
- Occupational therapy
- Physical therapy ; electro convulsive therapy
- Geriatric consideration
- Role of nurse in above therapies

Unit VI- 5 hours

# Nursing management of patient with schizophrenia, and other psychotic disorders

- ICD Classification
- Etiology, psychopathology, types, clinical manifestation, diagnosis
- Nursing assessment history, physical and mental assessment
- Treatment modalities and nursing management of patients with schizophrenia and other psychotic disorders
- Geriatric considerations
- Follow -up and home care and rehabilitation

Unit VII- 5 hours

# Nursing management of patient with mood disorders

- Mood disorders; bipolar affective disorders, mania depression and dysthamia etc
- Etiology, psycho -pathology, clinical manifestation, diagnosis
- Nursing assessment -history, physical and mental assessment
- Treatment modalities and nursing management of patient with mood disorders

- Geriatric considerations
- Follow-up, home care and rehabilitation

# Unit VIII- 8 hours

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

- Anxiety disorders, phobias, dissociation and conversion disorders, obsessive
- Compulsive disorders, somatoform disorders, post traumatic stress disorders
- Etiology, psycho-pathology, clinical manifestation, diagnosis
- Nursing assessment -history and physical and mental assessment
  - Treatment modalities and nursing management of patients with neurotic, stress, related and somatization disorders
- Geriatric consideration
- Follow-up, home care and rehabilitation

# Unit IX- 5 hours

# Nursing management of patients with substance use disorders

- Commonly used psychotropic substance; classification, forms routes, action, intoxication and withdrawal
- Etiology of dependence; tolerance, psychological and physical dependence, withdrawal syndrome, diagnosis,
- Nursing assessment history, physical, mental assessment and drug assay
- Treatment (detoxification, ant abuse and narcotic antagonist therapy and harm reduction) and nursing management of patients with substance use disorders
- Geriatric considerations
- Follow -up and home care and rehabilitation

# Unit X-

# Nursing managements of patients with personality, sexual and eating disorders

- · Classification of disorders
- Etiology, psycho pathology, characteristics, diagnosis
- Nursing assessment history, physical and mental assessment
  - Treatment modalities and nursing management of patient with personality, sexual and eating disorders
  - Geriatric considerations
  - Follow up and home care and rehabilitation
  - Sexual disorders: Normal sexuality, Sexual behavior, Normal sexual cycle, Difference in erotic stimuli, masturbation, sexual learning in childhood, psychosexual factors, Sexual disorder and their management, Sexual disorder not otherwise classified

# Unit XI- 6 hours

# Nursing management of childhood and adolescent disorders including mental deficiency

- Classification
- Etiology, psychopathology, characteristics, diagnosis, nursing assessment history, physical, mental and IQ assessment.
- Treatment modalities and nursing management of childhood disorders including mental deficiency

Follow up and home care and rehabilitation

Unit XII- 5 hours

# Nursing management of organic brain disorders

- Classification ICD
- Etiology, psycho pathology, clinical feature, diagnosis and differential diagnosis (Parkinson's and Alzheimer's)
- Nursing assessment -history, physical, mental and neurological assessment
- Treatment modalities and nursing management of organic brain disorders
- Geriatric considerations
- Follow up and home care and rehabilitation

Unit XIII- 6 hours

# Psychiatric emergencies and crisis intervention

- Types of psychiatric emergencies and there management
- Stress adaptation model; stress and stressor, coping, resource and mechanism
- Grief; theories of grieving process, principles techniques of counseling
- Types of crisis
- Crisis intervention: principles, techniques and process
- Geriatric considerations role and responsibility of nurse

Unit XIV- 4 hours

# Legal Issues In Mental Health Nursing

- The Mental health Act 1987, ACT, section, articles and their implication etc.
- Indian lunacy act 1912
- Right of mentally ill clients
- Forensic psychiatry
- Acts related to narcotic and psychotropic substance and illegal drug trafficking
- Admission and discharge procedures
- Role and responsibility of nurse

Unit XV- 4 hours

# Community mental health nursing

- Development of community mental health services;
- National mental health programmed
- Institutionalization versus deinstitutionalization
- Model of preventive psychiatry; levels of prevention
- Mental health services available at the primary, secondary, tertiary levels including rehabilitation and Role of nurse nursing Mental health agencies; government and voluntary, national and international
- Mental health issues for special populations: Children, Adolescence, women, elderly, victims of violence and abuse, Handicapped, HIV/AIDS etc.

