



Syllabus

B Sc

(Hons / Post Certificate) Nursing

at the AIIMS



All India Institute of Medical Sciences
Ansari Nagar, New Delhi, 110029

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(Honours / Post Certificate) Nursing
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All India Institute of Medical Sciences

New Delhi - 110 029

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PREAMBLE

The Health Survey and Development Committee, popularly known as the Bhoré Committee, in its report published in 1946, recommended very strongly the establishment of a national medical centre at Delhi which will concentrate on training of highly qualified teachers and research workers in order that a steady stream of these could be maintained to meet the needs of the rapidly expanding health activities throughout the country. After the attainment of independence the Union Ministry of Health proceeded to implement this challenging idea and a magnificent grant of one million pounds by the Government of New Zealand through the Colombo Plan helped to translate the idea into reality. An Act of Parliament in 1956 established the All India Institute of Medical Sciences as an autonomous institution of National importance and defined its objectives and functions.

The prime concern of the Institute is to develop patterns of teaching in undergraduate and postgraduate medical education in all the branches so as to demonstrate a high standard of medical education to all medical colleges and other allied institutions in India. This educational experience is imparted in an atmosphere of research.

By virtue of the Act, the Institute grants its own medical degrees and other academic distinctions. The degrees granted by the Institute under the All India Institute of Medical Sciences Act are recognised medical qualifications for the purpose of the Indian Medical Council Act and, notwithstanding anything contained therein, are deemed to be included in the first schedule of that Act, entitling the holders to the same privileges as those attached to the equivalent awards from the recognized Universities of India respectively.

The AIIMS imparts high quality state of the art training in nursing vide two courses, viz:

1. B Sc (Hons) Nursing
2. B Sc (Post Certificate) Nursing

Broad areas covered during the course tenure are highlighted here. The syllabus has been developed in consultation with the faculty of the College of Nursing and further scrutinized by the Academic Section under the supervision of the Dean.

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B Sc (HONS) NURSING

INSTRUCTION GOALS OF THE UNDERGRADUATE TRAINING PROGRAMME FOR NURSING AT COLLEGE OF NURSING, AIIMS

The following are the broad objectives of the undergraduate nursing education and training programme leading to the degree of B.Sc. (Hons) Nursing at the College of Nursing, AIIMS.

A nurse successfully completing the undergraduate training programme should be able to:

1. Describe the structure and function of the human body so as to permit her to appreciate aberrations from normal and their consequences. She should be able to observe and record vital functions of the body while nursing the sick and report the effects of therapeutic measures instituted. She should also be able to assist in common investigative procedures and recognize the deviations in the results from normal.
2. Function effectively as part of the team in the delivery of comprehensive health care in a community, hospital in urban as well as rural location. She should demonstrate competence not only in curative aspects of nursing but also in its preventive and promotive aspects for individual as well as community level.
3. Administer comprehensive as well as specialized nursing care to the sick in the hospital or home environments.
4. Explain the actions, side effects and indications for use of common drugs administered to the sick. She should be able to administer them in the correct dosage and by the correct method and recognize and report any toxic effects thereof.
5. Provide first aid to the injured or the sick in emergency independently in the absence of a doctor. She should be able to demonstrate skill in cardiopulmonary resuscitations in hospital or home environment.
6. Explain the local patterns of diseases in the country and common diseases in the country. She should be able to administer special nursing care required for the management of these diseases. She should be able to recognize the symptoms of common diseases and suggest suitable therapeutic measures for diseases like malaria, cholera, gastroenteritis, etc. in the absence of the availability of a doctor. She should at the same time be able to recognize her limitations and be able to decide the

situations where the patient must consult a doctor.

7. Explain the national health problems and appreciate the role of social, cultural, economic, psychological and environmental factors in the causation and control of diseases. Thus she should be able to describe the social and environmental factors necessary to function as a public health nurse.
8. Provide antenatal supervision and conduct normal deliveries at home or in the hospital. She should be able to recognize the complications during antenatal, natal or postnatal period and seek help in time from a doctor. She should be able to suggest methods for the care of the newborn infant and to the mother. She should be able to suggest and implement various measures for fertility control necessary for the family welfare and planning programme and render service in this aspect at the individual as well as the community level.
9. Demonstrate adequate management and supervisory skill to coordinate the proper functioning of various personnel in the ward, out patient department, rural health centres or the community. She should be able to teach both formally and informally in clinical nursing situations and in nursing education programmes.
10. Assist in common operative procedure and describe the surgical aspects, techniques and be skilled in its applications. She will be able to provide high quality team support to surgeons during operative procedures by cooperative planning and coordination of functions between nursing staff, surgical staff and anesthesia staff in an effort to improve the overall care of patient in the operating room.

INSTRUCTIONAL OBJECTIVES

1. BASIC SCIENCES

- (i) Describe the anatomical and biochemical structures so as to explain the physiological functions of human body and factors, which may disturb these, and mechanism of such disturbances.
- (ii) Describe various groups of micro-organisms of clinical importance.
- (iii) Identify and take appropriate measures including disinfection and sterilization for the prevention of diseases in the hospital and community.
- (iv) Collect and handle specimens for various diagnostic tests.
- (v) Enumerate weights and measures and demonstrate skill in calculation of dosage and preparation of solutions.
- (vi) Read and interpret prescriptions and care for drugs according to the regulations.
- (vii) Describe various groups of drugs acting on different systems of the body.
- (viii) Recognize the toxic symptoms related to common drugs and poisons.

2. NUTRITION AND DIETETICS

- (i) Describe various nutrients and their importance in the maintenance of health.
- (ii) Plan diets suitable to socio-economic status for different age groups and physiological conditions.
- (iii) Detect nutritional deficiencies and explain their prevention and management.

- (iv) Plan therapeutic diets for various disease conditions.

3. PSYCHOLOGY, MENTAL HEALTH AND PSYCHIATRIC NURSING

- (i) Describe normal and deviations in behavior among various age groups and their cause.
- (ii) Explain the principles of psychology and its application in health and diseases.
- (iii) Interpret behavior of self and others.
- (iv) Recognize deviations from normal behavior and provide guidance and counseling.
- (v) Explain the dynamics of patient's behavior and its application in providing nursing care.
- (vi) Demonstrate skill in communication and maintain interpersonal relations.
- (vii) Describe various therapies utilized in psychiatry and the various roles of nurses in psychiatric nursing.

4. FUNDAMENTALS OF NURSING

- (i) Describe nursing as a profession, its scope, etiquettes & ethics.
- (ii) Provide first aid treatments.
- (iii) To provide congenial and safe environment to the patient.
- (iv) Carry out basic nursing procedures for the care of the patients with an understanding of the scientific principles involved.
- (v) Make accurate observations and records.
- (vi) Administer prescribed medications and carry out treatments.
- (vii) Maintain records of patients and nursing care.

5. COMMUNITY HEALTH NURSING

- (i) Describe personal, environmental, social and cultural factors contributing to health of individual, family and community.
- (ii) Explain methods of control of spread of diseases.
- (iii) Identify the needs for health education and impart and evaluate the effect of the same to patients, families and community.
- (iv) Prepare and use appropriate audio-visual aids for imparting health education.
- (v) Recognize symptoms of social disorganization and social pathology.
- (vi) To demonstrate skills in medico-social work.
- (vii) Explain the principles of health care to mothers and children and the services available for them in urban and rural communities.
- (viii) Identify deviations from normal amongst mother and children and take necessary action in clinics,

health centres and homes.

- (ix) Educate the community about need and methods of family planning.
- (x) Demonstrate skill in community diagnosis and in delivery of community nursing services in accordance with the national health care system.

6. MEDICAL AND SURGICAL NURSING

- (i) Explain the causes, patho-physiology, symptoms, treatment and prophylactic measures in common medical and surgical conditions affecting various systems of the body.
- (ii) Provide patient centered nursing care to patients with common medical and surgical conditions affecting various systems of the body.
- (iii) Prepare operation theatre for surgery and assist in operative procedures.
- (iv) Identify common equipment used in operation theatre
- (v) Explain the anesthesia used, with their effects and dangers, and care for an anesthetized patient until such time as he recovers from the effect of anesthesia.
- (vi) Recognize and provide first aid in case of common emergencies using the resuscitation equipment including intubation.
- (vii) Care for critically ill patients who required support for maintaining vital functions.
- (viii) Provide first aid in case of disaster, emergency and accidents and demonstrate skill in transporting the casualties.
- (ix) Organize casualty/emergency services.
- (x) Explain infectious diseases, their transmission and barrier nursing in hospital and community.

7. PEDIATRIC NURSING

- (i) Describe growth and development, nutritional and psychological needs of children at different age group.
- (ii) Explain basic principles involved in pediatric nursing.
- (iii) Provide nursing management to neonates and children with medical and surgical disorders.
- (iv) Recognize emergencies in neonates and children and take appropriate first aid measures.
- (v) Manage normal newborn and low birth weight baby.
- (vi) Describe various aspects of preventive pediatric nursing and be able to practice them while rendering nursing care in a hospital or community.

8. OBSTETRICAL NURSING

- (i) Explain anatomy and physiology of pregnancy, child-birth and puerperium.
- (ii) Provide antenatal care to mothers.
- (iii) Conduct normal delivery independently in a hospital and community and recognize abnormalities and make timely referral to doctor.

- (iv) Perform episiotomy and suture a first and second -degree tear.
- (v) Guide and supervise multipurpose workers to carry on domiciliary services to mothers and children
- (vi) Describe the management of common obstetrical emergencies needing immediate treatment.
- (vii) Provide family welfare advice.

9. PRINCIPLES OF ADMINISTRATION AND SUPERVISION, EDUCATION AND TRENDS IN NURSING

- (i) Explain the principles of administration and its application to health administration at different levels.
- (ii) Describe the organizational pattern for nursing components of hospital and public health service.
- (iii) Maintain effective human relations to improve efficiency of the staff.
- (iv) Describe the principles of supervision and develop skill in supervisory techniques.
- (v) Explain the trends in nursing and nursing education in India and abroad.
- (vi) Appreciate the emergence of nursing as a profession and the rights, responsibilities and adjustment in professional life.
- (vii) Use different methods of teaching applicable to nursing.

DURATION AND COURSES OF STUDY: The course of studies leading to the award of B.Sc. (Hons) nursing degree shall be for a minimum period of four academic years or 8 semesters and shall consist of the following four phases.

HOURS OF CLASS ROOM INSTRUCTION

PHASE I: FIRST YEAR B.Sc. (Hons.) NURSING

<i>Subject</i>	<i>Semester I</i>	<i>Semester II</i>
1. Anatomy	30	30
2. Physiology	30	30
3. Biochemistry	—	20
4. Nutrition	—	20
5. Fundamentals of Nursing, First aid with applied Sciences and Pharmacology	90	70
6. Introduction to community health	30	
7. Psychology	20	20
8. Introduction to medical surgical nursing	20	40
Qualifying Subjects		
9. English	30	30
10. Hindi (For non-Hindi speaking students)	20	—
	270	260

PHASE II: SECOND YEAR B.Sc. (HONS) NURSING

<i>Subject</i>	<i>Semester III</i>	<i>Semester IV</i>
1. Med.Surg.Nursing		
i) Orthopaedics	10	
ii) E.N.T.	10	
iii) Skin & Communicable diseases	20	
iv) Eye		10
v) Gynae		10
vi) General Med. Surg.		85
vii) Applied pharmacology		20
2. Psychiatric Nursing	30	30
3. O.T. Technique	20	
4. Microbiology	30	
5. Health Education & A.V.Aids.	20	
	140	155

PHASE III: THIRD YEAR B. Sc. (HONS) NURSING

<i>Subject</i>	<i>Semester V</i>	<i>Semester VI</i>
1. Med.Surg. Nursing (speciality nursing) ICU	40	60
2. Paediatric Nursing & Growth & Development	20	20
3. Public Health Nursing	40	—
4. M.C.H.	30	—
5. Sociology & Social Medicine	—	20
6. Trends in Nursing & Professional adjustment	—	10
	150	110

PHASE IV: FOURTH YEARS B.Sc. (HONS) NURSING

<i>Subject</i>	<i>Semester VII</i>	<i>Semester VIII</i>
1. Midwifery & Obstetrical Nursing	35	35
2. Principles of administration & supervision	20	20
3. Elective-Introduction to Research and statistics	50	50
	105	105

CLINICAL EXPERIENCE

- (i) Total study hours per week shall be 40. During each academic year, students shall spend the available remaining hours besides theory instruction in the specified clinical areas as per rotation postings.
- (ii) During summer vacation period the student shall spend 4 weeks in the clinical areas as per rotation posting.
- (iii) Students shall be posted for Evening and Night duties after III year exams during summer vacation.
- (iv) Elective posting (100 hours): During the IV year at the time of elective posting, students shall do a project in the clinical area of their choice in nursing or related field.

