

Syllabus

Basic B.Sc. Nursing



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Philosophy

INC believes that:

Health is a state of well-being that enables a person to lead a psychologically, socially and economically productive life. Health is a right of all the people. Individuals, families and communities have a responsibility towards maintaining their health.

Nursing contributes to the health services in a vital and significant way in the health care delivery system. It recognizes national health goals and is committed to participate in the implementation of National Health policies and programmes. It aims at identifying health needs of the people, planning and providing quality care in collaboration with other health professionals and community groups.

Scope of nursing practice encompasses provision of promotive, preventive, curative and rehabilitative aspects of care to people across their life span in wide variety of health care settings. Practice of nursing is based upon application of basic concepts and principles derived from the physical, biological and behavioural sciences, medicine and nursing.

Nursing is based on values of caring, and aims to help individuals to attain independence in self-care. It necessitates development of compassion and understanding of human behaviour among its practitioners to provide care with respect and dignity and protect the rights of individuals & groups.

Undergraduate nursing program is broad based education within an academic framework specifically directed to the development of critical thinking skills, competencies & standards required for practice of professional nursing and midwifery as envisaged in National Health Policy 2002.

The teachers have the responsibility to be role models and create learning environment that enables students to acquire inquiry driven, self directed learning and foster an attitude of life long learning.

Under graduate nursing education program prepares its graduates to become exemplary citizen by adhering to code of ethics and professional conduct at all times in fulfilling personal, social and professional obligations so as to respond to national aspirations.

Aim

The aim of the undergraduate nursing program is to:

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

Objectives

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

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

Admission Requirements

1. The minimum age for admission shall be 17 years on or before 31st Dec. of the year of admission.
2. The minimum educational requirements shall be the passing of:
Higher Secondary school certificate Examination (12 years course),
Or
Senior School certificate Examination (10+2), pre-degree Examination (10+2)
Or
An equivalent with 12 years schooling from a recognized board or university with Science (Physics, Chemistry, Biology) and English with minimum of 50% aggregate marks (PCBE).
3. Candidate Shall be Medically Fit.

Entrance/Selection test

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

Duration

Duration of the course shall be four years including internship

Vacation

8 Weeks vacation shall be given in each year.

Duration

Course Duration	=	4 Years
Weeks available per year	=	52 weeks
Vacation	=	8 weeks
Gazetted holidays	=	3 weeks
Examination (Including preparatory)	=	4 weeks
Available weeks	=	37 weeks
Hours per week	=	40
Practical	=	30 hours per week
Theory	=	10 hours per week
Internship practical	=	48 hours per week
Hours available per academic year	=	1480 (37 weeks x 40hours)

Course of instruction

First Year

Subject	Theory (In hrs) (class and lab)	Practical (In hrs) (clinical)	(In hrs)
1. *English	60		
2. Anatomy	60		
3. Physiology	60		
4. Nutrition	60		
5. Biochemistry	30		
6. Nursing Foundations	265+200	450	
7. Psychology	60		
8. Microbiology	60		
9. Introduction to Computers	45		
10. ** Hindi /Regional language	30		
11. Library work /Self Study			50
12. Co-curricular activities			50
Total Hours	930	450	100
Total hours =1480 hrs			

** Optional

Second Year

Subject	Theory (In hrs) (Class and Lab)	Practical (In hrs) (clinical)	In Hours
1. Sociology	60		
2. Pharmacology	45		
3. Pathology & 4. Genetics	30 15		
5. Medical-Surgical Nursing (Adult including geriatrics)-I	210	720	
6. Community Health Nursing-I	90	135	
7. Communication and Educational Technology	60+30		
8. Library work /Self Study			50
9. Co-curricular activities			35
Total Hours	540	855	85
Total hours =1480 hrs			