#### MIDWIFERY AND OBSTETRICAL NURSING

**Placement:** Third year **Time:** Theory - 90 Hours

Practical - 180 Hours Internship - 240 Hours

Course Description: This course will unable the student to develop and understanding of midwifery and obstetrical nursing it help them to acquire knowledge and skills in rendering nursing care to normal and high risk pregnant women during antenatal, natal and post natal periods in hospital and community settings .it also help to develop skills in managing normal and high risk neonates and participate in family welfare programme.

Unit I- 3 hours

# Introduction to midwifery and obstetrical nursing

- Introduction to concept of midwifery and obstetrical nursing
- Trends in midwifery and obstetrical nursing
- Historical perspectives and current trends
- Legal and ethical aspects
- Pre conception care and preparing for parenthood
- Role of nurse in midwifery and obstetrical care
  - National policy and legislation in relation to maternal health and welfare.
- Maternal morbidity and mortality and fertility rates
- Prenatal morbidity and mortality rates.

Unit II- 8 hours

# Review of anatomy and physiology of female reproductive system and foetal development

- Female pelvis general description of the bones joints, ligament, planes of the pelvis diameters of the true pelvis, important landmarks, and variations in pelvis shape.
- Female organ of reproduction -external, internal genital organ and their anatomical relation, musculature blood supply, nerves, lymphatic, pelvic cellular tissue, pelvic peritoneum.
- Physiology of menstrual cycle.
- Human sexuality
- Fetal development -
- Conception
  - Review of fertilization, implantation (embedding of the ovum) development of the embryo and placenta at term -functions, abnormalities, the fetal sac, amniotic fluid. The umbilical cord.
- Fetal circulation, fetal skull, bones sutures and measurements.
- Review of Genetics

Unit III- 8 hours

# Assessment and management of pregnancy (ante-natal)

- Normal pregnancy
- Physiological changes during pregnancy.
- Reproductive system
- Cardio vascular system
- Respiratory system
- Urinary system
- Gastro intestinal system
- Metabolic changes
- Skeletal changes
- Skin changes
- Endocrine system
- Psychological changes
- Discomforts of pregnancy
- Diagnosis of pregnancy
- Signs
- Differential diagnosis
- Confirmatory tests
- Ante -natal care
- Objectives
- Assessment
- -History and physical examination
  - o Ante-natal examination
  - o Signs of previous child-birth.
- Relationship of fetus to uterus and pelvis; lie, attitude presentation, position
- Per vaginal examination.
- Screening and assessment for high risk;
- Risk approach
- History and physical examination.
- Modalities of diagnosis ; invasive and non-invasive, ultrasonic, cardio tomography, NST, CST,
- Antenatal preparation
- Antenatal counseling
- Antenatal exercises
- 1. Diet
- Substance use
- Education for child birth
- Husband and families
- Preparation for safe confinement
- Prevention from radiation
- Psycho-social and culture aspect of pregnancy
- Adjustment to pregnancy

- Unwed mother
- Single parent
- Teenage pregnancy
- Sexual violence
- Adoption

Unit IV-

# Assessment and management of intra-natal period.

- Physiology of labour, mechanism of labour
- Management of labour
- First stage
  - o Sign and symptoms of onset of labour; normal and abnormal
  - o Duration
  - o Preparation of labour room and women
  - Assessment and observation of women in labour
  - o Partogram- maternal fetal monitoring
  - o Active management of labour, Induction of labour
  - Pain relief and comfort in labour.
- Second stage
  - o Signs and symptoms; normal and abnormal o Duration
  - o Conduct of delivery; principles and techniques
  - Episiotomy (only if required)
  - Receiving the new born
- Neonatal resuscitation; initial steps and subsequent resuscitation
- Care of umbilical cord
- Immediate assessment including screening for congenital anomalies
- Identification
- Bonding
- Initiate feeding
- Screening and transport of the neonate
- Third stage
  - Signs and symptoms; normal and abnormal
  - Duration
  - Method of placental expulsion
  - Management principles and techniques
  - Examination of the placenta
  - Examination of the perineum
  - Maintaining records and report
- Fourth stage