SCHEME OF EXAMINATION

FIRST YEAR

<i>Paper</i>	<i>Subject</i>	<i>Theory marks</i>	<i>Internal assessment</i>	<i>Total marks</i>	
I.	Anatomy & Physiology	50	50	100	
II.	Biochemistry, Nutrition and Dietetics	50	50	100	
III.	Fundamentals of Nursing and First Aid Introduction to community health	50	50	100	
IV.	Psychology	50	50	100	
V.	Nursing Practical I Fundamentals of Nursing & First Aid	50	50	100	
Total marks		250	250	500	
VI	English*	100	75	25	100
	Hindi**	100	75	25	100

*Qualifying Exams: 33% Pass marks

Main subjects 50% Pass marks

**College Exam

SECOND YEAR

<i>Paper</i>	<i>Subject</i>	<i>Theory marks</i>	<i>Internal assessment</i>	<i>Total marks</i>
I.	Medical-Surgical Nursing I	50	50	100
II.	Psychiatric Nursing	50	50	100
III.	Part A: Microbiology Part B. O.T. Techniques	50	50	100
IV.	Nursing Practical II Med.Surg.-I, O.T. Techniques & Microbiology & Psychiatric Nursing	50	50	100
Total marks		200	200	400

THIRD YEAR

<i>Paper</i>	<i>Subject</i>	<i>Theory marks</i>	<i>Internal marks</i>	<i>Total marks</i>
I.	Medical Surgical Nsg. II Nursing specialties including ICU.	50	50	100
II.	Pediatric Nursing & Growth & Development	50	50	100
III.	Nursing Practical III (Nursing specialties, ICU, Pediatric Nursing)	50	50	100
Total marks		150	150	300

FOURTH YEAR

<i>Paper</i>	<i>Subject</i>	<i>Theory marks</i>	<i>Internal marks</i>	<i>Total marks</i>
I.	Midwifery & Obstetrics Nursing	50	50	100
II.	M.Ch & Family Welfare, Public Health including Health Education and Sociology	50	50	100
III,	Professional adjustments, Trends in Nursing & Nursing service administration.	50	50	100
IV.	Nursing Practical IV Midwifery and Public Health & M.CH.	50	50	100
Total marks		250	250	400

ANATOMY

Placement: Semester I & II

Time: 60 hours

- I. General Introduction
 1. Anatomical terms
 2. Parts of the human body
 3. Tissues in broad outline
- II. Skeletal and joint system (Demonstration on the skeleton)
 1. Bones, types of bones, structure and development
 2. Bones of the whole body, skeleton
 3. Joints, structure
 4. Classification of various joints of the body
- III. Muscular system
 1. Types of muscles and structure
 2. Skeletal muscle
 3. Cardiac muscle
 4. Smooth muscle
- IV. Circulatory system
 1. Heart and its structure
 2. Arteries, veins and lymphatic system
- V. Respiratory system
 1. Structure of nose, larynx, trachea, bronchi and lungs (Demonstration on the body)
- VI. Digestive system
 1. Mouth, pharynx, esophagus and whole of gastrointestinal tract and also the glands associated. The liver, the gall bladder in the pancreas, the spleen (Structure and distribution in the body)
- VII. Urinary system
 1. Demonstration of structure of kidney, ureters, bladder and urethra
- VIII. Endocrine system

All the endocrine glands
- IX. Nervous system and special senses
 1. Brain
 2. Spinal cord
 3. Nerves
 4. Autonomic nervous system
 5. Eye, ear and nose
- X. Reproductive system
 1. Male structure
 2. Female structure

PHYSIOLOGY

Placement: Semester I & II

Time: 60 hours

- I. Introduction to physiology of the cell.
- II. Blood
 1. Composition and function of various components of blood
 2. Normal and abnormal hemopoiesis
 3. Destruction of red cells, jaundice and blood groups
- III. C.V.S.
 1. Structure and function of heart and blood vessels
 2. Regulation of heart rate and blood pressure
 3. Regional circulation with special reference to coronary circulation and ischemic heart disease
- IV. Respiratory system
 1. Functional anatomy of respiratory system and mechanisms of respiration
 2. Regulation of respiration
 3. Anoxia, cyanosis, dyspnea and pulmonary function tests
- V. Gastro-intestinal system
 1. Composition, mechanism of action and regulation of salivary and gastric secretions
 2. Bile, Pancreatic juice and intestinal secretions
 3. Gastro-intestinal tract movement and absorption
 4. Functions of liver
- VI. Excretory system
 1. Structure and functions of kidney
 2. Mechanism of function of kidney and kidney function tests
 3. Structure and function of the skin
- VII. Endocrine and Metabolism
 1. Endocrine and their functions
 2. Regulation of endocrine secretions
 3. Endocrine disorders
 4. Physiology and reproduction
 5. Basis of use of various contraceptive devices

VIII. Nervous system and special senses

1. Neuron conduction of nerve impulses, synaptic transmission and reflex action
2. Sensory organs and different tracts
3. Regulation of tone and posture
4. Physiology of cerebellum and basal ganglia
5. The cerebral cortex
6. Physiology of vision
7. The special sensation-auditory, tests and olfaction
8. Constancy of milieu interieur

PRACTICAL

1. Blood
 1. RBC and WBC count, Hemoglobin
 2. Differential count
 3. Blood groups, ESR, CT, BT
2. C.V.S
 1. Examination of cardiovascular system
 2. Recording of blood pressure in human beings and the effect of exercise
3. Respiratory system
 1. Use of spirometer and B.M.R. apparatus
4. CNS and special senses
 1. Examination of CNS and the special senses

BIOCHEMISTRY**Placement: Semester II****Time: 20 hours**

- I. Introduction to biochemistry, study of cell, biochemical functions of various components of cells
- II. Proteins:
 1. Amino acids - chemistry, properties, function
 2. Proteins-Their structure, properties, functions, plasma proteins in Health and diseases
 3. Enzymes-Nature and functions, nomenclature and classification, Mechanism of action of

enzymes, stability, precautions for handling specimens for enzyme estimation, factors influencing the rate of enzymes reaction, diagnostic - importance of enzymes.

III. Intermediary metabolism: Introduction, catabolism, anabolism, digestion of C.P.F., factors influencing digestion

Carbohydrates: Introduction, classification, chemistry, properties of carbohydrates and their tests. Biological functions of carbohydrates. Storage of carbohydrates in the body, liver and muscles, glycogens, glycogenesis, glycogenolysis.

Energy release: Tricarboxylic acid cycle and exidative phosphorylation. Metabolism of fructose, galactose, genetic disorder of carbohydrate metabolism. Blood glucose and its regulation, GTT, hyperglycemia, hypoglycemia and Glucosuria.

IV. Lipids: Introduction, classification, chemistry, properties, their test, Biological functions.

Biosynthesis of fats, storage of fats in the body, metabolism of lipids, blood lipids.

V. Nucleic acid: Chemistry, their biological significance. Catabolism of nucleic Acids, purine metabolism, uric acid formation, gout. Biosynthesis of proteins in the cells, role of nucliec acid in protein synthesis. Catabolism of proteins and aminoacids, Urea cycle/genetic disorders of proteins and amino acid metabolisms.

VI. Miscellaneous: Iron metabolisms. Formation and breakdown of hemoglobin. pH of Blood and its regulation. Role of buffers, lungs, kidneys. Liver function tests, their biochemical principles.

NUTRITION AND DIETETICS

Placement: Semester II

Time: 20 hours

- I. Introduction to the study of nutrition, the meaning of food, nutrition, dietetics. dietary principles, relation of nutrition to health diseases.
- II. Constituents of food, water, protein, fat, carbohydrates, minerals, vitamins and functions. sources, daily requirements, metabolism, influence in health, growth and development, defects of deficiency.
- III. The calories, methods of calculating normal food requirements, influence of age, sex and occupation, nutritive value of common food stuffs, dietary allowances-meal planning for the family, quality and economic factors.
- IV. Different methods of cooking and their effects on food and food constituents.
- V. Factors influencing selection of food and planning of meals, income, number, age and occupation of family members, cultural habits, religious practices, budgeting for food, sample menus.
- VI. Teaching-balanced diet, principles of nutrition.
- VII. Diet in the treatment of disease, methods of modifying diet in relation to caloric value and other nutrient.

- VIII. Environmental psychological and cultural factors in accepting diet, serving of food, feeding helpless patients, opportunities for teaching.
- IX. Energy metabolism, fuel value of foods, B.M.R. and its measurement, direct and indirect calorimetry. Factors influencing total energy requirements, caloric allowance.
- X. Special nutritional needs through out life cycle, infancy, childhood, teenage and after fifty. Nutrition in pregnancy and lactation.
- XI. Therapeutic nutritional factors to be considered in the study of diet therapy, effects of illness on food acceptance. Nutrition and handicapped individual.
- XII. Therapeutic adaptations of the normal diet, regular normal diet for energy, protein and texture. High caloric fluid diet, soft diet etc.
- XIII. Nutrition in surgical conditions, effects of surgery on nutritive requirements. Pre-operative and post-operative diets.
- XIV. Diet in specified surgical conditions as involving mouth, throat, oesophagus and stomach, dumping syndrome, diet in burns, tube feeding.
- XV. Diet in disturbances of the gastro-intestinal tract, bland and fibre-restricted diet in 3 stages, high fibre diet, gluten free diet, high protein, moderate fat, high carbohydrate diet, low fat diets.
- XVI. Diet in metabolic disorders like diabetes mellitus, rationale for dietary measurements, calculation of the diabetic diet, prescription, planning the meal pattern, insulin unitages, dietary counseling. Low purine diet-gout.
- XVII. Diet in cardiovascular and renal disorders
- (a) Fat-controlled diets
 - (b) Sodium restricted diets
 - (c) Low protein diet, potassium restricted diets, calcium and phosphorus, restricted diet
 - (d) Diet in anemia
- XVIII. Agencies carrying out nutrition work, FAO, WHO, UNICEF, ICMR
- XIX. Vitamins: Role of vitamins in nutrition and metabolism, study of fat soluble vitamins, & A. D. E. K.
- Vitamins of B group- their role as coenzymes. Diseases due to deficiency of various members of vitamin B complex.
- Vitamin C, scurvy.

PRACTICAL

1. Visit to wards and taking of dietary history
2. Planning, preparation and calculation of normal diet
3. Preparation of diet Charts (Sheets)

4. Helping and supervising food distribution
5. Planning and calculation of therapeutic diet
6. Visit to wholesale food markets for selection and purchasing of foodstuffs.
7. Taking of food supplies from the contractors and their checking
8. Administration of kitchen and stores
9. Analysis of some foods-milk, eggs, potato, wheat

FUNDAMENTALS OF NURSING AND FIRST AID WITH APPLIED SCIENCES

Placement: Semester I & II

Time: 90 hours + 70 hours

- I. Introduction - Etiquettes and Nurses, orientation to the ward. Definition of nursing and profession scope of nursing. Criteria of good nursing. Code of Ethics for nurses. The changing concepts of nursing, progressive patients care. Health programs and nursing in hospital. Nursing process.
- II. Health resources in the community
 - Preventive
 - Curative
 - Rehabilitative
- III. The patient in hospital
 - as individual with varying needs
 - as a member of health team
 - the psychological approach to patient care
 - admission and discharge procedure of patients
- IV. Communication skill
 - Definition of communication
 - Methods of communication
 - Interviewing the patient
 - Nurse-patient relationship
- V. Observing, reporting and recording
- VI. Temperature, pulse, respiration and blood-pressure
- VII. Nurses role in providing for the needs of patient
 - Person and Cleanliness
 - Bathing adult and child patient

- Care of mouth
- Hair care
- Care of eyes, nose and nails
- Care of skin
- Prevention of pressure sores
- Comfortable Bed
 - Bed sheets and bed making
 - Materials used for beds and bedding
 - Hospital beds and its adjuncts
 - Special mattresses
 - Care of linen
 - Principles of bed making
 - Special types of beds
- Body Mechanism
 - Transportation, rest and sleep
 - Devices for helping the patient to move
 - Exercise and ambulation, position used in nursing
- Safety of the patients
 - Safety measures in hospital
 - Prevention of accidents and trauma
 - Prevention of infection
 - Medical and surgical sepsis
- VIII. Nurses role in diagnostic measures
 - Assisting in physical examination
 - Assisting in diagnostic tests
 - Observation of excreta and discharges and collection of specimens
 - Urine
 - Faeces
 - Sputum
 - Vomitus
 - Vaginal discharge
 - Purer Secretions

Preparing the patient for various investigations and radiological examinations.

IX. Nurses role in the therapeutic measures

- Local applications
- General applications
- Drainage, irrigation and introduction of food into the elementary tract
- Aspiration and drainage of body cavities
- Drainage, irrigation and medication of urinary bladder
- Irrigation and medication of eye, ear, nose and throat
- Administration of oxygen and other gases and the use of respirator
- Administration of medicines
- Administration of food and fluid by parenteral therapy
- Care of wounds, including surgical dressings

X. Providing for the spiritual needs of the patients

XI. Care of the terminally ill patients

- Needs of the terminally ill patients
- Signs of death
- Care of the death

XII. First aid and Nursing in simple emergency: definition of first aid, aims and objectives, responsibilities and general principles for first aiders.

- (a) Bandage, material used in bandaging, techniques of application of a roller bandage, techniques of application of a triangular bandage. Different types of knots and slings.

First aid kit, articles and purposes

- (b) Application of splints, plaster of paris, traction and strapping

- Definition, types of application procedure

c) Emergency Nursing care in

- Wound
- Haemorrhage
- Shock
- Burns and scald
- Unconsciousness
- Epilepsy

- Drowning, strangulation, choking, inhalation of fumes
- Poisoning & insect bites
- Respiratory and cardiac arrest
- Injuries to bones, muscles, joints
- Miscellaneous conditions; dog bite, snake bite, heat stroke, frost bites

(d) Transportation of injured person

XIII. Pharmacology

- Introduction
- Brief history of the evolution of modern drug therapy
 - Law regulating drugs-national, international
 - Pharmacopias

Sources of drugs Plants, animals, minerals and synthetics

Pharmaceutical Solution and suspensions

Preparations Dosage, forms-pills, capsules, tablets, etc.

Weight and Measures

Prescribing of drugs

Administration of drug

Action of drug-local, systemic

Toxic symptoms and antidotes

Factors influencing action of drugs

Grouping of drugs

Care of drugs

PRACTICAL

All the procedures taught in the class room shall be demonstrated to the students in the ward situation and the students will have to do the return demonstration and practice the same in the clinical areas.

INTRODUCTION TO COMMUNITY HEALTH

Placement: Semester I

Time: 30 hours

- I. Concept of optimum health and its relation to successful living. Maintenance of health, building good health habits, hygiene: personal and mental. Concept of health, determinants and community health resources. Concept of primary health care and nurses' role.
- II. Environmental Health

- (a) Water supply -sources, impurities and pollution, water borne disease, water purification, protected water supply
 - (b) Disposal of refuse
 - (c) Housing
 - (d) Disposal of human excreta
 - (e) Ventilation, lighting, noise control
 - (f) Disposal of the Dead.
 - (g) Hygiene of slaughter houses and of eating places
- III. Insects of public health importance. Introduction to medical entomology. Control of Vermin and insects, mosquitoes, flies, human lice and ticks. Control measures.
- IV. Food sanitation, diseases transmitted through food. Milk as a transmitter of disease, milk sanitation. balanced diet
- V. HIV/AIDS: introduction, transmission and control

PRACTICAL

- (a) Method used to make well water safe
- (b) Field visits to: City water supply, Sewage disposal plants, soakage pit, composting, latrines, incineration plant, Infectious diseases hospital, mother dairy.