Third Year

Subject	Theory (In hrs) (Class and Lab)	Practical (In hrs) (clinical)	In Hours
1. Medical-Surgical Nursing (Adult including geriatrics)-II	120	270	
2. Child Health Nursing	90	270	
3. Mental Health Nursing	90	270	
4. Midwifery and Obstetrical nursing	90	180	
5. Library work/Self study			50
6. Co-curricular activities			50
Total Hours	390	990	100
Total hours =1480 hrs			

Fourth Year

Subject	Theory (In hrs) (Class and Lab)	Practical (In hrs) (clinical)	
1. Midwifery and Obstetrical nursing		180	
2. Community Health Nursing-II	90	135	
3. Nursing Research & Statistics	45	*	
4. Management of Nursing Services and education	60+30		
Total Hours	225	315	
Total hours = 540 Hrs			

- Project work to be carried out during internship

Practical = 30 hours per week

Intern-Ship (Integrated Practice)

Subject	Theory	Practical (In hrs)	In Weeks
1. Midwifery and Obstetrical nursing		240	5
2. Community Health Nursing-II		195	4
3. Medical Surgical Nursing (Adult and geriatric)		430	9
4. Child Health		145	3
5. Mental Health		95	2
6. Research Project		45	1
	Total Hours	1150	24
Total: 1690 hours			

Note:

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

Scheme of Examination

First Year

Subject	Assessment			
	Hours	Internal	External	Total
Theory				
1. Anatomy & Physiology	3	25	75	100
2. Nutrition and Biochemistry	3	25	75	100
3. Nursing Foundations	3	25	75	100
4. Psychology	3	25	75	100
5. Microbiology	3	25	75	100
6. English	3	25	75	100
7. Introduction to Computer		25	75	100
Practical and Viva Voce				
1. Nursing Foundations		100	100	200

Second Year

Subject	Assessment			
	Hours	Internal	External	Total
Theory				
8. Sociology	3	25	75	100
9. Medical-Surgical Nursing- I	3	25	75	100
10. Pharmacology, pathology, genetics	3	25	75	100
11. Community Health Nursing-I	3	25	75	100
12. Communication and Educational Technology	3	25	75	100
Practical & Viva Voce				
2. Medical- Surgical Nursing- I		100	100	200

Third year

Subject	Assessment			
	Hours	Internal	External	Total
Theory				
13. Medical-Surgical Nursing-II	3	25	75	100
14. Child Health Nursing	3	25	75	100
15. Mental Health Nursing	3	25	75	100
Practical & Viva Voce				
3. Medical- Surgical Nursing- II		50	50	100
4. Child Health Nursing		50	50	100
5. Mental Health Nursing		50	50	100

Fourth year

Subject	Assessment			
	Hours	Internal	External	Total
Theory				
16. Midwifery and Obstetrical nursing	3	25	75	100
17. Community Health Nursing-II	3	25	75	100
18. Nursing Research & Statistics	3	25	75	100
19. Management of Nursing Services and education	3	25	75	100
Practical & Viva Voce				
6. Midwifery and Obstetrical nursing	3	50	50	100
7. Community Health Nursing	3	50	50	100

Note:

1. Anatomy and Physiology-Question paper will consist of Section A Anatomy of 37 marks and B Physiology should be of 38 marks
2. Nutrition and Biochemistry and -Question paper will consist of Section A Nutrition of 45 marks and Section B of Biochemistry of 30 marks
3. Pharmacology, genetics, pathology: Section A of Pharmacology with 38 marks, Section B of Pathology of 25 and Genetics with 12 marks
4. Nursing Research & Statistics- Nursing Research should be of 50 marks and Statistics of 25 marks
5. Minimum pass marks shall be 40% for English only
6. Theory and Practical exams for Introduction to computer to be conducted as College exam and marks to be sent to the University for inclusion in the marks sheet.
7. Minimum pass marks shall be 50 % in each of the Theory and practical papers separately.
8. A candidate must have minimum of 80% attendance (irrespective of the kind of absence) in theory and practical in each subject for appearing for examination.
9. A candidate must have 100% attendance in each of the practical areas before award of degree
10. A candidate has to pass in theory and practical exam separately in each of the paper.
11. If a candidate fails in either theory or practical paper he/she has to re-appear for both the papers (Theory and practical).
12. Maximum number of attempts permitted for each paper is 3 including first attempt
13. A candidate failing in more then two subjects will not be promoted to the next year.