Unit V- 5 hours

# Assessment and management of women during post natal period

 Normal puerperium; physiology and duration Postnatal assessment and management Promoting physical and emotional well being Lactation management Immunization

• Family dynamics after child birth Family welfare services; method, counseling Follow -up Records and reports

Unit VI- 6 hours

### Assessment and management of normal neonate

- Normal neonate Physiological adaptation, Initial and daily assessment Essential new born care; Thermal, control Breast feeding, prevention of infections Immunization
- Minor disorder of newborn and its management Level of neonatal care (level 1,2&3) At primary, secondary and tertiary level Maintenance of report and records

Unit VII-

# High - risk pregnancy -assessment and management

- Screening and assessment
- Ultrasonic, cardio tomography, NST, CST, non-invasive and invasive,
- Newer modalities of diagnosis.
- High-risk approach
- Level of care; primary secondary and tertiary levels
- Disorders of pregnancy
- Hyper -emesis gravid arum, bleeding in early pregnancy abortion, ectopic
- Pregnancy, vesicular mole,
- Ante -partum hemorrhage.
- Uterine abnormality and displacement.
- Disease complicating pregnancy
- Medical and surgical condition
- Infection RTI (STD), UTI, HIV, TORCH
- Gynecological diseases complicating pregnancy
- Pregnancy induced hypertension and diabetes, toxemia of pregnancy, hydramnios
- RH incompatibility
- Mental disorders
- Adolescent pregnancy ,Elderly primi and grand multipara
- Multiple pregnancy
- Abnormalities of placenta and cord
- Intrauterine growth, retardation
- Nursing management of mothers with high risk pregnancy

• Maintenance of records and report

Unit VIII-

# Abnormal labour assessment and management

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

Unit IX- 4 hours

# Abnormalities during post natal periods

- Assessment and management of women with postnatal complication
- Puerperal infection, breast engorgement & infection, UTI, thrombo- embolic disorders, post-partum hemorrhages, eclampsia and sub involution,
- Psychological complication;
- -Post partum blues
- -Post partum depression
- -Post partum psychosis

Unit X-

# Assessment and management of high risk new born

- Admission of neonates in the neonatal intensive care unit -protocols
- Nursing management of
  - o Low birth weight babies
  - o Infection o Respiratory problem
  - o Hemolytic disorders
  - o Birth injuries
  - Malformation
- Monitoring of high risk neonates
- Feeding of high risk neonates
- Organization and management of neonatal intensive care units
- Maintenance of reports and records

Unit XI- 4 hours

# Pharmaco -therapeutic in obstetrics

- Indication, dosage, action, contraindication and side effects of drugs
- Effect of drugs on pregnancy, labour and puerperium,
- Nursing responsibility in administration of drugs in obstetrics
- -Oxytocins, antihypertensive, diuretics tocolytics agent's anticonvulsants
- Analgesics and anesthetics in obstetrics
- Effect on maternal medication on fetus and neonate

Unit XII- 10 hours

# Family welfare programme

- Population trends and problems in India
- Concepts, aims, importance and history of family welfare programme
- National population dynamics policy and education
- Organization and administration; at national, state, district, block and village levels
- National family welfare programme; RCH, ICDS, MCH, safe motherhood
- Methods of contraception; spacing, temporary and permanent, Emergency contraception
- Infertility and its management
- Counseling for family welfare
- Latest research in contraception
- Maintenance of vital statistics
- Role of national, international, and voluntary organizations
- Role of nurse in family welfare programme
- Training/Supervision/Collaboration with other functionaries in community like ANMs -LHVs, anganwadi workers TBA(Traditional birth attendant-Dai)

#### COMMUNITY HEALTH NURSING II

**Placement :** Fourth Year Time :Theory - 90 Hours

Practical- 135Hours Internship- 195Hours

**Course Description -** This course is designed for students to practice community health nursing for the individual, family and groups at both urban and rural settings by using concept and principles of health and community health nursing.