PSYCHOLOGY AND MENTAL HYGIENE

Placement: Semester I & II

Time: 40 hours

- I. Aim and methods of Psychology
- (a) Introduction to the course
 - (b) Definition of psychology
 - (c) Significance of psychology in nursing and in every day life
 - (d) Scientific methods of psychology
- II. Human behavior
- (a) What individual does, why and how?
 - (b) Response mechanism, interaction with environment
- III. Motives, drives and needs
- (a) Definition and classification of motives
 - (b) Importance and purposes of motives

- (c) Motivation of work, personal and social
- (d) Fundamental and physiological drives
- (e) Needs and determiners of behavior
- (f) Basic needs of an individual

IV. Feelings, emotions and instincts

- (a) Emotions and attitudes
- (b) Theories of emotions
- (c) Definition and kinds of instincts
- (d) Conflicts and frustrations
- (e) Emotional support to the patient

V. (a) Attention

- (b) Perception of different kinds
- (c) Accuracy and inaccuracy of observation
- (d) Improvement in observation

VI. Learning

- (a) Definition
- (b) Types of learning
- (c) Laws of conditioning
- (d) Important factors in learning

VII. Memory

- (a) Memorizing
- (b) Economy of memorizing
- (c) Retention
- (d) Recall
- (e) Recognition
- (f) Memory training

VIII. Thinking

- (a) Ideation
- (b) Tools of thought
- (c) Problems solving
- (d) Logical and illogical thinking

IX. Individual differences in abilities

- (a) Intelligence

- (b) The individual's unequal standing in different abilities
- (c) Vocational guidance

X. Personality

- (a) Definition of personality
- (b) Types of personality
- (c) Basic factors which influence personality
 - Physiological
 - Social
- (d) Self consistency and personality integration
- (e) Improving personality
- (f) Measurement and evaluation of personality
- (g) Interplay heredity and environmental factors in personality

XI. Mental Hygiene

- (a) The nature and scope of mental hygiene
- (b) Historical survey and outline of mental health problems
- (c) An outline of psychopathology
- (d) Preventing mental health
- (e) Promoting mental health
 - (i) Home and balanced personality
 - (ii) From nature of infants to nature of adults
 - (iii) Dynamics of conscience
 - (iv) Coping with reality
 - (v) From fixation to functional autonomy
 - (vi) Adjustment mechanism

Definitions

Kinds of adjustment mechanisms operating in daily life.

Compensation	Regression
Rationalization	Negativism
Projection	Sympathism
Identification	Fantasy
Repression	Substitution
Sublimation	

- vii) Is repression a mental hygiene evil?
 - viii) Education for mental health and its significance
 - ix) Community Mental health programs
- XII. Formation and change of attitudes- their nature and function.
- XIII. Psychological reaction to illness- attitude to illness (acute, recurrent, chronic, terminal, invalidating).
- Psychological aspects of hospitalization - Attitude to treatment
 - Interpersonal relations in a hospital-hospital as a social institution.

INTRODUCTION TO MEDICAL SURGICAL NURSING

Placement: Semester II

Time: 60 hours

- I. Introduction
 - The patients' concept of the nurse
 - The nurse's concept of the patient
 - Function of the nurse in out-patient-department
 - Department, clinics and wards
 - Patient assignment.
- II. Internal defences against invasion by pathogens
 - Inflammatory response
 - Antigen antibody response
 - The healing process
 - Principles basic to invasion by pathogens
 - Management of patient with inflammation
- III. Internal defences against foreign bodies
 - Allergy, anaphylactic shock, transfusion
 - Reaction of tissue, antiseptics and sepsis
- IV. Special problems influencing the care of patient in general
 - Fluid electrolyte and temperature balance
 - Care of the incontinent patient
 - Unconscious patient
 - Patient with acute illness
 - Patient with pain
 - Patient with chronic illness
 - Aged patient
 - Patient undergoing surgery

ENGLISH

Placement: Semester I & II

Time: 60 hours

Objectives

1. To further development of vocabulary which will enable the student to comprehend fully the technical and abstract word of medical and nursing profession.
2. To further knowledge of the structure of the English language and its modern usage.
3. To acquire standard of English which will enable the student to lectures and books in nursing and allied subjects render their writing accurate, speech fluent, and reading fast and comprehend fully.

Unit I Text Books

1. Arms and the Man by J.B.Shaw
2. The final diagnosis by Arther Hailey

Reference to the context

Questions on the text from both above books

Unit II Grammar

1. Essay
2. Precis
3. Letter
4. Paragraph
5. Punctuation
6. Articles
7. Direct/indirect
8. Speech
9. Tenses
10. Idioms
11. Active/Passive
12. Fill in the blanks

HINDI

Placement: Semester I

Time: 20 hours

I. Reading and comprehension

Questions should be (as far as possible) objective in nature. The Broad question types should confirm the following patterns:

- | | |
|---|----|
| (a) Summary of prescribed lesson of precis of a given passage from the prescribed text. | 15 |
| (b) Short questions for testing comprehensive skill based on prescribed text. | 10 |
| (c) Question on Idiomatic expression based on prescribed text. | 5 |

(d) Finding out the central idea of an unseen passage on the following lines	
(i) Caption (title)	3
(ii) Basic points of discourse in format of multiple choice test	7
II. Writing and Composition	
(a) Essay on a general topic	20
(b) Letter writing	10
III. Functional Grammar	
Questions on grammar should be limited to basic sentence patterns of Hindi and Morphological processes involved therein.	
The broad division for examination purposes should be as follows:	
(a) Grammatical categories: noun, pronoun, adjective, adverb, verb, number, gender, person, tense, aspect, mood	10
(b) Basic sentence patterns (use of post positions, concordance, voice and casual constructions)	10
(c) Word-meaning and word-formation (synonym, antonym and polisemy, broad Categories of word formation)	10

MEDICAL SURGICAL NURSING

Placement: Semester III & IV

Time: 165 hours

- I. Maintaining the body in dynamic equilibrium
 - Maintaining the circulation of blood
 - Shock: classification, symptomatology, patho-physiology and care
 - Haemorrhage-types and its management, body fluid component and body electrolyte components
 - Fluid and electrolyte balance
 - Management of patient with fluid and electrolyte imbalance
 - Prevention of fluid and electrolyte imbalance
 - Assessment of fluid and electrolyte imbalance
 - Replacement therapy
 - Pharmacology: drugs acting on different systems, emergency drugs
- II. Inflammation: types, causes, pathology, complications and management
 - Ulceration-causes, symptomatology, treatment
 - Gangrene: causes, types, pathology and management
 - Wound: types, symptomatology, pathology and management
 - Tumors and malignancy, stress on early diagnosis

III. Medical and surgical nursing management of patient with

- (a) Circulatory disorders: CAD, Angina, MI, RHD, peripheral arterial disease, hypertension, arrhythmias, anemias, leukemias, immunological problems
- (b) Digestive disorders, liver and biliary disorders
- (c) Respiratory disorders: investigations, COPD, pneumonia, lung abscess
- (d) Renal disorders: ARF, CRF, infections of urinary tract, nephrotic syndrome
- (e) Poisoning and its management

IV. Orthopaedic nursing

Principles of Orthopaedic treatment

Fractures and dislocation of upper and lower limbs

Diseases of bones, joints, muscles and bursae, bone TB

Orthopaedic surgery and nursing care, Replacement of hip & knee joint

V. Ophthalmic nursing

Review of the anatomy and physiology of eye

Common eye conditions, styes, conjunctivitis

Squints, corneal ulcers, Glaucoma, Trachoma, cataract

Retinal detachment, ophthalmic emergencies

VI. ENT (Ear, Nose, and Throat) Nursing

- (a) Review of the anatomy and physiology of ear, nose and throat, common ear diseases or conditions.

Common nursing procedures done in ENT

Boils in the external meatus, Otitis media, mastoiditis and otosclerosis.

Common investigations done in ENT

- (b) Common conditions of the nose

Sinusitis, Rhinitis, Epistaxis, Nasal obstruction and noidectomy, Meniere's disease

- (c) Common condition of the throat

Acute pharyngitis, acute follicular tonsillitis, Peritonsillar abscess, laryngitis. Management of patient with laryngectomy and tracheostomy

VII. Skin and communicable diseases

Diseases of skin-insect infestation, fungal infection, viral diseases, scabies, immunological problems, malaria, cholera, small pox, chicken pox, V. D., principles of communicable diseases control - planning, control measures and immunization, HIV/AIDS, Plague, Tuberculosis

VIII. Gynae nursing

Gynaecological examination of patient

Disturbance of menstruation, abortions

Diseases of external genitalia and vagina

Diseases of uterus, ovaries, fallopian tubes and broad ligament

IX. Advanced nursing procedures: abdominal and pleural aspirations, biopsies, endoscopies, catheterization, fumigation, ostomy care, irrigations, nasogastric intubation, endotracheal intubation, CPR.

Procedures related to the female reproductive system

Vaginal examination, recto-abdominal Examination, Collection of smear, Biopsy, test for tubal patency

Procedures related to the musculo- skeletal system

Plaster of Paris, nursing care of a patient in a plaster cast, Traction-Orthopaedic appliances. Nursing of patients with splints, frames, braces and supports

Procedures related to the eye, ear, nose, throat

Eye-examination, cold application, medication, pre and post operative preparation and care.

Ear-Examination, Removal of Foreign bodies, irrigations, pre and post operative care.

Nose- Examination, Instillation of nose drops, irrigation,

Throat- examination, throat swabs, care of tracheostomy and tonsillectomy

Misc. general procedures: Scanning, MRI, Ultrasound

Procedures related to Gastro-intestinal system

Oesophagoscopy, gastroscopy, Barium swallow, gastric analysis, gastrostomy feeding, gastric lavage, gastric gavage, continuous gastric suction, cholecystography, abdominal paracentesis, Barium enema, sigmoidoscopy, Proctoscopy, colonic irrigation, colostomy irrigation, proctoclysis.

Procedures related to respiratory system

Bronchoscopy, Bronchography, thoracoscopy, thoracentesis, artificial pneumothorax, drainage of Pleural cavity, Postural drainage, Breathing exercises

PSYCHIATRIC NURSING

Placement: Semester III & IV

Time: 60 hours

- I. Brief historical review of psychiatry, and psychiatric nursing in India and abroad
- II. Principles of psychiatric nursing and their application in general nursing
- III. Classification of mental disorders (ICD & DSM)
- IV. Communication skill, interviewing, observation and process recording
- V. Interpersonal relationship, nurse-patient relationship, nurse's role in therapeutic psychiatric team and therapeutic impasse
- VI. Mental disorders: their etiology, clinical features, criteria for diagnosis, and treatment methods (Organic brain syndrome, psychotic, neurotic, stress related and somatization disorders, childhood & adolescent disorders & problems of mentally challenged children, personality disorders, substance use disorders and eating disorders).
- VII. Nursing approaches in thought, perceptual & motor activity disorders and behaviors: Aggressive, withdrawal, anxious, paranoid, addicted, psychosomatic and negative and positive attitudes.
- VIII. Role of nurse in specific therapies.
 - Chemotherapy
 - Somatic therapy (ECT)
 - Psychotherapy

- Psychosocial therapies: Milieu therapy, therapeutic community, group therapy, behaviour therapy and family therapy, etc.
- Crisis intervention therapies
- Occupational therapy

IX. Changing trends in the care of mentally ill, preventive psychiatry, various community mental health agencies

X. Community mental health nursing and Psychiatric social work

XI. Psychiatric emergencies

XII. Legal Psychiatry

PRACTICAL

Inpatient unit - 7 weeks

OPD posting - 1 week (clinics- de-addiction, CGC, Neuro-psychiatry)

Write: care plans, nursing care assessment study, OPD observation report and case reports, process recording, drug book, daily diary and observation reports of field visit

Field Trips: Institute of Human Behavior and Allied Sciences (Shahdara), Mental hospital, De-addiction unit

OPERATION THEATRE TECHNIQUES

Placement: Semester III

Time: 20 hours

OPERATION ROOM NURSING

- I. Responsibilities of operation room nurse
- II. Preparation of theatre and theatre dress
- III. Sterilization of instruments, utensils and dressing Linen -cleaning and packing
- IV. Sutures, ligature and surgical needles
- V. Anesthesia- Types of anesthesia and resuscitation of patient, endotracheal intubation
- VI. Various positions used in O.R. Manipulation of table
- VII. Care of patient before, during and after operation, Transportation of patients
- VIII. Common instruments used in various surgical operations, Assisting in various types of surgery
- IX. Operation Theatre techniques

Operation theatre unit, carbolization and setting up, scrubbing of hands, wearing of gown, masks and gloves, chemical substances used in the theatre, anesthesia, ligature and sutures, needles, articles for general, spinal and rectal anesthesia.

PRACTICAL REQUIREMENTS

1. Keep record of 20 operations for which they scrubbed
2. Record of operations for which they helped as a circulatory nurse

MICROBIOLOGY**Placement: Semester III****Time: 30 hours**

- I. Introduction to microbiology and history of microbiology
- II. Morphology and classification of bacteria including characterization of bacteria
- III. Factors and conditions affecting growth of bacteria and methods used for study of bacteria
- IV. Collection and transportation of specimens for their cultivation
- V. Sterilization: Physical methods
Chemical methods
- VI. Hospital infection, universal precautions
- VII. Fungi
- VIII. Parasitology and host-parasite relation
- IX. Immunity and immunization procedure
- X. Vaccines, sera, toxoids and toxins
- XI. The viruses and Rickettsia
- XII. Serological tests and their corresponding diseases
- XIII. Basic concepts of pathology

PRACTICAL

1. Visit to Microbiology department demonstration of equipment used in bacteriology
2. Use of microscope and demonstration of characteristics of bacteria, cocci, bacilli, spirochetes.
3. Staining techniques and preparation of culture media
4. Autoclave, hot air oven and chemical methods of sterilization
5. Demonstration of Fungi, protozoa, helminths, virus and Rickettsia

HEALTH EDUCATION**Placement: Semester III****Time: 20 hours**

- I. Aims, concepts, scope and limitations of health education
- II. National plan for health education. Functions and qualifications of extension workers, applied nutrition programs

III. Health teaching and communication

Communications - principles and methods

Techniques of interviewing

Public Speaking

Planned and incidental health teaching. Simple teaching aids

Preparation and use in hospitals and community

IV. Methods of Health Education

Methods of health education to motivate: Individual, family community, organization and mass, special group leaders, groups dynamics religion community and voluntary workers. Techniques in health education: Lectures, discussions, symposium, seminars, group discussion, debate, organizing camp, demonstration, role-play, puppet show, drama etc.

Organizational set up for health education

V. Audio-visual aids

Definitions, classification, principles in use of A.V. Aids using projected aids- film strip, and slide projectors

Opaque projector, Patrol Lantern, filmstrip projector

Movie projector, 16 mm for education purposes. Tape recorder and their operation, multimedia.

Field trips-Definition, advantages of field trip as a learning experience, principles and steps involved in organizing a field trip.

Planning displays and exhibits: Functions and principles involved, attention catching devices.

Display material and their uses: posters, charts, maps, graphs, and photographs, flannel graph, flip charts, bulletin board, blackboard, flash cards. Purposes, principles and effective utilization of these materials.