14. Candidate shall not be admitted to the subsequent higher examination unless the candidate has passed the previous examination.
15. The maximum period to complete the course successfully should not exceed 8 years
16. Maximum number of candidates for practical examination should not exceed 20 per day.
17. All practical examinations must be held in the respective clinical areas.
18. One internal and One external examiners should jointly conduct practical examination for each student
19. An examiner should be a lecturer or above in a college of nursing with M.Sc (N) in concerned subject and minimum of 3 years of teaching experience. To be an examiner for nursing foundations course faculty having M.Sc (N) with any specialty shall be considered.

English

Placement – First Year

Time: Theory - 60 hours

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

Unit	Time (Hrs)	Learning Objectives	Content	Teaching Learning Activities	Assessment methods
I	10	<ul style="list-style-type: none"> • Speak and write grammatically correct English 	<ul style="list-style-type: none"> • Review of Grammar • Remedial study of Grammar • Building Vocabulary • Phonetics • Public Speaking 	<ul style="list-style-type: none"> • Demonstrate use of dictionary • Class-room conversation • Exercise on use of Grammar • Practice in public speaking 	<ul style="list-style-type: none"> • Objective Type • Fill in the blanks • Paraphrasing
II	30	<ul style="list-style-type: none"> • Develop ability to read, understand and express meaningfully, the prescribed text 	<ul style="list-style-type: none"> • Read and comprehend prescribed course books 	<ul style="list-style-type: none"> • Exercise on: <ul style="list-style-type: none"> □ Reading □ Summarizing □ Comprehension 	<ul style="list-style-type: none"> • Short Answers • Essay Type
III	10	<ul style="list-style-type: none"> • Develop writing skills 	<ul style="list-style-type: none"> • Various forms of composition <ul style="list-style-type: none"> □ Letter writing □ Note taking □ Precis writing □ Nurses notes □ Anecdotal records □ Diary writing □ Reports on health problems etc. □ Resume/CV 	<ul style="list-style-type: none"> • Exercises on writing <ul style="list-style-type: none"> □ Letter writing □ Nurses Notes □ Precis □ Diary □ Anecdote □ Health problems □ Story writing □ Resume/CV • Essay writing <ul style="list-style-type: none"> □ Discussion on written reports/ documents 	<ul style="list-style-type: none"> • Assessment of the skill: based on the check list
IV	6	<ul style="list-style-type: none"> • Develop skill in spoken English 	<ul style="list-style-type: none"> • Spoken English <ul style="list-style-type: none"> □ Oral report □ Discussion □ Debate □ Telephonic conversation 	<ul style="list-style-type: none"> • Exercise on: <ul style="list-style-type: none"> □ Debating □ Participating in Seminar, panel, symposium □ Telephonic conversation 	<ul style="list-style-type: none"> • Assessment of the skill: based on the check list

Unit	Time (Hrs)	Learning Objectives	Content	Teaching Learning Activities	Assessment methods
V	4	<ul style="list-style-type: none"> • Develop skill in listening comprehension 	<ul style="list-style-type: none"> • Listening Comprehension <ul style="list-style-type: none"> □ Media, audio, video, speeches etc. 	<ul style="list-style-type: none"> • Exercise on: <ul style="list-style-type: none"> □ Listening to audio, video tapes and identify the key points 	<ul style="list-style-type: none"> • Assessment of the skills based on the check list