#### Unit:I

#### Introduction

- Definition, concepts & scope of Community Health & Community Health Nursing
- Historical development of -
- Community Health
- Community Health Nursing; Pre independence, post- independence

#### Unit:II-

### Health planning & policies & problems

- National health planning in India-Five Year Plans
- Various committees & commissions on health & family welfare
  - Central council for health & welfare (CCH & FW)
  - o National health policies (1983, 2002)
  - National population policy
- Health problems in India

# Unit III- 15 hours

#### Delivery of community health services

- Planning, budgeting & material management of SCs, PHC & CHC
- Rural: Organization, staffing & functions of rural health services provided by government at:
  - o Village
  - Sub centre
  - Primary health center
  - o Community health center/ sub divisional
  - o Hospital: Districts, State, Centre
- Urban: Organization, staffing & functions of urban health services provided by government at:
  - o Slums
  - Dispensaries
  - o Maternal & child health centre
  - Special Clinics
  - Hospitals
  - Corporation / Municipality / Board
- Components of health services

- Environmental sanitation o Health education o Vital statistics
- o M.C.H, antenatal, natal, postnatal, MTP Act, female feticide act, Child adoption act
- Family welfare
- National health programmes
- School health services
- Occupational health
- o Defense services
- Institutional services
- Systems of medicine & health care
  - Allopathy
  - Indian system of medicine & Homeopathy
  - Alternative health care systems like yoga, meditation
  - o Social & spiritual healing etc
- Referral system

# Unit IV- 25 hours Community health nursing approaches, concepts & role & responsibilities of nursing personnel

- · Approaches
  - o Nursing theories &nursing process o Epidemiological approach o Problem solving approach o Evidence based approach o Empowering people to care for themselves
- Concepts of primary health care:
  - o Equitable distribution o Community participation o Focus on prevention o Use of appropriate technology o Multi-sect oral approach
- Role & responsibility of community health nursing personnel in
  - Family health services
  - Information Education Communication (IEC)
  - Management Information system (MIS): Maintenance of records & reports
  - Training &supervision of various categories of health workers
  - o National Health Programmes
  - o Maternal & child health & Family welfare
  - Treatments of minor ailments
  - School health services
  - Occupational health
  - o Organization of clinics, camps: Types, Preparation, Planning, Conduct & evaluation
  - Waste management in the center, clinics etc
- Home visit: Concept, Principle, Process, Techniques: Bag technique, home visit
- Qualities of community health nurse
- Job description of community health nursing personnel

# Unit V- 15 hours

# Assisting individuals & groups to promote & maintain their health

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

- A. Assessment of self & family
  - Monitoring growth & development
  - Mile stones
  - Weight measurement
  - Social development
  - Temperature &Blood pressure monitoring
  - Menstrual cycle
  - Breast self-examination & testicles
  - Warning sign of various diseases
  - Tests: Urine for sugar & albumin, blood sugar

#### B. Seek

- health services for
- Routine checkup
- Immunization
- Counseling
- Diagnosis
- Treatment
- Follow up
- C. Maintenance of health records for self & family
- D. Continue medical care & follow up in community for various Diseases & disabilities
- E. Carryout therapeutic procedures as prescribed / required for self & family
- F. Waste Management
  - o Collection & disposable of waste at home & community
- G. Sensitize & handle social issues affecting health & development for self & family
  - Women Empowerment
  - Women & child abuse
  - Abuse of elders
  - Female Feticide
  - Commercial sex workers
  - Food adulteration
  - Substance abuse
- H. Utilize community resources for self & family
  - o Trauma services
  - Old age homes
  - Orphanage
  - o Homes for physically &mentally challenged individuals
  - Home for destitute