Objects, specimen and models-purposes and principles related to the use of these.

MEDICAL SURGICAL NURSING II (Specialty Nursing)

Placement: Semester V and VI

Time: 100 hours

I. Cardio-thoracic Nursing (15 hours theory)

Review of the anatomy and physiology of the heart

Mitral stenosis, Aortic stenosis, Fallot's Tetralogy, Coarctation of the Aorta

Principles of open heart surgery and closed heart surgery

Special pre-operative and post-operative care of the patients undergoing cardio-thoracic surgery- CABG, double valve replacement, coarctation of aorta

Cardio-pulmonary resuscitation, ECG and cardiac catheterization, angiography

Defibrillators, Pace-makers, cardiac monitors, cardiac tamponade

II. Cardiology Nursing (15 hours)

CHD, CAD, Arteriosclerosis, Atherosclerosis, Angina Pectoris

Myocardial Infarctions, Hypertension, Burgers disease, cardiomyopathy, endocarditis, Causes of these conditions, clinical features, patho-physiology

Investigations, management and nursing Care

Congestive heart failure, Rheumatic fever & RHD, cardiac arrhythmias, cardiac arrest, heart block, Cor-pulmonale, pulmonary edema, cardiogenic shock, pulmonary embolism, cardiac tamponade. Causes of these conditions

Clinical manifestations, pathophysiology, investigations, management and nursing care

III. Neurological and Neurosurgical Nursing (20 hours)

Examinations of neurological and neuro surgical patients

Observing, recording and reporting

Cranial, spinal and peripheral neuropathies

Common diagnostic tests done for patients in neurology and neuro surgery

Cerebro-vascular accidents, Brain tumors, Extra-pyramidal diseases, Epilepsy, Head injury, spinal injuries, CNS infections, Multiple sclerosis. Life saving drugs used in neuro and neuro surgery. Management and special nursing care of neurology patients, unconscious patients and pre and post op management of neurosurgery patients

IV. Burns and plastic surgery (15 hours)

Historical background, scope

Burns: types, classification, pathophysiology, maintenance of fluid and electrolyte balance and nursing management in burns. Prevention of contractures. Skin grafts and flaps. Principles of cosmetic surgery, nursing care of patients undergoing cosmetic surgery. Rehabilitation of burns patients.

V. Nephrological & Urological Nursing (10 hours)

Review of anatomy and physiology of urinary tract

Common tests and investigations done for nephro and urological conditions

UTI, Acute renal failure, chronic renal failure, renal calculi, BPH, Cancers of the kidney, bladder prostate

Etiology, symptomatology, patho-physiology, management and nursing care

Care of drainages/drainage tubes

Dialysis, its purpose, type and principles, nursing care

Kidney transplantation, nursing care and management

VI Cancer Nursing (15 hours)

Nature of cancer: difference between normal cell and cancer cell, growth, appearance, cell structure, biochemical difference & genetic difference.

Classification & staging of cancer

Principles & treatment planning for cancer patients.

Principles of chemotherapy & Nursing management.

Radiation therapy- Brachy therapy, teletherapy & Nursing management.

Cancer of Head & neck, Larynx, Lungs, G. I. system, cervix & female genital organs, kidney, ureter, bladder & male genital organs, thyroid & parathyroid gland, bone & nursing management.

Management of patient with Anemia, Leukemia, Lymphoma & multiple myeloma

Symptomatic management of cancer patients.

Bone marrow transplantation & nursing management.

Pain management. Palliative care. Care of the terminally ill cancer patient-Hospice care

Oncological Emergencies.

Rehabilitation of oncology patients.

VII Intensive care nursing (10 hours)

ADVANCED NURSING PROCEDURES

1. Procedures related to the cardiovascular system
Blood examination, Blood circulation time, venous pressure, cardiac catheterization, Angio-cardiography, Electrocardiography, Sternum and tibial puncture
2. Procedures related to the urinary system
IVP. Urethrography, cystoscopy, cystography, pyelography, catheterisation, bladder irrigation, tidal drainage, kidney biopsy, urodynamic studies
3. Procedures related to the nervous system lumbar puncture, lumbar air study, myelography, electroencephalography

GROWTH AND DEVELOPMENT

Placement: Semester V

Time: 20 hours

- I. (a) Development of fertilized ovum and the embryo
- (b) Fetal development
- (c) Newborn baby
- (d) Infant
- (e) Toddler
- (f) Pre-school child
- (g) School going child
- (h) Adolescent
- (i) Adult

- (j) Aging
 - (k) Old age
- II. (a) Stages of socialization - periods of elementary socialization, domestic socialization, resistance and communal socialization
- (b) Emotions - Insecurity and frustration
 - (c) Personality - Constitution and typology, Heredity and environment mechanisms and dynamism in personality development.
 - (d) Attitudes - Parental attitudes, Teacher's attitudes, Physician's attitudes, Group attitudes
 - (e) The symptoms - as an admission ticket
 - As a signal
 - As a safety valve
 - As a means of solving problems
 - As a nuisance
- III. Problems of behaviors - Eating problems
- Sleeping problems
 - Disorders of speech and language
 - Bed wetting (enuresis)
 - Habitual manipulation of the body
 - Problems of scholastic performance
 - Problems of sexual behaviour
- IV. Functional mental disorders in children
- Nervousness
 - Psychosis
 - Delinquency
- V. Psychosomatic problem
- The central nervous system
 - The circulatory system
 - The respiratory system
 - The muscular system
 - The urinary system
 - The special senses

VI. Prophylaxis (preventive measures against emotional problems)

The parental education

The children and the community

Planned parenthood

PAEDIATRIC NURSING

Placement: Semester VI

Time: 20 hours

- I. Introduction and scope of paediatrics and its limitations
Paediatrics as a general discipline, principles of paediatric nursing, effects of hospitalization and care of hospitalized child
- II. Infant and childhood mortality and morbidity, effect of morbidity on growth and development
- III. Preventive Paediatrics, including prenatal care
- IV. Infant and child feeding: breast feeding, artificial feeding, weaning and introduction of solids, baby friendly hospital initiative, nutritional requirements of children at different stages
- V. Fluid and electrolyte balance and disturbance and their management
- VI. Immunization: EPI, UIP, cold chain, schedule
- VII. Physiological, anatomical and pathological variation in children
- VIII. Concepts of social paediatric, community services
- IX. Influence of age on response to drugs and chemicals, common drugs used in paediatrics, dosage, indications, side effects, nurses' responsibility
- X. Normal newborn, characteristics, normal variations, routine care
- XI. Care of the low birth weight & high risk neonate
- XII. Prevention of the infections in the nursery
- XIII. Recognition of congenital malformations in the newborn. Introduction to paediatric surgery, pre- and post-operative nursing care, surgical management of common congenital malformations
- XIV. Nursing care of infant and child with HIV infection
- XV. Handicapped child and management. Mental retardation, cerebral palsy, physically handicapped child, mental health and illnesses of child
- XVI. Diseases of children, management (system wise)

PRACTICAL

Procedures related to Paediatric Nursing: (Demonstration and practice on the wards)

- Observation of a child, Milestones, bathing an infant, weighing the baby, changing of napkin

- Assisting with physical examination, safety programme and child care
- Toys for children, restraints
- Collection of specimens, administration of medicines, medicine calculation and dosages,
- Preparation of fluids- N/2, N/3 N/4, N/5 etc. fluid requirements for infants and children, fluid administration
- Oxygen administration by different methods, steam inhalation
- Emergency measures of asphyxia, gastric gavage and lavage, pre and post operative care
- Catheterization of a female child
- Care of child on ventilator, in incubator, under warmer
- Assisting with diagnostic procedures and therapeutic measures.

PUBLIC HEALTH NURSING AND HEALTH ADMINISTRATION

Placement: Semester V

Time: 40 hours

- I. Introduction to Public Health & Community Nursing
 - History of community medicine and community nursing
 - Objectives and scope of community nursing
 - Health planning in India
 - Health survey and development and Planning Commission
 - Five-year plans in relation to health
- II. Organization and administration of health services in India
 - Centre, state, district, urban health services, rural health services, system of medicines, centrally sponsored health schemes, role of voluntary health organizations and international health agencies and community participation. Role of panchayat in health care system. Role & functions of community health nurse at centre, state, district and peripheral level
- III. Role of epidemiology in community health
 - Communicable diseases. HIV/AIDS. Organizing immunization session.
- IV. Principles and concepts of public health nursing
 - Community diagnosis, family nursing process
 - Individual, family and community as a unit of service
 - Principles of home visiting
 - Establishing working relationship with the family
 - Working with families in relation to prevention of disease, promotion of health
 - Care of the sick in the home, physically handicapped and mentally retarded

Family records- Purposes of records, types of record, principles and maintenance of records.

Surveillance and monitoring

V. Role of the public health nurse in

National health programmes.

Maternal and child health programmes, family welfare and school health services, industrial health services, nutritional programmes as a member of the health team.

Training of Dais, VHG, AWW etc. Human sexuality and reproduction: role of nurse as a counsellor

VI. Medico-legal aspects in public health nursing

Law and the nurses, care of poisoning, injury

Case of assault and violation on the female or rape

Legal responsibility of nurses in cases of abortion

Confinement, injections of anaesthetics, gunshot, professional secrets.

PRACTICAL

The student will work in the mobile clinic, be allotted families for gaining experience in identifying family health needs, health counseling and guidance and family budgeting, for optimum health.

The students will be given opportunity to participate in the activities of primary health centre, sub-centre, MCH centre. Visits will be made to selected health welfare agencies.

MATERNAL AND CHILD HEALTH

Placement: Semester V

Time: 30 hours

I. Development of MCH Services

Birth rate, morbidity and mortality rate, infant mortality, maternal mortality and morbidity rates. Causes with facts and figures related to region, national and international statistics. RCH program.

Fertility rates, management of fertility, sub-fertility and sterility.

II. Needs and management of healthy children in Indian culture. Socialization through parents, siblings and community, normal mental development of the child, maturation, effect of training, characteristics of mentally healthy child, special problems of children, adolescents, mental and emotional needs of children and ways of meeting these needs in Indian culture.

III. Nutritional needs of children

0-5 years and 5-14 years, methods of meeting them in urban and rural areas, immunization schedules.

IV. Child health organization

Crèche, nursery schools, child welfare centres, orphanages, remand homes. National and international agencies for child-care, special problems of children and adolescents, needs for remand houses, adoption homes.

- V. Maternity and health services: Structure of domiciliary services, parent craft, aims and objectives. The role of A.N.M. coordination of hospital and basic health services. Referral system. Law regarding birth, infection, vaccination procedure, notification of birth, infection, etc. Marriage guidance and counseling. Training of Dais, role of multipurpose workers. Female and male health worker supervisor.
- VI. Socio-economic factors affecting community health, beneficial and adverse effects of economic status, housing, education, patterns of family, neighborhood. The community village, town social organization, adequate resources, welfare organization, factors in social disorganization, poverty, crime, delinquency, unemployment, culture, conflicts, labour problem. Social, cultural, economic aspects of M.C.H. services, effects of early marriage, beliefs in relation to confinement, puerperium and diet, breast feeding, weaning, etc. Local culture, customs and ways of living, social norms and pressure of various groups in a changing and developing country.
- VII. Family welfare programme.
Aims of objectives of family welfare programmes, population trends and growth rate in India, need of limiting the family as a social, economic and health need. National population policy. Population dynamics and control of conception. Yearly targets and achievements. Advantages of limiting of family. Survey of eligible couples, motivation, use of extension education to spread the message of small family norm. Organization of services in homes, clinics and hospitals. Problems of population growth, family planning methods, acceptance and problems. Review of the methods of family planning, advantages, disadvantages of each methods, teaching to be given to the client about each method, follow up cases in homes, postpartum programme, medical termination of pregnancy and role of the M.C.H. worker.
- VIII. School health program.

SOCIOLOGY AND SOCIAL MEDICINE

Placement: Semester VI

Time: 20 hours

- I. Significance of sociology in nursing and other medical sciences
- II. Social structure: society and the individual, process and agencies of socialization, social and geographical heritage.
- III. Major types of social groups: The family, joint family in India and its disorganization, social customs relating to marriage, dowry system, laws relating to Hindu and Muslim women's rights.
- IV. Social caste and class: Hindu caste system: its origin, functions and evils. Different communities in India. Scheduled Tribes and their problems. Social customs with reference to personal hygiene and public health.
- V. The city and country: sociological contrast, social and economic life in urban areas, social problems in urban areas- pauperism, crime, prostitution, slums, housing, alcoholism, diseases and delinquency, social and economic life in rural areas, social stratification, means of livelihood, economic classes, problems of Indian peasants, etc.
- VI. Human Relation- Communication, interpersonal relationship.

TRENDS IN NURSING AND PROFESSIONAL ADJUSTMENT

Placement: Semester VI

Time: 20 hours

- I. Orientation - criteria of a profession.
- II. Historical background
 1. Development of nursing in ancient era- India, Egypt, Rome
 2. Nursing in middle ages
 3. Modern era - Florence Nightingale and her work
 - Birth of formal education for nurses
 - Development of public health nursing
- III. Nursing Educational Programmes in India
 - Certificate and post-certificate courses
 - G.N.M. programmes
 - In-service education- how, when and by whom organized?
 - Nursing Education in Universities
 - Basic & post-basic B.Sc. Nursing courses
 - Master of Nursing
 - M. Phil and Ph.D. programmes
 - Advanced education in nursing and clinical specialization
 - Sources of information, programmes available in India
 - Sources of financial assistance, scholarships, application
- IV. Nursing Registration and Nursing Legislation
 - Indian Nursing Council, its historical growth, objectives and functions.
- V. Nursing Services in India
 1. Organization of nursing services on a national basis
 - Functions and responsibilities of nursing advisor and other nurses at the Directorate level.
 2. Organization of nursing services at state level
 - Functions and responsibilities of state superintendent
 3. Organization of public health nursing at national and state level.
 - Family planning and nurse's role at national and state level
 - Industrial nursing
 - School health nursing

VI. Government Services

Regulations, policies, procedures, sources of knowledge concerning positions, applications, interviews, responsibility in fulfilling a position, resigning from position.

VI. Nursing organization

1. Nursing organization in India- organization aims, and functions of Trained Nurses Association of India. The professional Journal.
2. The Catholic Nurses association - its organization and activities.
3. Other National organizations and professional journals A.N.A., N.L.N., P.H.N.A., C.N.A., N.C.N.C.B.
4. Midwives' association
5. International Council of Nurses

VIII. International organization and their role in the development of nursing profession.

- | | |
|--------------------|---------------------------|
| 1. W.H.O. | 2. U.S.A.I.D. |
| 3. U.N.I.C.E.F. | 4. Colombo Plan |
| 5. Ford Foundation | 6. Rockefeller Foundation |
| 7. The Red Cross | |

Historical background, objectives and activities at the international and national level, organization of Indian and Red Cross and the functions of Nursing Director.