Anatomy

Placement– First Year

Time: Theory - 60 hours

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

Unit	Time (Hrs)	Learning Objectives	Content	Teaching Learning Activities	Assessment methods
I	5	<ul style="list-style-type: none"> Describe the anatomical terms, organization of human body and structure of cell, tissues, membranes and glands 	<p>Introduction to Anatomical terms organization of the human body</p> <ul style="list-style-type: none"> Human Cell structure Tissues – Definition, Types, characteristics, classification, location, functions and formation Membranes and glands – classification and structure <p>Alterations in disease Applications and implications in nursing</p>	<ul style="list-style-type: none"> Lecture discussion Explain using charts, microscopic slides, Skeleton & torso Demonstrate cells, types of tissues membranes and glands Record book 	<ul style="list-style-type: none"> Short answer questions Objective type
II	6	<ul style="list-style-type: none"> Describe the structure & function of bones and joints 	<p>The Skeletal System</p> <ul style="list-style-type: none"> Bones- types, structure, Axial & Appendicular Skeleton, Bone formation and growth Description of bones Joints – classification and structure <p>Alterations in disease Applications and implications in nursing</p>	<ul style="list-style-type: none"> Lecture discussion Explain using charts, skeleton, loose bones, and joints Record book 	<ul style="list-style-type: none"> Short answer questions Objective type
III	7	<ul style="list-style-type: none"> Describe the structure and function of muscles 	<p>The Muscular System</p> <ul style="list-style-type: none"> Types and structure of muscles Muscle groups <p>Alterations in disease Applications and implications in nursing</p>	<ul style="list-style-type: none"> Lecture discussion Explain using chart, models and films Demonstrate muscular movements Record book 	<ul style="list-style-type: none"> Short answer questions Objective type

Unit	Time (Hrs)	Learning Objectives	Content	Teaching Learning Activities	Assessment methods
IV	6	<ul style="list-style-type: none"> Describe the structure & function of nervous system 	<p>The Nervous System</p> <ul style="list-style-type: none"> Structure of neurologia & neurons Somatic Nervous system <ul style="list-style-type: none"> Structure of brain, spinal chord, cranial nerves, spinal nerves, peripheral nerves Autonomic Nervous System – sympathetic, parasympathetic <ul style="list-style-type: none"> Structure, location <p>Alterations in disease Applications and implications in nursing</p>	<ul style="list-style-type: none"> Lecture discussion Explain using models, charts, slides, specimens Record book 	<ul style="list-style-type: none"> Short answer questions Objective type
V	6	<ul style="list-style-type: none"> Explain the structure & functions of sensory organs 	<p>The Sensory Organs</p> <ul style="list-style-type: none"> Structure of skin, eye, ear, nose, tongue, (Auditory and olfactory apparatus) <p>Alterations in disease Applications and implications in nursing</p>	<ul style="list-style-type: none"> Lecture discussion Explain using models, charts, slides, specimens Record book 	<ul style="list-style-type: none"> Short answer questions Objective type
VI	7	<ul style="list-style-type: none"> Describe the structure & function of circulatory and lymphatic system 	<p>Circulatory and lymphatic system</p> <ul style="list-style-type: none"> The Circulatory System <ul style="list-style-type: none"> Blood – Microscopic structure Structure of Heart Structure of blood vessels – Arterial & Venous System, Circulation: systemic, pulmonary, coronary Lymphatic system <ul style="list-style-type: none"> Lymphatic vessels and lymph Lymphatic tissues <ul style="list-style-type: none"> Thymus gland Lymph nodes Spleen Lymphatic nodules <p>Alterations in disease Applications and implications in nursing</p>	<ul style="list-style-type: none"> Lecture discussion Explain using models, charts, slides, specimens Record book 	<ul style="list-style-type: none"> Short answer questions Objective type