Unit VI- 20 hours

# National health & family welfare programmes & role of nurse

- National ARI Programme
- Revised National Tuberculosis Control Programme (RNTCP)
- National Anti-Malaria Programme
- National Filarial control Programme
- National Guinea worm eradication Programme
- National Leprosy eradication Programme
- National AIDS control Programme
- STD control Programme
- National Programme for control of blindness
- Iodine deficiency disorder Programme
- Expanded Programme on immunization
- National family welfare Programme-RCH Programme
- Historical development, organization, administration, research, constraints
- National water supply & sanitation Programme
- Minimum needs Programme
- National diabetics control Programme
- Polio Eradication: Pulse Polio Programme
- National cancer control Programme
- Yaws Eradication Programme
- National nutritional Anemia Prophylaxis Programme
- 20 points Programme
- ICDS Programme
- Mid-day meal applied nutritional Programme
- National mental health Programme
  - Health schemes o ESI o CGHS
  - Health insurance

# Unit VII-Health Agencies:

5 hours

#### International-

• WHO, UNFPA, UNDP, World Bank, FAO, UNCEF, 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 AND STATISTICS

Placement: Fourth Year Time: Theory:45 Hours
Internship Practical: 45 Hours

Course Description: The Course is designed to enable students to develop an understanding of basic concepts of research, research process and statistics. It further, structured to conduct / participate in need based research studies in various settings and utilize the research findings to provide quality nursing care. The hours for practical will be utilized for conducting individual/ group research project.

Unit:I 4 hours

# Research and research process

- Introduction and need for nursing research
- Definition of Research and Nursing Research
- Steps of scientific method
- Characteristics of good research
- Steps of Research process-overview

Unit:II 3 hours

### Research Problem/Question

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

Unit:III 3 hours

#### **Review of Literature**

- Location
- Sources
- On line search:
- CINHAL, COCHRANE etc
- Purposes
- Method of review

Unit :IV 4 hours

# Research approaches and designs

- Historical, Survey and experimental
- Qualitative and Quantitative designs

Unit:V 8 hours

# Sampling and Data collection

- Definition of Population, Sample, Sampling criteria, factors influencing sampling
- process, types of sampling techniques
- Data- why, what, from whom, when and where to collect
- Data collection methods and instruments:
- Method of data collection

- Questioning, Interviewing
- Observation, record analysis and measurement
- Types of instruments
- Validity & reliability of the instrument
- Pilot study
- Data collection procedure

Unit: VI 4 hours

# Analysis of data

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

Unit: VII 15 hours

#### **Introduction to statistics**

- Definition, use of statistic, scales of measurement
- Frequency distribution and graphical presentation of data
- Mean, Median, Mode, Standard Deviation
- Normal Probability and test of significance
- Co-efficient of correlation
- Statistical packages and its application

Unit:VIII 4 hours

#### 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

# MANAGEMENT OF NURSING SERVICES & EDUCATION

Placement: Fourth year

**Course Description-** This course is designed to enable students to acquire understanding of management of clinical & community health nursing services, nursing educational programmes. This designed to enable students to acquire understanding of the professional responsibilities, prospects & contribution to the growth of profession.

Time: Theory:- 90 Hours

Unit I- 4 hours

### Introduction to management in nursing

- Definition, concepts & theories
- Function of management
- Principle of management
- Role of nurse as a manager

Unit II- 5 hours

# Management process

- Planning, mission, philosophy, objective, operational plan
- Staffing: philosophy staffing study, norms, activities, patient classification systems, scheduling
- Human resource management: recruiting, selecting, deployments, retaining, promoting, super annuation etc
- Budgeting: concept, principles, types, cost benefit analysis, audit
- Material management: equipment & supplies
- Directing process (leading)
- Controlling: Quality management
- Programme Evaluation Review Technique (PERT), Bench marking, Activity plan (Gantt Chart)

Unit III- 8 hours
Management of nursing services in the hospital & Community 20 Hrs (Practical)