IX. Issues in Nursing today in the world- India's needs in the nursing field.

X. Nursing research

XI. Field Visits: Indian Nursing Council, T.N.A.I., W.H.O., UNICEF, VHAI

MIDWIFERY AND OBSTETRICS NURSING

Placement: Semester VII & VIII

Time: 70 hours

I. Introduction - Historical review

II. Anatomy and Physiology

Reproductive organs, pelvis and pelvic floor, the breast, foetal skull Influence of hormones in reproductive organs.

III. Embryology

Implantation fetal membranes and placenta formation, growth of foetus, fetal circulation

IV. Physiology of pregnancy

Signs and symptoms and diagnosis

- V. Antenatal care
Objectives, history taking, calculation of expected date of pregnancy, routine examination, care and advice, minor disorders of pregnancy, alleviation of discomfort.
- VI. Preparation for delivery
Requirements for mother and baby, preparation for home delivery, psychological preparation of mother and family.
- VII. Physiology of labor
Physiological changes, mechanisms, stages of labor, moulding of fetal skull.
- VIII. Conduct of labor
Preparation of patient and delivery room, vaginal examination, techniques, management of first and second stages, delivery technique, third stage management. Mechanism of labor- vertex and breech
- IX. Puerperium
Involution, lochia, psychological adjustment, management of puerperium, breast- feeding establishment, minor disorders.
- X. Review of care of new born
Respiration, apgar score, care of cord, eyes, skin, examination for defects, feeding and clothing, minor disorders, prematurity, prevention and care.
- XI. Postnatal examination
Objectives, techniques, family planning. Post partum programme.
- XII. Multiple pregnancy
Diagnosis, presentation, antenatal care, delivery and management of mother and babies.
- XIII. Abnormalities of pregnancy
Ectopic gestation, abortion, vesicular moles, hydraminos, malformation of foetus, hyperemesis gravidarum, toxemias, Rh factors, cardiovascular, urinary respiratory, metabolic, nutritional, venereal, gynaecological conditions, complications of pregnancy, ovarian tumors, retroversion, prolapse of uterus, vaginitis, haemorrhage, placenta previa. Genetic counseling. Common diagnostic procedures in obstetrics
- XIV. Abnormalities of labor
Malformation, transverse or oblique lie, presentation and prolapse of cord.
Abnormal uterine action, contracted pelvis, obstructed labor, complications of third stage of labor. Injuries to birth canal. Obstetrical operations, episiotomy repair, manual removal of placenta, preparation of patient and theatre for each. Obstetrical emergencies. HIV/AIDS in obstetrics. Common instruments used in obstetrics, fetal monitoring.
- XV. Abnormalities of the puerperium
Sub involution, puerperal haemorrhage, puerperal sepsis, prevention, thrombo-phlebitis, white leg, embolism, cracked nipple, breast abscess, suppression of lactation, psychiatric disturbance.

Adoption, unmarried mothers

XVI The infant

Asphyxia neonatorum, neonatal resuscitation, birth injuries, congenital anomalies, feeding difficulties, artificial feeding, digestive disturbance, new born infections, congenital syphilis, hemolytic disease of the new born. Prematurity, incidence, prevention, management and care at home.

Stillbirths: incidence, prevention, causes

XVII. Legislation

- Medico-legal aspects of M.C.H. services
- Ethical and legal issues in obstetrical nursing
- Drugs in common use, drugs permitted for use by midwives and recognizing need for episiotomy and suturing it
- Anaesthetics and analgesics - The role of midwife in their use.
- Quality assurance

PRACTICAL

During the period of training, each student shall:

1. Have a minimum of four weeks experience in antenatal wards and four weeks in the post natal wards (including newborns).
2. Conduct antenatal examinations on not less than 30 women.
3. Receive clinical instruction in the conduct of labour witnessing not less than ten deliveries before conducting one herself.
4. Conduct 20 deliveries
5. Have practice in performing episiotomy and suturing a first -degree tear.
6. Nurse not less than 20 lying in women and their babies during the puerperium
7. Make five vaginal examinations.
8. Have a minimum of five attendance at an antenatal and a post natal clinic

Procedures related to Maternity and Obstetrics Nursing

- (A) Antenatal care- admission of mother in labor, management of first, second and third stage of labor, perineal care, measuring of fundal height, antenatal and post natal exercises, care of breast
- (B) Breast feeding, artificial feeding, expression of breast milk, test feeding, introduction to supplementary food, care of abnormal condition of breast, management of the new born, first bath, daily bath and other care, episiotomy and repair of perineum. Bimanual compression of the uterus. Management of Breech and Face delivery. Induction of Labor. Manual removal of placenta.

- (C) Radio-therapeutic treatment and nursing measures
- (D) Ultrasonic
- (E) Family Planning. Medical termination of pregnancy

PRINCIPLES OF NURSING SERVICES ADMINISTRATION AND SUPERVISION

Placement: Semester VII & VIII

Time: 40 hours

- I. Introduction
 - Significance of administration
 - Systems of administration
 - Functions and Objectives
 - Policies and programmes.
 - Planning and decision making process
- II. Organizational structure.
 - Formal and informal organization
 - The chief executive
 - Line and staff relationship
 - Departmental organization
 - Conflict management in organization
- III. Personnel administration
 - Classification
 - Recruitment
 - Promotion
 - Training
 - Condition of Service
 - Morale and discipline
 - Staff association
 - Performance appraisal
 - Discipline and disciplinary procedure
- IV. Finance
 - The role of budget and budgetary authority in governmental organization
 - Features of budget
 - Audits

- V. Elementary principles of accountancy
Drawing of cheque, fixed deposits, saving banks account, current account, bank drafts.
Maintenance of public money, cash book, contingent bills, non-governmental accounts
Stores keeping and store accounting. Procedure for purchases of government goods, storage, taking stock, loan etc.
- VI. Management
Executive direction and leadership
Public Relations
- VII. Supervision: Philosophy of supervision,
Ethics, aims and objectives, principles involved.
Definition of terminology, personnel administration, team work, team spirit
Job Description: What it contains/its uses and purposes
Job description of area supervisor in hospital and community setting
Practice making job descriptions
Supervisory Management: management and leadership relations
attitudes and patterns
Bureaucratic, autocratic, Idiocratic (Diplomatic) and democratic leadership
Tools of supervision: Techniques and skills involved in observations
Interviewing, individual and group conferences
Record and record keeping
Communication skills, oral and written reports
Performance rating and rating scales
Problem solving technique
Responsibilities of supervisor: Work assignment and hours
House keeping
Handling of complaints and grievances
Maintenance of discipline
Staff education
Evaluating the supervisory programmes.

INTRODUCTION TO RESEARCH AND STATISTICS

Placement: Semester VII & VIII

Time: 100 hours

I. Research

1. Definition of research, steps of the scientific method, need for nursing research, and areas of research in nursing

2. Research process: problem statement, review of literature, survey method, simple sampling techniques, methods of obtaining data, classifying and organizing the data, presentation and interpretation of data
3. Essentials in writing scholarly paper, professional articles, research reports

II. Statistics

4. Types of measures, graphic methods of presentation
5. Measures of central tendency and variability, correlation, probability distribution
6. Bio-statistics, vital and health statistics, uses, sources of obtaining data, estimation of rates and trends

III. Use of Computers (30 hours)

Introduction to computer science & its application to health care system

Disk Operating system

Microsoft windows & MS office & its applications: MS Word, Power point, Excel

Introduction to internet and email

Graphics

Introduction to Data base

Use of statistical packages

Computer aided teaching and testing

PRACTICAL

Students will do a project either individually or in a group, in any clinical area of their choosing.

B Sc (POST CERTIFICATE) NURSING

NURSING FOUNDATION

Placement: 1st Year

Time: 45 Hours

COURSE DESCRIPTION

This course will help students develop an understanding of the philosophy, objectives and responsibilities of nursing as a profession. The purpose of the course is to orient to the current concepts involved in the practice of nursing and developments in the nursing profession.

OBJECTIVES

At the end of the course, the student will

1. Identify professional aspects of nursing
2. Explain theories of nursing
3. Identify ethical aspects of nursing profession
4. Utilize steps of nursing process
5. Identify the role of the nurse in various levels of health services.
6. Appreciate the significance of quality assurance in nursing
7. Explain current trends in health and nursing.

COURSE CONTENTS

Unit I

Development of nursing as a profession, its philosophy, objectives and responsibilities of a graduate nurse. Trends influencing nursing practice. Expanded role of the nurse. Development of nursing education

in India and trends in nursing education. Professional organizations, career planning.

Unit II

Ethical, legal and other issues in nursing. Concepts of health and illness, effects of the person, stress and adaptation.

Health care concept and nursing care concept. Developmental concept, needs, roles and problems of the developmental stages of individual-newborn, infant, toddler, pre-adolescent, adolescent, adulthood, middle-age, old age.

Unit III

Theory of Nursing practice. Met paradigm of nursing-characterized by four central concepts i.e. nurse, person (Client/patient), health and environment.

Unit IV

Nursing process Assessment: Tools for assessment, methods & recording.

Planning: Techniques for planing care, types of care plans.

Implementation: Different approaches to care, organizations and implementation of care & recording.

Evaluation: Tools for evaluation, process of evaluation

Unit V

Quality assurance: nursing standards, nursing audit, total quality management, role of council and professional bodies in maintenance of standards

Unit VI

Concepts of Primary health care, community- oriented nursing, holistic nursing, primary nursing, family oriented nursing, problem oriented nursing, progressive patient care and team nursing.

NUTRITION AND DIETETICS

Placement: 1st Year

Time: Theory-30 hours

Practical-15 hours

COURSE DESCRIPTION

This course is designed to provide the students with a wide knowledge of dietetics in Indian setting, that the practice of teaching optimum and realistic dietary planning can become an integral part of nursing practice.

OBJECTIVES

At the end of the course, the student will

1. Explain the principles and practices of nutrition and dietetics.

2. Plan therapeutic diets in different settings.
3. Identify nutritional needs of different age groups and plan diet accordingly.
4. Prepare meals using different methods utilizing cookery rules

COURSE CONTENTS

Unit I

- Introduction to nutrition and dietetics.
- Balanced diet, factors on which it depends. Factors to be considered in planning. Guides available for planning. Food hygiene, preparation and preservation.
- Review of nutrients- micro & macro.
- Physiology and biochemistry of digestion, constituents of foods
- Factors affecting selection of foods-income, family size, age, occupation, culture, religion in nutrition and food selection

Unit II

Introduction to diet therapy. Routine hospital diets. Therapeutic diet under each unit i.e. Cardiovascular diseases, gastrointestinal diseases, renal disorders, endocrine and metabolic disorders, allergy, infections and fevers, pre- and post-operatives stage. Deficiency diseases and malnutrition. Overweight and underweight.

- Alcohol, food toxins, adulterants and food poisoning
- Feeding of comatose patients
- Special feeds

Unit III

Infant and child Nutrition

- Feeding of normal infants: factors to be considered in planning. Nutritional requirements.
- Feeding of premature infants: factors to be considered in planning, nutritional requirement
- Supplementary feeding of infants: Advantage and method of introduction, weaning & effects on mother and child
- Psychology of infant and child feeding. Feeding the sick child. Diet in diseases of infancy and childhood.
- Deficiency states-malnutrition and under nutrition.
- Feeding pre-school child: nutritional needs, factors to be considered in planning diets.
- Problems in feeding
- School lunch programme: Advantages. Need in India.

Unit IV

Community Nutrition: Need for community nutrition programme

- Nutritional needs for special groups: infant, child, adolescent, pregnant woman, lactating mother and old people.
- Substitutes for non- vegetarian foods. Selection of cheap and nutritious foods. Nutrition education- needs and methods.
- Methods of assessing nutritional status of individual/group/community – Anthropometric assessments
- Current nutritional problems and national programmes.

PRACTICAL

1. Methods of cooking and cookery rules.
 1. Simple preparation of beverages, soups, cereals, pulses, eggs, vegetables & meat.
 2. Menu plans.
2. Preparation of supplementary foods for infants.
 1. Foods for toddlers.
 2. Low cost nutritious dishes for vulnerable groups.
 3. Dietary case study of patient on special diet and planning of low cost dietary instructions for home adaptations
 4. Planning of therapeutic diets.

BIOCHEMISTRY & BIOPHYSICS

Placement: 1st year

Time: Theory 30+30 Hours

COURSE DESCRIPTION

This course introduces the basic principles of Biochemistry and Biophysics related to Nursing.

OBJECTIVES

At the end of the course, the student will

1. Identify the basic principles of Biochemistry and Biophysics.
2. Synthesize the knowledge of these principles in various Nursing situations.

COURSE CONTENT

SECTION A: BIOCHEMISTRY**Time: 30 Hours*****Unit I***

Introduction: Importance of Biochemistry in Nursing. Study of Cell and its various components.

Unit II

Water and Electrolytes: Water-Sources, property & functions in human body. Water and fluid balance. Electrolytes of human body, functions, sources.

Unit III

- Enzymes: Mechanism of action. Factors affecting enzyme activity.
- Diagnostic applications, precautions for handling specimens for enzyme estimation
- Digestion and absorption of carbohydrates, protein and fats.
- Various factors influencing the digestion and absorption, mal-absorption syndrome

Unit IV

Carbohydrates: Catabolism of carbohydrates for energy purposes TCA cycle, Mitochondrial oxidation and oxidation phosphorylation and electron transport chain. Fates of glucose in the body. Glycogenesis, glycogenolysis and neoglucogenesis. Blood glucose and its regulation. Glucose tolerance test, hyperglycemia and hypoglycemia and glycemia. Metabolism of fructose and galactose. Genetic disorders of carbohydrate metabolism

Unit V

- Protein: Amino acids, hormones.
- Essential amino acids. Biosynthesis of protein in the cells
- Role of nucleic acid in protein synthesis.
- Nitrogenous constituents of Urine, Blood, their origin-urea cycle, uric acid formation, Gout.
- Plasma proteins and their functions.
- Genetic disorders of protein and amino acid metabolism
- pH of blood and its regulation. Role of buffers-lungs and kidneys
- Liver function tests, their biochemical principles
- Hormones of thyroid gland their function and regulation
- Hormones of adrenal medulla and cortex and their relevance

Unit VI

Fat: Biosynthesis of fats and storage of fats in the body

- Role of liver in fat metabolism
- Biological importance of important lipids and their functions
- Cholesterol and lipoprotein: sources, occurrence and distribution, blood level and metabolism-Ketone bodies and utilization. Inter-relationships in metabolism and cellular control of metabolic processes.