Unit	Time (Hrs)	Learning Objectives	Content	Teaching Learning Activities	Assessment methods
VII	5	<ul style="list-style-type: none"> Describe the structure & functions of respiratory system 	The Respiratory System <ul style="list-style-type: none"> Structure of the organs of respiration Muscles of respiration: Intercostals and Diaphragm Alterations in disease Applications and implications in nursing	<ul style="list-style-type: none"> Lecture discussion Explain using models, torso, charts, slides, specimens Record book 	<ul style="list-style-type: none"> Short answer questions Objective type
VIII	6	<ul style="list-style-type: none"> Describe the structure & functions of digestive system 	The Digestive System <ul style="list-style-type: none"> Structure of Alimentary tract and accessory organs of digestion Alterations in disease Applications and implications in nursing	<ul style="list-style-type: none"> Lecture discussion Explain using models, torso, charts, slides, specimens Record book 	<ul style="list-style-type: none"> Short answer questions Objective type
IX	4	<ul style="list-style-type: none"> Describe the structure & functions of excretory system 	The Excretory System (Urinary) <ul style="list-style-type: none"> Structure of organs of urinary System: Kidney, ureters, urinary bladder, urethra, structure of skin Alterations in disease Applications and implications in nursing	<ul style="list-style-type: none"> Lecture discussion Explain using models, torso, charts, slides, specimens Record book 	<ul style="list-style-type: none"> Short answer questions Objective type
X	4	<ul style="list-style-type: none"> Describe the structure & functions of endocrine system 	The Endocrine System <ul style="list-style-type: none"> Structure of Pituitary, Pancreas, thyroid, Parathyroid, thymus and adrenal glands Alterations in disease Applications and implications in nursing	<ul style="list-style-type: none"> Lecture discussion Explain using models, Torso, charts, slides, specimens Record book 	<ul style="list-style-type: none"> Short answer questions Objective type
XI	4	<ul style="list-style-type: none"> Describe the structure and functions of reproductive system 	The Reproductive system including breast <ul style="list-style-type: none"> Structure of female reproductive organs Structure of male reproductive organs. Structure of breast Alterations in disease Applications and implications in nursing	<ul style="list-style-type: none"> Lecture discussion Explain using models, Torso, charts, slides, specimens Record book 	<ul style="list-style-type: none"> Short answer questions Objective type

Physiology

Placement – First Year

Time: Theory - 60 Hours

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

Unit	Time (Hrs)	Learning Objectives	Content	Teaching Learning Activities	Assessment methods
I	4	<ul style="list-style-type: none"> Describe the physiology of cell, tissues, membranes and glands 	Cell Physiology <ul style="list-style-type: none"> Tissue-formation, repair Membranes & glands – functions Alterations in disease Applications and implications in nursing	<ul style="list-style-type: none"> Lecture discussion 	<ul style="list-style-type: none"> Short answer questions Objective type
II	4	<ul style="list-style-type: none"> Describe the bone formation and growth and movements of skeleton system 	Skeletal System <ul style="list-style-type: none"> Bone formation & growth Bones – Functions and movements of bones of axial and appendicular skeleton, bone healing Joints and joint movement Alterations in disease Applications and implications in nursing	<ul style="list-style-type: none"> Lecture discussion Explain using Charts, models and films Demonstration of joint movements 	<ul style="list-style-type: none"> Short answer questions Objective type
III	4	<ul style="list-style-type: none"> Describe the muscle movements and tone and demonstrate muscle contraction and tone 	Muscular System <ul style="list-style-type: none"> Muscle movements, Muscle tone, Physiology of muscle contraction, levels and maintenance of posture Alterations in disease Applications and implications in nursing	<ul style="list-style-type: none"> Lecture discussion Explain using Charts, models slides, specimen and films Demonstration of muscle movements, tone and contraction 	<ul style="list-style-type: none"> Short answer questions Objective type
IV	7	<ul style="list-style-type: none"> Describe the physiology of nerve stimulus, reflexes, brain, cranial and spinal nerves Demonstrate reflex action and stimulus 	Nervous System <ul style="list-style-type: none"> Functions of Neurologia & neurons Stimulus & nerve-impulse-definitions and mechanism Functions of brain, spinal cord, cranial and spinal nerves Cerebrospinal fluid-Composition, circulation and function Reflex arc, Reflex action and reflexes 	<ul style="list-style-type: none"> Lecture discussion Explain using, Charts, models and films Demonstrate nerve stimulus, reflex action, reflexes 	<ul style="list-style-type: none"> Short answer questions Objective type