# • Planning:

- o Hospital & patient care units including ward management
- o Emergency & disaster management
- Hospital resource management:
  - o Recruiting, selecting, deployment, retaining, promoting, superannuation etc
  - o Categories of nursing personnel including job description of all levels
  - o Patient / population classification system
  - o Patient / population assignment & Nursing care responsibilities
  - Staff development & welfare
- Budgeting: proposal-projecting requirement for staff, equipment & supply for
  - o Hospital & patient care units
  - o Emergency & disaster management
- Material management: procurement, inventory control, auditing & maintenance

in

- o Hospital & patient care units
- o Emergency & disaster management
- Directing leading: delegation, participatory management
  - Assignment, rotation, delegations
  - o Supervision & guidance
  - o Implement Standards, policies, procedures & practices o Staff development & welfare o Maintenance of discipline
- Controlling / Evaluation:
  - o Nursing rounds/Visits, Nursing protocols, Manuals o Quality assurance Model,
  - o Records & reports Performance appraisal.

Unit IV- 5 hours

# Organizational behavior & human relations

- Concepts, theories & techniques of Organizational behavior
- Review of channels of communication
- Leadership styles
- Review of motivation, concepts & theories
- Group dynamics
- Techniques of:
  - o Communication & Interpersonal relationships, Human relations
- Public relation in context of nursing
- Relation with professional association & employee unions & collective bargaining

Unit V- 5 hours
In service education 5 Hrs (Practical)

- Nature & scope of in service education programmes
- Organization of in service education
- Principle of adult learning
- Planning for in service education programmes, technique methods & evaluation of staff education programmes
- Preparation of report

Unit VI-

# Management of nursing educational institutions

- Establishment of nursing educational institution-INC norms & guidelines
- Co-ordination with-
- Regulatory bodies
- Accreditation
- Affiliation
  - o Philosophy / objective
  - o Organization
- Structure
- Committees
  - o Physical facilities
- College / School

- Hostel
- Students
  - o Selection, Admission, Guidance & counseling, Maintaining discipline
- Faculty & staff
  - Selection, Recruitment, Job description, Placement Performance appraisal,
     Development & welfare
- Budgeting
- Equipments & supplies- Audiovisual equipments, laboratory equipment, Books, journals etc
- Curriculum: Planning, implementation & evaluation,
- Clinical facilities
- Transport facilities
- Institutional records & reports- Administrative, faculty, staff & students

Unit VII- 10 hours

# Nursing as a profession

- Nursing as a profession
- Philosophy, nursing practice
- Aims & objectives
- Characteristics of professional nurse
- Regulatory bodies: INC, SNC Acts: constitution, functions
- Current trend & issues in nursing
- Professional ethics:
  - o Code of ethics: INC, ICN
  - o Code of professional conduct: INC, ICN
- Practice standards for Nursing, INC
- Consumer protection act
- Legal aspects in nursing
  - o Legal term related to practice, registration & licensing
  - Law related to nursing practice, Breach & penalties
  - o Malpractice & negligence

Unit VIII- 3 hours

#### **Professional Advancement**

- Continuing education
- Career Opportunities
- Collective bargaining
- Membership with professional
- Organization- National International
- Participation in research activities
- Publications; Journals, newspapers etc.

#### **ENVIRONMENTAL STUDIES**

Placement: Fourth year Course Description-

Unit: I 5 hours

Time: Theory:- 30 Hours

#### Introduction

- Environment
- Definition, Scope, Dimension of Environment
- Nurses Role in Environmental Health
- Local Environmental issues
- Importance of Environmental studies
- Need for public awareness

Unit: II 10 hours

# **Environment & Development**

- Eco System
- Social Factors affecting development
- Poverty, affluence, education.
- Employment, child marriage.
- Child lab our.
- Human health
- Socio cultural and ethical values.
- Impact of development & environment
- Changing pattern of land use
- Land reclamation, deforestation
- Resource depletion
- Pollution & Environmental degradation

Unit: III 15 hours

# Environmental pollution & Global issues

- Air, water (fresh & marine), soil pollution
- Sources and consequences including human diseases
- Solid, liquid & gaseous pollutants
- Hazardous material: processes, handling and management of hazardous wastes.
- Ozone layer depletation and its effect
- Greenhouse effect -Global warming and climate changes and their effect on human society, agriculture, plants and animals.
- Nuclear accident, air act, wild life act, International environment laws & Public awareness.
- Strategies for reducing pollution and improving the Environment.