Unit VII

- Metabolism of calcium and phosphorous, calcium homeostasis
- Radioisotopes: their use in diagnosis and therapy

B: BIOPHYSICS

Time: 30 hours

Unit I

- Introduction: Concepts of unit and measurements. Fundamental and derived units. Units of length, weight, mass, time.
- Matter: properties of solids, liquids and gases
- Measurement of length, area, volume, mass and density- application in nursing

Unit II

- Vector and Scalar Motion, Speed, velocity and acceleration.
- Qualities.

Unit III

Gravity: Specific gravity, centre of gravity, principles of gravity. Effect of gravitational forces on human body. Application of principles of gravity in nursing.

Unit IV

Force, Work, Energy: Their unit of measurements. Type and transformation of energy, forces of the body, static forces. Principles of machines, friction and body mechanics. Simple machine-lever and body mechanic, pulley and traction, incline plane, screw. Application of these principles in Nursing.

Unit V

Heat: Nature, measurement, transfer of heat. Effects of heat on matter. Relative humidity, specific heat. Temperature scales. Regulations of body temperature. Use of heat for sterilization. Application of these principles in Nursing.

Unit VI

Light: Laws of reflection. Focussing elements of the eye, defective vision and its correction, use of

lenses. Relationship between energy, frequency and wave length of light. Biological effects of light. Use of light in therapy. Application of these principles in nursing.

Unit VII

Pressures: Atmospheric pressure, hydrostatic pressure, osmotic pressure, Measurement of pressures in the body. Arterial and venous blood pressures, ocular pressure, intracranial pressure, application of these.

Density, fluid pressure, principles of Archimedes, floating bodies, hydrometers, surface tension, capillary viscosity, diffusion and osmosis.

Unit VIII

Sound: Frequency, velocity and intensity. Nature of transmission of sound, music and noise. Vocalisation and hearing. Use of ultrasound. Noise pollution and its prevention, application of these principles in Nursing. Hearing aids, stethoscope, tuning fork

Unit IX

- Electricity and Electromagnetism: Nature of Electricity. Voltage, Current, Resistance and their Units
- Flow of electricity in Solids, Electrolytes, Gases and Vacuum
- ECG, EEG, EMG, ECT
- Pace maker and defibrillation
- Magnetism and electricity
- M.R.I. Scanning, CAT SCAN

Unit X

- Atomic Energy
- Structure of Atom
- Isotopes and Isobars
- Radioactivity
- Use of radioactive isotopes. Radiation protection units and limits. Instruments used for detection of ionising radiation X-ray
- Radioactive forms of elements used in medicine, X-ray and radiotherapy unit and radium ward

Unit XI

- Principles of Electronics
- Common electronic equipment used in patient care

PRACTICAL

Note: Experiments and Tests should be demonstrated wherever applicable

PSYCHOLOGY

Placement: First year

**Time: Theory-60 hours
Practical-15 hours**

COURSE DESCRIPTION

This course is designed to reorient and widen the students' knowledge of fundamentals of psychology. The student is offered an opportunity to apply the theoretical concepts in the clinical setting and thereby understand the psychodynamics of patient behaviour. This course would also help the students to develop an insight into their own behaviour.

OBJECTIVES

At the end of the course, the student will

1. Apply psychological principles while performing nursing duties.
2. Distinguish the psychological processes during health and sickness
3. Analyze own behaviour patterns.
4. Tabulate the psychological needs of the patients for planning nursing care.
5. Participate in psychometric assessment of the client,

COURSE CONTENT

Unit I

- Introduction: Definition of psychology, Scope and Methods of psychology.
- Relationship with other subjects.

Unit II

- Sensation, attention and perception: Definitions.
- Sensory processes: Normal and abnormal
- Attention and distraction: Contributory factors.
- Characteristics of perception: Normal and abnormal

Unit III

- Motivation
- Definition and nature of motivation
- Biological and social motives
- Frustration and conflicts
- Self-actualization

Unit IV

- Emotion
- Definition of emotions
- Expression and perception
- Self-actualization

Unit V

- Personality
- Definition
- Constituents of personality
- Personalities, sickness and nursing

Unit VI

- Psychological aspects of Nursing
- Behaviour and sickness
- Psychological needs of
 - (a) Child and adolescents
 - (b) Adult
 - (c) Aged
 - (d) Attendants
 - (e) Chronically ill individual

Unit VII

- Individual differences
- Significance of individual differences
- Heredity and environment
- Role of individual differences both in health and sickness
- Implications of individual differences in nursing

Unit VIII

- Intelligence and Abilities: Definitions
- Intelligence and abilities during sickness. Measurement of intelligence and abilities.

UNIT IX

- Learning: Definition
- Conditions of learning

- Laws of learning
- Learning during health and sickness

Unit X

- Memory and forgetting
- Definition and nature of memory
- Memory during health and sickness
- Forgetting during health and sickness

Unit XI

- Attitudes
- Definition
- Development and modification
- Role of attitudes in health and sickness

Unit XII

- Thinking
- Tools of thinking
- Problem solving
- Logical and illogical thinking

Unit XIII

- Concept of mental hygiene & mental health
- Characteristics of a mentally healthy person
- Defence mechanisms
- Inter personal relations- nature and functions
- Psychological reaction to illness
- Community mental health programmes.

PRACTICAL

- (a) Simple experiments in (i) perception (ii) measuring thresholds (iii) reaction time.
- (b) Administration of psychological tests
- (c) Observation and recording data: (i) field observation (ii) interview (iii) case study (iv) Self-rating.

MICROBIOLOGY

Placement: First year

**Time: Theory-30 hours
Practical-30 hours**

COURSE DESCRIPTION

This course reorients the students to the fundamentals of microbiology and its various sub-divisions. It provides opportunities to gain skill in handling and use of microscope for identifying various micro-organisms. It also provides opportunities for safe handling of materials containing harmful bacteria and methods of destroying micro-organisms.

OBJECTIVES

At the end of course, the student will

1. Identify common disease producing micro-organisms.
2. Explain the basic principles of microbiology and their significance in health and disease.
3. Demonstrate skill in handling specimens.
4. Explain various methods of disinfection and sterilization.
5. Identify the role of the nurse in hospital and infection control system.

COURSE CONTENTS

UNIT I

- Introduction to microbiology
- Structure and Classification of Microbes
- Morphological types
- Size and form of bacteria
- Motility
- Classification of Micro-organisms

Unit II

- Identification of micro-organisms
- Discussion of laboratory methods
- Diagnosis of bacterial diseases

Unit III

- Growth and Nutrition of Microbes
- Temperature

- Moisture
- Blood

Unit IV

- Destruction of Micro-organisms
- Sterilization and disinfection
- Chemotherapy and antibiotics
- Effects of heat and cold
- Hospital Infection control procedure & role of nurses.
- Universal precautions
- Disposal of hospital waste
- Antimicrobials

Unit V

- Disease producing micro-organisms
- Gram positive bacilli
- Tuberculosis and Leprosy
- Anaerobes
- Cocci
- Spirochaete
- Ricketasiae
- STD & UTI

Unit VI

- Pathogenic Fungi
- Dermatophytes
- Systemic Mycotic infection
- Laboratory diagnosis of mycotic infection

Unit VII

- Immunity
- Immunity and hypersensitivity- Skin test
- Antigen and antibody reaction
- Immunization in disease

- Pathogenesis of infectious diseases

Unit VIII

- Parasites & vectors
- Characteristics and classification of parasites
- Protozoal infection including amoebiasis
- Helminthes infection
- Diagnosis of parasitic infection
- Vectors and disease transmitted by them.

Unit IX

- Viruses
- Classification and general character of viruses
- Diseases caused by viruses in man and animal and their control.

Unit X

- Micro-organisms transmitted through Food
- Food - poisoning. Food borne infections
- Water borne diseases
- Air borne diseases

PRACTICAL

- Laboratory practical:
- Use and care of microscope
- Common examination: Smear, Blood, Mouldes, Yeasts
- Staining techniques-gram staining, acid fast staining, hanging drop preparation.
- Preparation of Media and culture techniques
- Collection, handling and transportation of various specimens
- Identification and study of the following bacteria: Strepto-Cocci, Pneumococci, Staphylococci, Corynebacteria, Spirochetes and gonococci, Enteric bacteria,
- Identification of Parasites and Vectors
- While giving nursing care in the wards students will practice collection and processing of specimens, prevention and control of hospital infections, sterilization, immunization, chemotherapy and maintenance of personal and environmental hygiene.
- Observation visit to incinerator, posting in CSSD and infection control department.

MATERNAL NURSING

Placement: First year

**Time: Theory-60 hours
Practical-240 hours**

COURSE DESCRIPTION

This course is designed to widen the students' knowledge of obstetrics during pregnancy, labour and puerperium. It also helps to acquire knowledge and develop skill in rendering optimum nursing care to a child-bearing mother in a hospital or community and help in the management of common gynaecological problems.

OBJECTIVES

At the end of the course, the student will

1. Describe the physiology of pregnancy, labour and puerperium.
2. Manage normal pregnancy, labour and puerperium.
3. Explain the physiology of lactation and advice on management of breast -feeding.
4. Be skilled in providing pre- and post- operative nursing care in obstetric conditions.
5. Identify and manage high- risk pregnancy including appropriate referrals.
6. Propagate the concept and motivate acceptance of family planning methods.
7. Teach, guide and supervise auxiliary midwifery personnel.

COURSE CONTENT

Unit I

- Introduction and historical review
- Planned parenthood
- Maternal morbidity and mortality rates
- Legislations related to maternity benefits, MTP Acts, incentives for family planning etc.

Unit II

Review of the anatomy and physiology of female reproductive system

- Female pelvis (normal and contracted)
- Review of fetal development.

Unit III

Physiology and management of pregnancy, labour and puerperium

- Signs and symptoms and diagnosis of pregnancy

- Antenatal care
- Pregnant women with HIV/AIDS
- Management of Common Gynaecological problems
- Fetal well being monitoring
- Common diagnostic procedures in obstetrics

Unit IV

The new born baby

- Care of the baby at birth
- The normal baby
- Feeding
- Jaundice and infection
- Small & Large for date babies
- Intensive care of the new born
- Trauma and haemorrhage

Unit V

Management of Abnormal pregnancy, Labour and puerperium

- Abortion, ectopic pregnancy and vesicular mole.
- Pregnancy induced hypertension, gestational diabetes, anaemia, heart disease.
- Urinary infections, A.P.H.
- Abnormal labour (malposition & malpresentation)
- Uterine inertia
- Disorders of puerperium
- Management of engorged breast, cracked nipples, breast abscess and mastitis
- Puerperal sepsis
- Post-partum haemorrhage
- Inversion and prolapse of uterus, obstetrical emergencies
- Obstetrical operation i.e. forceps, vacuum, episiotomy, caesarean section
- Rh iso immunization.

Unit VI

Drugs in obstetrics

- Effects of drugs during pregnancy, labour and puerperium on mother & baby.

Unit VII

- National Welfare Programmes for women
- National Family Welfare Programme
- Infertile family
- Problems associated with unwanted pregnancy
- Unwed mothers
- Adoption
- Ethical and legal issues in obstetric nursing
- Quality assurance in obstetrical nursing

PRACTICAL

The student will

1. Be posted in antenatal Clinic, MCH clinic, antenatal ward, labor room, post-natal ward, maternity OT, MTP room.
 - Visit welfare agencies for women and write observation report.
 - Follow nursing process in providing care to 3-6 patients
 - Write at least two nursing care studies and do a presentation
 - Give at least one planned health teaching to a group of mothers.
2. Practical following nursing procedures
 - Antenatal & post natal examination, per vaginal exam
 - Conduct normal delivery, stitching of episiotomy, (For male candidates minimum conduct of 5 deliveries)
 - Motivation of family for adopting family planning methods.
 - Motivate family for planned- parenthood.
 - Assist in various diagnostic and therapeutic procedures including IUD insertion and removal.

CHILD HEALTH NURSING

Placement: First year

**Time: Theory-60 hours
Practical-240 hours**

COURSE DESCRIPTION

This course is aimed at developing an understanding of the modern approach to child care, the common

health problems of children and neonates in health and sickness.

OBJECTIVES

At the end of the course, the students will:

1. Explain the modern concept of child care and the principles of child health nursing.
2. Describe the normal growth and development of children at different ages.
3. Manage sick as well as healthy neonates and children.
4. Identify various aspects of preventive pediatric nursing and apply them in providing nursing care to children in hospital and community.

COURSE CONTENTS

Unit I

Introduction

- Modern concept of child- care
- Internationally accepted rights of the child
- National policy and legislations in relation to child health and welfare
- National and international agencies related to child health
- Changing trends in hospital care, preventive, promotive and curative aspects of child health.
- Child morbidity and mortality rates
- Differences between an adult and child
- Hospital environment for a sick child, effect of hospitalization on child and families
- The role of a pediatric nurse in caring for a hospitalized child
- Principles of pre- and post- operative care of infants and children
- Paediatric nursing procedures

Unit II

The healthy child

- Growth and development from birth to adolescence
- The needs of normal children through the stages of developmental and parental guidance.
- Nutritional needs of children and infants: 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.

Unit III

Nursing care of a neonate

- Nursing care of a normal newborn
- Neonatal resuscitation
- Nursing management of a low birth weight baby
- Nursing management of common neonatal disorders
- Organization of neonatal unit
- Prevention of infections in the nursing.

Unit IV

Nursing management in common childhood diseases

- Nutritional deficiency disorders.
- Respiratory disorders and infections
- Gastrointestinal infections, infestations and congenital disorders.
- Cardio-vascular problem-congenital defects and rheumatic fever.
- Genito-urinary disorder-Nephrotic syndrome, Wilms' tumor, infection and congenital disorders.
- Neurological infections and disorders-convulsions, epilepsy, meningitis, hydrocephalus, spina-bifida
- Haematological disorders – Anaemias, thalassemia, ITP, Leukemia, hemophilia.
- Endocrine disorders – Juvenile Diabetes Mellitus.
- Orthopaedic disorders – club- feet, hip dislocation and fracture.
- Disorders of skin, eye and ears.
- Common communicable diseases in children, their identification, nursing management in hospital and home and prevention. Nursing management of infant and child with HIV infection
- Pediatric emergencies – poisoning, foreign bodies, haemorrhage, burns and drowning, common congenital malformations needing immediate surgery.