Unit	Time (Hrs)	Learning Objectives	Content	Teaching Learning Activities	Assessment methods
			<ul style="list-style-type: none"> • Autonomic functions— <ul style="list-style-type: none"> □ Pain: somatic, visceral, and referred □ Autonomic learning and biofeedback <p>Alterations in disease Applications and implications in nursing</p>		
V	8	<ul style="list-style-type: none"> • Describe the physiology of blood and functions of Heart • Demonstrate blood cell count, coagulation, grouping, Hb: BP and Pulse monitoring 	<p>Circulatory System</p> <ul style="list-style-type: none"> • Blood formation, composition, blood groups, blood coagulation • Hemoglobin: Structure, Synthesis and breakdown, Variation of molecules, estimation • Functions of Heart, Conduction, Cardiac cycle, circulation— Principles, Control, factors influencing BP and Pulse <p>Alterations in disease Applications and implications in nursing</p>	<ul style="list-style-type: none"> • Lecture discussion • Explain using Charts, films • Demonstration of Blood cell count, coagulation, grouping, Haemoglobin estimation, Heart conduction system. • Measurement of pulse, BP 	<ul style="list-style-type: none"> • Short answer questions • Objective type
VI	6	<ul style="list-style-type: none"> • Describe the physiology and mechanisms of respiration • Demonstrates spirometry 	<p>The Respiratory System</p> <ul style="list-style-type: none"> • Functions of respiratory organs • Physiology of respiration • Pulmonary ventilation, Volume • Mechanics of respiration • Gaseous exchange in lungs • Carriage of oxygen & carbon-dioxide • Exchange of gases in tissues • Regulation of respiration. <p>Alterations in disease Applications and implications in nursing</p>	<ul style="list-style-type: none"> • Lecture discussion • Explain using Charts, films • Demonstration of spirometry 	<ul style="list-style-type: none"> • Short answer questions • Objective type
VII	6	<ul style="list-style-type: none"> • Describes the physiology of digestive system • Demonstrates BMR 	<p>The Digestive System</p> <ul style="list-style-type: none"> • Functions of organs of digestive tract. Movements of alimentary tract, Digestion in mouth, stomach, small intestines, Large intestines, Absorption of food. Functions of liver, gall bladder and pancreas • Metabolism of carbohydrates, protein and fat 	<ul style="list-style-type: none"> • Lecture discussion • Explain using Charts, Films 	<ul style="list-style-type: none"> • Short answer questions • Objective type
VIII	5	<ul style="list-style-type: none"> • Describe the physiology of excretory 	<p>The Excretory System</p> <ul style="list-style-type: none"> • Functions of kidneys, ureters, urinary bladder & urethra 	<ul style="list-style-type: none"> • Lecture discussion • Explain using Charts, films 	<ul style="list-style-type: none"> • Short answer questions