Unit V

- Management of behavior disorders in children.
- Management of challenged children.
- Mentally challenged
- Physically challenged

- Socially challenged

PRACTICAL

The student will

- Be posted in Pediatric Medical and Surgical ward, OPD in hospital and health centre and neonatal unit.
- Visit a centre for handicapped children and child welfare centre and write observation report.
- Write an observation study of normal children of various age groups in home/nursery school/ creche.
- Follow nursing process in providing care to 3-6 children.
- Write at least two nursing care studies and do a presentation
- Give two planned health teachings, one in hospital and one in OPD/health centre.
- Practice the following nursing procedures:
 - Taking pediatric history
 - Physical assessment of children
 - Baby bath
 - Feeding
 - Restraining
 - Calculation of dosage of drugs and fluids and administration of medications and injections
 - Preparation of fluids and infusions
 - ORS preparation
 - Collection of specimens
 - Enema, bowel wash, colostomy irrigation
 - Steam and oxygen
 - Preparation to assist with diagnostic test and operations
 - Examination/assessment of a newborn
 - Neonatal resuscitation
 - Care of a baby in incubator, on ventilator and under overhead warmer
 - Phototherapy
 - Assist in exchange transfusion and other therapeutic procedures
 - TPN

MEDICAL-SURGICAL NURSING

Placement: First year

**Time: Theory-120 hours
Practical-270 hours**

COURSE DESCRIPTION

The purpose of this course is to widen the students' knowledge and develop proficiency in caring for patients with medical surgical problems. This course includes review of relevant anatomy and physiology, pathophysiology in medical-surgical disorders and the nursing management of these conditions.

OBJECTIVES

At the end of the course, the student will

- Explain relevant Anatomy and Physiology of various systems of the body.
- Explain patho-physiology of various disorders.
- Explain the actions, side effects and nursing implications in administering drugs for various disorders.
- Discuss the recent advancement in the treatment and care of patients with medical surgical conditions.
- Develop skill in giving comprehensive nursing care to patients following the steps of nursing process.
- Assist the patients and his family in identifying and meeting their own health needs.
- Appreciate the role of the nurse in the medical surgical health team.

COURSE CONTENTS

Unit I

Introduction to medical surgical nursing

- Review of concepts of comprehensive nursing care in medical surgical conditions.
- Nurse, patient and his family.
- Functions of nurse in the outpatient department.
- Intensive care unit.

Unit II

Nursing management of patient with specific problems.

- Fluid and electrolyte imbalance
- Dyspnea and cough, respiratory obstruction
- Fever
- Shock
- Unconsciousness

- Pain
- Acute illness
- Chronic illness
- Terminal illness
- Age related illness
- Patient undergoing surgery, Incontinence

Unit III

Nursing management of patient with neurological and neuro-surgical conditions.

- Review of Anatomy and Physiology of the nervous system.
- Cardinal features of neuro and neurosurgical disorders
- Neurological assessment and Glasgow coma scale
- Pathophysiology, diagnostic, procedures and management of:
 - Cerebra -Vascular accident. Cranial, spinal and peripheral neuropathies.
 - Head-ache and intractable pain. Epilepsy. Infectious and inflammatory diseases and trauma of the nervous system- head injuries, spinal injuries. Common disorders of the system. Recent advances in diagnostic and treatment modalities. Drugs used in these disorders. Tumors of brain & Spinal cord, congenital malformations, degenerative diseases.
- Rehabilitation of neuro patients with various disabilities
- Brain death and organ transplantation

Unit IV

Nursing management of patient with cardiovascular problems

- Review of relevant anatomy and physiology of CVS
- Pathophysiology, diagnostic procedures and management of Ischemic Heart diseases. Cardiac arrhythmias. Congestive heart failure. Rheumatic and other valvular heart diseases. Endocarditis, Cardiomyopathies, congenital heart diseases, hypertension, heart block, cardiac emergencies: cardiac arrest, acute pulmonary, oedema, cardiac tamponade, cardiogenic shock, Aneurisms and peripherovascular disorders, recent advancement in Cardiology. Rehabilitation in cardiac pacemakers

Unit V

Nursing management of patient with respiratory problems.

- Review of anatomy and physiology of Respiratory System.
- Pathophysiology, diagnostic procedures and management of upper respiratory tract infections.
- Bronchitis

- Asthma
- Emphysema, Empyema, Atelectasis, COPD
- Bronchiectasis
- Pneumonia
- Pulmonary tuberculosis
- Lung abscess
- Pleural effusion
- Tumors and Cysts
- Chest injuries
- Respiratory arrest and insufficiency
- Pulmonary embolism
- Drugs used in the management of these patients
- Special respiratory therapies.

Unit VI

Nursing management of patient with genito- urinary problems.

- Review of anatomy and physiology of the genito – urinary system
- Nephritis
- Renal Calculus
- Acute renal failure
- Chronic renal failure
- End stage renal disease
- Special procedures, dialysis, renal transplant
- Drugs used in management of these patients
- Congenital disorders, urinary infections
- Benign Prostate Hypertrophy.
- Cancer of bladder and associated structures

Unit VII

Nursing management of patients with problems of the Digestive systems.

- Review of anatomy and physiology of gastro-intestinal system and Accessory organs.
- Pathophysiology, diagnostic procedures and management of G.I. Bleeding
- Peptic ulcer

- Infections
- Acute abdomen
- Colitis, diarrhoea, dysentery & mal-absorption syndrome.
- Cholecystitis
- Hepatitis, hepatic coma and cirrhosis of liver
- Portal hypertension
- Pancreatitis
- Tumors, hernias, fistulas, fissures, haemorrhoids.
- Drugs used in the management of these patients.

Unit VIII

Nursing management of patient with endocrine problems

- Review of anatomy and physiology and pathophysiology of patients with
- Thyroid disorders
- Diabetes mellitus
- Diabetes insipidus
- Adrenal tumor
- Pituitary disorders
- Diagnostic procedures
- Nursing management of patient with these problems.
- Drugs used in endocrine problems.

Unit IX

Nursing management of patient with musculo-skeletal problems

- Review of anatomy and physiology and pathophysiology
- Arthritis, osteomyelitis, bursitis,
- Fractures, dislocation and trauma
- Prolapsed disc
- Osteomalacia and osteoporosis
- Tumor
- Amputation
- Diagnostic procedures
- Nursing management of patient with these problems

- Prosthesis and rehabilitation
- Transplant & replacement surgeries.

Unit X

Nursing management of patients with disorders of female reproductive tract

- Disorder of menstruation
- Infections of the genital tract
- Benign and malignant tumors of the genital tract
- R.V.F., V.V.F.
- Menopausal problems and their management
- Climactic changes and associated problems.

Unit XI

Nursing management of patients with Oncological disorders.

- Types of neoplasms and related pathophysiology.
- Diagnostic procedures
- Modalities of treatment and nurse's role.
- Special therapies- chemotherapy and radiotherapy
- Preventive measures, other therapies.

Unit XII

- Nursing management of patient with burns.
- Nursing management of patient with reconstructive surgeries.

Unit XIII

- Nursing management of patients with common communicable diseases & STDS
- Nursing management of patients with immunological disorders including HIV/AIDS

Unit XIV

- Nursing management of patients with diseases of eye, ear, nose, throat & skin.

UNIT XV

- Nursing management of patient with blood disorders
- Review of Anatomy & Physiology of Blood and Blood products.
- PathoPhysiology, diagnostic procedures and management of blood disorders – Anaemia, Leukemia, bleeding disorders- haemophilia, purpura etc.
- Blood transfusion, safety checks, procedures 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
- Bio-safety and waste management in relation to blood transfusion.

Unit XVI

- Nursing in emergencies.
- Cardiac emergencies
- Trauma
- Poisoning
- Crisis management: Thyroid crisis, Hypertensive crisis, adrenal crisis.

PRACTICAL

Students will be rotated in the selected areas of medicine & surgery, like Cardio-Thoracic, Neurology, Urology, Orthopaedics, Gynaecological, Oncology, Burns and reconstructive surgical units. The students will be given patient assignment. They will practise patient centered comprehensive nursing. Each student is required to give planned health teachings, case presentation and drug study.

ENGLISH

Placement: First Year

Time: 60 hours

COURSE DESCRIPTION

This course is designed to help the student understand and use English needed for their professional work.

OBJECTIVES

After the course the students will

1. Speak and write grammatically correct English
2. Demonstrate effective skill in reading and understanding the English language
3. Demonstrate skill in reporting.

COURSE CONTENTS

Unit I

- Remedial study of Grammar
- Review of grammar, vocabulary and effective use of dictionary. Prepare task- oriented seminars, Symposia and panel discussion.

Unit II

- The ability to understand selected passage and express meaning in one's own words. Reading and comprehension of the prescribed books.

Unit III

- The study of various forms of composition
- Note taking
- Diary
- Nurses’ notes, anecdotal records.
- Writing of summary
- Nurses reports on health problems
- The student will submit one sample of each item from her own practical experience.

Unit IV

- Verbal communication
- Oral reports
- Summarization of discussion
- Debate
- Listening comprehension-film, cassette and Radio.

PRACTICAL

- The clinical experience in the wards and bedside nursing will provide opportunity for students to fulfill the objectives of learning language.
- Assignment on writing and conversation through participation in discussion, debates, seminars and symposia. The students will gain further skills in task- oriented communication.

SOCIOLOGY**Placement: Second year****Time: 60 hours****COURSE DESCRIPTION**

This course is to reorient students to sociology related to community and social institution in India and its relationship with health, illness and nursing.

OBJECTIVES

At the end of the course, the student will

1. Describe sociological concepts that are applicable to nursing.
2. Determine role of sociology in nursing as related to social institutions in India.
3. Develop positive attitudes towards individual, family and community.

COURSE CONTENTS

Unit I

Introduction

- Importance of study of sociology in nursing, relationship of anthropology, sociology etc.

Unit II

Individual and the Society

- Socialization
- Interdependence of the individual and society
- Personal disorganization.

Unit III

Culture

- Nature of culture
- Evolution of culture
- Diversity and uniformity of culture.

Unit IV

Social organization

- Social groups, crowds and public groups, nations, races.
- Social institutions: The family, marriage, education, religion, arts, economic organization political organization. The urban & rural community of the town and city
- Social stratification: class and caste
- Problems of Indian peasant

Unit V

Social process

- Process of social interaction: Competition, conflict-war, co-operation, accommodation and assimilation.

Unit VI

Social changes

- Nature and process of Social change: Factors influencing cultural change.
- Cultural lag.

Unit VII

Social problems

- Social disorganization, control & planning: poverty, population, housing, illiteracy, food supplies, growth of urbanization, prostitution, minority groups, rights of women & children, child labour, child abuse, delinquency and crime, substance abuse.

Unit VIII

Beliefs and practices related to socio-medical problems eg STD, HIV/AIDS, Leprosy, T.B., Malnutrition, Counselling for AIDS

Unit IX

Social research methodology

- Social survey methods, interview technique, design of questionnaire for KAP survey

COMMUNITY HEALTH NURSING

Placement: Second year

Time: Theory-60 hours

Practical-240 hours

COURSE DESCRIPTION

The course enables the students to understand the national health care delivery system and to participate in the delivery of community health nursing.

OBJECTIVES

At the end of the course, the students will

1. Explain the concept of the various factors contributing to health of individual, family and community.
2. Identify the role of community health nurse.
3. Describe National Health Care delivery system.
4. Describe epidemiological methods and principles of prevention and control of illness in the community
5. Identify the role of personnel working in the community health set up.
6. Plan the work of community health nurse and supervise and train health workers.

COURSE CONTENTS**Unit I**

Introduction

- Historical review and development of community health services in India
- Introduction to Community Health-Concepts, principles and element of Primary Health Care.

- Introduction to community Health Nursing.
- Concepts of Community Health Nursing, Community Nursing process.
- Objectives, scope and principles of Community Health Nursing.
- Roles and functions of community health nurse.

Unit II

Family Health Services

Family nursing process

- Concept, objectives, scope and principles.
- Individual, family and community as a unit of service.
- Principles and techniques of home visiting.
- Establishing working relationship with the family.
- Working with families in relation to prevention of disease, promotion of health.
- Home visiting bag
- Family health records
- Care of the sick in the home, physically handicapped and mentally retarded.
- Surveillance and monitoring.

Unit III

Organization and administration of health services in India.

- National health policy
- Health Care Delivery system in India.
- Health team concept.
- Centre, State, District, urban health services, rural health services, system of medicines, centrally sponsored health agencies. Role of health personnel in the community. Public Health legislation. Role of Panchayat in health care delivery system
- Community participation

Unit IV

Health Education

- Aims, concepts and scope of health education.
- National plan for health education, communication techniques, methods and media for health education programmes, planning for health education and role of nurse.

Unit V

Role of the community health nurse

- National health programmes.
- Maternal and child health programmes, family welfare and school health services, occupational health services.
- As a member of the health team.
- Training and supervision of Health Care Workers. (TBA, VHG, AWW)
- Medico legal aspects in community health nursing: Law and the nurse in case of poisoning, injury, rape, assault
- Legal responsibilities of nurse in case of abortion, confinement, infections, gunshot, suicide, homicide etc.

Unit VI

Epidemiology

- Definition, concepts, aims, objectives, methods, principles
- Epidemiology-theories and models.
- Application of Epidemiology, principles and concepts in community health.

Unit VII

Bio-Statistics and Vital Statistics

- Introduction, definition and scope, legislation.
- Report, recording and compiling of vital statistics at the local, state, national and international level.
- Definitions and methods of computing vital statistics.
- Methods of presenting data.
- Management Information System.

PRACTICAL

1. Each student will prepare a community profile.
2. The students will be allotted families for gaining experience in identifying family health needs, health counselling and guidance and family budgeting for optimum health.
3. The students will participate in the activities of Primary Health Centre, sub-centre, MCH Centre.
4. Visits will be made to selected health and welfare agencies, water purification plant and sewage disposal plant, Infectious disease hospital.
5. Conduct health education programmes for individual/groups/community.

MENTAL HEALTH NURSING

Placement: Second year

**Time: Theory-60 hours
Practical-240 hours**

COURSE DESCRIPTION

This course enables the students to recognize and appreciate the causes, symptoms and process of abnormal human behavior. It also introduces the student to the present day treatment modalities in the light of psychological, social and cultural factors affecting human behavior. This course helps the student to learn principles of mental health and psychiatric nursing and to develop beginning skills in the management of the mentally ill in hospital and community.

OBJECTIVES

At the end of the course the student will

1. Identify and describe the philosophy and principles of mental health nursing.
2. Describe the historical development of mental health and psychiatric nursing.
3. Classify mental disorders.
4. Develop skill in history taking and performing mental status examination.
5. Describe etiological factors, psychopathology, clinical features, diagnostic criteria and treatment methods used for mental disorders.
6. Manage the patients with various mental disorders.
7. Communicate therapeutically with patients and their families.
8. Identify role of the nurse in preventive psychiatry.
9. Identify the legal aspect in practice of mental health and psychiatric nursing.

COURSE CONTENTS

Unit I

Introduction and Historical Development:

- History of Psychiatry.
- Historical development of mental health nursing.
- Philosophy, principles of mental health and psychiatric nursing.
- Concept of normal and abnormal behavior.
- Role and qualities of mental health and psychiatric nurse.
- Mental health team and functions of team members.
- Legal aspects in psychiatry and mental health services.

Unit II

Classification and assessment of mental disorders:

- Terminologies used in Psychiatry.
- Classification of mental disorders
- Etiological factors and psychopathology of mental disorders.
- History taking and assessment methods for mental disorders.

Unit III

Therapeutic Communication:

- Communication process
- Interview skills, therapeutic communication techniques, Nurse-Patient Relationship, Therapeutic impasse and its management. Process recording.

Unit IV

Management of mental Disorders:

- Etiological factors, psychopathology, types, clinical features, diagnostic criteria, treatment and nursing management of patient with following disorders.
- Neurotic Disorders: Anxiety Neurosis, Depressive Neurosis, obsessive compulsive Neurosis, Phobic Neurosis and hypochondriacal Neurosis, Stress related and Somatoform disorders.
- Psychotic Disorders: Schizophrenic form, affective and organic psychosis.
- Organic Brain Syndromes
- Psychosomatic disorders
- Personality Disorders
- Disorders of childhood and adolescence.

Unit V

Management of patients with Substance use disorders.

- Substance use and misuse. Dependence, intoxication and withdrawal, classification of psychoactive substances, etiological & contributory factors, psychopathology, clinical features, diagnostic criteria, treatment and nursing management of patient with substance use disorders.
- Preventive and rehabilitative aspects in substance abuse.

Unit VI

Management of mental sub-normality:

- Classification of mental sub-normality.

- Etiological factors, psychopathology, psychometric assessment, diagnostic criteria and management of sub-normality.

Unit VII

Psychiatric emergencies:

- Types of emergencies, psychopathology, clinical features, assessment and diagnosis, treatment and nursing management of patient with psychiatric emergencies.
- Crisis Intervention therapy.

Unit VIII

Therapeutic Modalities:

- Principles, indication, contra-indications and role of nurse in various treatment methods
- Therapeutic community and Milieu therapy
- Occupational therapy
- Psychotherapy
- Behavior therapy
- Group therapy
- Family therapy
- Pharmaco-therapy
- Electro-convulsive therapy
- Other miscellaneous therapies.

Unit IX

Preventive Psychiatry:

- Model of prevention
- Role of nurse in preventive psychiatry
- Psychiatric social work
- Community mental health nursing
- Community mental health agencies
- National mental health program

PRACTICAL

The student will be provided opportunity to:

- Observe, record and report the behaviour of their selected patients.

- Records the process of interaction.
- Assess the nursing needs of their selected patients, plan and implement the nursing intervention.
- Counsel the attendant and family members of patient.
- Participate in the activities of psychiatric team.
- Write observation report after a field visit to Child guidance clinic, (School/Special Schools for mentally challenged), Mental hospital, Community mental health centres, De-addiction centre.

INTRODUCTION TO NURSING EDUCATION

Placement: Second Year

Time: Theory-60 hours

Practical-75 hours

COURSE DESCRIPTION

This course introduces the students to principles and concepts of education, curriculum development and methods and media of teaching. It also describes the steps in curriculum development and implementation of educational programmes in nursing.

OBJECTIVES

At the end of the course the students will

1. Describe the philosophy and principles of education
2. Explain the teaching- learning process
3. Develop the ability to teach using various methods and media.
4. Describe the process of curriculum development
5. Describe the administrative aspects of school of nursing
6. Participate in planning and organizing an in-service education program.
7. Develop basic skill of counseling and guidance.

COURSE CONTENTS

Unit I

Introduction to education

- Meaning of education, aims, function and principles
- Philosophy of education, factors influencing development of philosophy of nursing education
- Agencies of education: formal and informal

Unit II

Teaching learning process

- Nature, characteristics and process of learning, principles and maxims of teaching, formulating

objectives, lesson planning

Unit III

Methods of teaching

- Teaching methods: lecture, discussion, demonstration, group discussion, project, role play, panel discussion, symposium, seminars, field trip, workshop, exhibition, programmed instruction, computer assisted learning,
- Clinical teaching methods: Case methods, case presentation, nursing rounds and reports, bedside clinic, conference (individual and group), recording of interaction process

Unit IV

Educational media

- The communication process: factors affecting communication. Purposes and types of audio-visual aids
- Graphics aids: Chalk-board, charts, graphs, posters, flash cards, flannel graph/khadi graph, bulletin board
- Three dimensional aids: objects, specimen, models, puppets.
- Printed aids: pamphlets and leaflets
- Projected aids: slides, films and televisions, VCR, VCP, overhead projector, camera, microscope.
- Audio-aids: tape-recorder, public address system, use of computer in teaching learning process

Unit V

Methods of assessment

- Purposes and scope of evaluation and assessment
- Criteria for selection of assessment techniques and methods
- Assessment tools
- Assessment of knowledge: essay type question, SAQ (Short Answer Questions),
- MCQ (Multiple choice questions)
- Assessment of skills: Observation, Checklist, Practical examination, Viva, Objective structured clinical examination
- Assessment of attitudes: Attitude scale
- Setting of question paper
- Scoring of answer papers

Unit VI

Curriculum

- Definition, meaning and basic concepts

- Principles of curriculum development
- Steps in curriculum development

Unit VII

Management of school of nursing

- Nursing education system in India
- Planning of school of nursing, organization
- Recruitment of teaching staff, budget, facilities for the school, student selection and admission procedure, administrative planning for students, welfare services for students, maintenance of school records, preparation of annual reports. INC guidelines for school of nursing

Unit VIII

Guidance and Counseling

- Definitions
- Basic principles of guidance and counseling
- Organization of guidance and counseling services
- Counseling process
- Managing disciplinary problems
- Management of crises

Unit IX

Educational psychology

- Meaning & scope
- Individual and his environment
- Developmental needs of various stages in life and educational implications
- Mental hygiene of the teachers and the taught

Unit X

In-Service education

- Introduction to nature and scope of inservice education programme, principles of adult learning, planning for inservice programme, techniques, and methods of staff education programme and evaluation of inservice programme.

PRACTICAL

Each student will

- Conduct five planned teachings using different method and media.
- Prepare different types of teaching aids.
- Plan, organize and conduct inservice education programme.

- Conduct at least one counseling session.
- Prepare rotation plans.

INTRODUCTION TO NURSING SERVICE ADMINISTRATION

Placement: Second year

Time: Theory-60 hours

Practical-180 hours

COURSE DESCRIPTION

This course is designed to give an opportunity to the student to gain an understanding of the principles of administration and its application to nursing service. It is also intended to assist the student to develop an understanding of professional leadership need.

OBJECTIVES

At the end of the course the student will

1. Identify the principles of administration
2. Describe the principles and techniques of supervision
3. Explain the principles and methods of personnel management
4. Explain the principles of budgeting
5. Organize and manage a nursing unit effectively
6. Identify dynamics of organizational behaviour styles and functions of effective leadership.

COURSE CONTENTS

Unit I

Principles and practise of Administration

- Significance, elements and principles of administration. Organization of Hospital: Definition, aims, functions and classifications, health team. Policies of hospital, different departments with special emphasis to department of nursing & Office management. Responsibilities of the nursing personnel especially of ward sister. Medico-legal aspects, concept of cost effectiveness. Functions and qualities of good administrator. Administrative process (POSDCORB)

Unit II

Nursing unit management

- Physical layout of a nursing unit and necessary facilities, factors affecting the quality of nursing care. Maintenance of a therapeutic environment. Administration of the unit-management of patient care. Maintenance of physical environment. Assignment of duties and time plan. Patient assignment, safety measures, prevention of accidents and infections, maintenance of patients' records of reports, legal responsibilities. Maintenance of quality nursing care, nursing audit. Management information system

Unit III

Staff recruitment and selection, appointment, promotions, personnel policies and job descriptions. Job analysis. Staffing the unit, staffing norms, rotation plan, leave planning, performance appraisal, staff welfare and management of disciplinary problems. Conflict and conflict management, morale and motivation. Staff development

Unit IV

Supervision

- Principles of supervision, nature and objectives, tools and techniques of supervision, evaluation, nursing audit, staff development-orientation programme, skill training, Leadership development. Problem solving process

Unit V

Material Management

- Principles of Material management, Quality control, Inventory, care of equipments, safe keeping, role of nursing personnel natural management.

Unit VI

- Financial Management
- Budgeting- principles of budgeting, audit

Unit VII

Organizational Behavior

- Group dynamic and human relation, organizational communication (hospital information system) Public relations, leadership styles and functions. Methods of reporting. Maintaining records and reports.

PRACTICAL

- Observe the functioning of nursing administration at various levels i.e. institution, department, unit. Each student will practise ward management under supervision, students prepare rotation plan of the staff, write reports, give verbal reports of the ward and assist in maintaining the inventory of the nursing unit.
- Visit to private and Government hospital and write observation reports.

INTRODUCTION TO NURSING RESEARCH AND STATISTICS

Placement: Second year

Time: Theory-45 hours

Practical-120 Hours

COURSE DESCRIPTION

The course is designed to assist the student to develop an understanding of basic concepts of research

and statistics, use the findings of nursing research in nursing practice, apply the knowledge in conducting project(s) and solve problems related to nursing using scientific methods.

OBJECTIVES

At the end of the course the students will

- Define the terms and concepts of nursing research
- Identify needs and scope of nursing research
- Identify and define a research problem
- Locate and list sources of literature for a specific study
- Describe different research approaches, methods of data collection and sampling techniques with a special reference to survey method.
- Develop tools for data collection
- Enumerate steps of data analysis and present data summary in tabular form
- Use descriptive and co-relational statistics in data analysis
- Conduct a group research project.

COURSE CONTENT

A. INTRODUCTION TO RESEARCH METHODOLOGY

Unit I

- Steps of scientific methods, definition of research, need for nursing research, characteristics of good research. Research Process.

Unit II

- Statement of research problem: Statement of purpose and objectives. Definition of research terms. Review of literature

Unit III

- Research approaches: historical, survey and experimental

Unit IV

- Sampling techniques and methods of data collection
- Sampling
- Instruments-questionnaire. Interview
- Observation schedule, records, measurements
- Reliability and validity of instruments

Unit V

- Analysis of data: Tabulation, Classification and summarization, presentation, interpretation of data.

Unit VI

- Communication of research findings:
- Writing Report: Organizing materials for writing- format of the report, use of computers.

B. INTRODUCTION TO STATISTICS**Unit VII**

- Descriptive statistics
- Frequency distribution- types of measures, frequencies, class interval, graphic methods of describing frequency. Measures of central tendency, Mode, Median and Mean. Measures of variability: Range, Standard deviation. Introduction to Normal probability

Unit VIII

- Correlation: computation by rank difference methods. Uses of correlation co-efficient

Unit IX

- Biostatistics: Crude rates and standardized rates ratio and estimation of trends.

C. INTRODUCTION TO COMPUTERS**Unit X**

Introduction to computer in nursing

- Introduction to computers and disk- operating system,
- Introduction to word processing
- Introduction to data base
- Lotus and graphics and use of statistical packages.
- Windows, MS office and its application, word, excel, power point, multimedia.
- Introduction to Internet & use of electronic mail
- Computer aided teaching & testing.

PRACTICAL

Students will conduct research project in small groups in selected areas of nursing and submit a report (Group studies may include studying of existing health practises, improved practises of nursing procedure, health records, patient records and survey of nursing literature).

**COLLEGE OF NURSING
ALL INDIA INSTITUTE OF MEDICAL SCIENCES**

COURSE LEADING TO B. Sc. NURSING (POST BASIC) DEGREE

COURSES OF STUDY

First year

S. No.	Subject	Hours Theory	Hours Practical
1.	Nursing Foundation	45	
2.	Nutrition & Dietetics	30	15
3.	Biochemistry & Biophysics	60	
4.	Psychology	60	15
5.	Maternal Nursing	60	240
6.	Child Health Nursing	60	240
7.	Microbiology	30	30
8.	Medical & Surgical Nursing	120	270
9.	English (Qualifying)	60	—
Total		525	810

Note: Hindi language for non- Hindi speaking students.

Second year

S. No.	Subject	Hours Theory	Hours Practical
1.	Sociology	60	
2.	Community Health Nursing	60	240
3.	Mental Health Nursing	60	240
4.	Introduction to Nursing Education	60	75
5.	Introduction to Nursing Administration	60	180
6.	Introduction to Nursing Research & Statistics	45	120
Total		345	855

SCHEME OF EXAMINATION

First year

Paper	Subject	Duration Hours	Internal Assessment.	Final Exam	Total Marks
1.	Nursing Foundation	2	25	25	50
2.	Nutrition & Dietetics	2	25	25	50
3.	Biochemistry & Biophysics	3	50	50	100
4.	Psychology	3	50	50	100
5.	Microbiology	3	50	50	100
6.	Maternal Nursing	3	50	50	100
7.	Child Health Nursing	3	50	50	100
8.	Medical Surgical Nursing	3	50	50	100
9.	English (Qualifying)*	3	25	75	100
Practicals					
1.	Medical Surgical Nursing		50	50	100
2.	Maternal Nursing		50	50	100
3.	Child Health Nursing		50	50	100
Total					1100

Second year

Paper	Subject	Duration Hours	Internal Assessment	Final Exam	Total Marks
1.	Sociology	3	50	50	100
2.	Community Health Nursing	3	50	50	100
3.	Mental Health Nursing	3	50	50	100
4.	Introduction to Nursing Education	3	50	50	100
5.	Introduction to Nursing Administration	3	50	50	100
6.	Introduction to Nursing Research & Statistics**	2	50	–	50
Practicals					
1.	Community Health Nursing		50	50	100
2.	Mental Health Nursing		50	50	100
3.	Research Project**		50		50
Total					800

Note: * Qualifying Exam

** College Exam. (No university exam)