Unit	Time (Hrs)	Learning Objectives	Content	Teaching Learning Activities	Assessment methods
		system	<ul style="list-style-type: none"> • Composition of urine • Mechanism of urine formation • Functions of skin • Regulation of body temperature • Fluid and electrolyte balance. Alterations in disease Applications and implications in nursing		<ul style="list-style-type: none"> • Objective type
IX	4	<ul style="list-style-type: none"> • Describe the physiology of sensory organs 	The Sensory Organs <ul style="list-style-type: none"> • Functions of skin, eye, ear, nose, tongue, Alterations in disease Applications and implications in nursing	<ul style="list-style-type: none"> • Lecture discussion • Explain using Charts, films 	<ul style="list-style-type: none"> • Short answer questions • Objective type
X	5	<ul style="list-style-type: none"> • Describe the physiology of endocrine glands 	The Endocrine System <ul style="list-style-type: none"> • Functions of Pituitary, pineal body, thymus, Thyroid, parathyroid, pancreas, Suprarenal, Placenta and ovaries & Testes Alterations in disease Applications and implications in nursing	<ul style="list-style-type: none"> • Lecture discussion • Explain using Charts, films • Demonstration of BMR 	<ul style="list-style-type: none"> • Short answer questions • Objective type
XI	5	<ul style="list-style-type: none"> • Describe the physiology of male and female reproductive system 	The Reproductive System <ul style="list-style-type: none"> • Reproduction of cells – DNA, Mitosis, Meiosis, spermatogenesis, oogenesis. • Functions of female reproductive organs; Functions of breast, Female sexual cycle. • Introduction to embryology. • Functions of male reproductive organs, Male function in reproduction, Male fertility system, Alterations in disease Applications and implications in nursing	<ul style="list-style-type: none"> • Lecture discussion • Explain using Charts, films, models, specimens 	<ul style="list-style-type: none"> • Short answer questions • Objective type
XII	2	<ul style="list-style-type: none"> • Describe the physiology of Lymphatic and Immunological System 	Lymphatic and Immunological System <ul style="list-style-type: none"> • Circulation of lymph • Immunity <ul style="list-style-type: none"> □ Formation of T-cells and B cells □ Types of Immune response □ Antigens □ Cytokines □ Antibodies 	<ul style="list-style-type: none"> • Lecture discussion • Explain using Charts, films 	<ul style="list-style-type: none"> • Short answer questions • Objective type

Nutrition

Placement: First Year

Time: Theory 60 hours

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

Unit	Time (Hrs)		Learning Objectives	Content	Teaching Learning Activities	Evaluation
	Th.	Pr.				
I	4		<ul style="list-style-type: none"> Describe the relationship between nutrition & Health. 	Introduction <ul style="list-style-type: none"> Nutrition: <ul style="list-style-type: none"> History Concepts Role of nutrition in maintaining health Nutritional problems in India National nutritional policy Factors affecting food and nutrition: socio-economic, cultural, tradition, production, system of distribution, life style and food habits etc Role of food and its medicinal value Classification of foods Food standards Elements of nutrition: macro and micro Calorie, BMR 	<ul style="list-style-type: none"> Lecture Discussion Explaining using charts Panel discussion 	<ul style="list-style-type: none"> Short answers Objective type
II	2		<ul style="list-style-type: none"> Describe the classification, functions, sources and recommended daily allowances (RDA) of carbohydrates 	Carbohydrates <ul style="list-style-type: none"> Classification Caloric value Recommended daily allowances Dietary sources. Functions Digestion, absorption and storage, metabolism of carbohydrates Malnutrition: Deficiencies and Over consumption 	<ul style="list-style-type: none"> Lecture Discussion Explaining using charts 	<ul style="list-style-type: none"> Short answers Objective type

Unit	Time (Hrs)		Learning Objectives	Content	Teaching Learning Activities	Evaluation
	Th.	Pr.				
III	2		<ul style="list-style-type: none"> Describe the classification, functions, sources and recommended daily allowances (RDA) of Fats 	Fats <ul style="list-style-type: none"> Classification Caloric value Recommended daily allowances Dietary sources. Functions. Digestion, absorption and storage, metabolism Malnutrition: Deficiencies and Over consumption 	<ul style="list-style-type: none"> Lecture Discussion Explaining using charts 	<ul style="list-style-type: none"> Short answers Objective type
IV	2		<ul style="list-style-type: none"> Describe the classification, functions, sources and recommended daily allowances (RDA) of Proteins 	Proteins <ul style="list-style-type: none"> Classification Caloric value Recommended daily allowances Dietary sources. Functions. Digestion, absorption, metabolism and storage Malnutrition: Deficiencies and Over consumption 	<ul style="list-style-type: none"> Lecture Discussion Explaining using charts 	<ul style="list-style-type: none"> Short answers Objective type
V	3		<ul style="list-style-type: none"> Describe the daily calorie requirement for different categories of people 	Energy <ul style="list-style-type: none"> Unit of Energy – Kcal Energy requirements of different categories of people. Measurements of energy. Body Mass Index (BMI) and basic metabolism Basal Metabolic Rate (BMR) – determination and factors affecting 	<ul style="list-style-type: none"> Lecture Discussion Explaining using charts Exercise Demonstration 	<ul style="list-style-type: none"> Short answers Objective type
VI	4		<ul style="list-style-type: none"> Describe the classification, functions, sources and recommended daily allowances (RDA) of Vitamins 	Vitamins <ul style="list-style-type: none"> Classification Recommended daily allowances Dietary sources. Functions. Absorption, synthesis, metabolism storage and excretion Deficiencies Hypervitaminosis 	<ul style="list-style-type: none"> Lecture Discussion Explaining using charts 	<ul style="list-style-type: none"> Short answers Objective type

Unit	Time (Hrs)		Learning Objectives	Content	Teaching Learning Activities	Evaluation
	Th.	Pr.				
VII	4		<ul style="list-style-type: none"> Describe the classification, functions, sources and recommended daily allowances (RDA) of Minerals 	Minerals <ul style="list-style-type: none"> Classification Recommended daily allowances Dietary sources. Functions. Absorption, synthesis, metabolism storage and excretion Deficiencies Over consumption and toxicity 	<ul style="list-style-type: none"> Lecture Discussion Explaining using charts 	<ul style="list-style-type: none"> Short answers Objective type
VIII	3		<ul style="list-style-type: none"> Describe the sources, functions and requirements of Water & electrolytes 	Water & electrolytes <ul style="list-style-type: none"> Water: Daily requirement, regulation of water metabolism, distribution of body water, Electrolytes: Types, sources, composition of body fluids Maintenance of fluid & electrolyte balance Over hydration, dehydration and water intoxication Electrolyte imbalances 	<ul style="list-style-type: none"> Lecture Discussion Explaining using charts 	<ul style="list-style-type: none"> Short answers Objective type
IX	5	15	<ul style="list-style-type: none"> Describe the Cookery rules and preservation of nutrients Prepare and serve simple beverages and different types of foods 	Cookery rules and preservation of nutrients <ul style="list-style-type: none"> Principles, methods of cooking and serving <ul style="list-style-type: none"> Preservation of nutrients Safe Food handling-toxicity Storage of food Food preservation, food additives and its principles Prevention of food adulteration Act (PFA) Food standards Preparation of simple beverages and different types of food 	<ul style="list-style-type: none"> Lecture Discussion Demonstration Practice session 	<ul style="list-style-type: none"> Short answers Objective type Assessment of practice sessions
X	7	5	<ul style="list-style-type: none"> Describe and plan balanced diet for 	Balanced diet <ul style="list-style-type: none"> Elements Food groups Recommended Daily 	<ul style="list-style-type: none"> Lecture Discussion Explaining using charts 	<ul style="list-style-type: none"> Short answers Objective type

Unit	Time (Hrs)		Learning Objectives	Content	Teaching Learning Activities	Evaluation
	Th.	Pr.				
			different categories of people	Allowance <ul style="list-style-type: none"> • Nutritive value of foods • Calculation of balanced diet for different categories of people • Planning menu • Budgeting of food • Introduction to therapeutic diets: Naturopathy –Diet 	<ul style="list-style-type: none"> • Practice session • Meal planning 	<ul style="list-style-type: none"> • Exercise on menu planning
XI	4		<ul style="list-style-type: none"> • Describe various national programmes related to nutrition • Describe the role of nurse in assessment of nutritional status and nutrition education 	Role of nurse in nutritional programmes <ul style="list-style-type: none"> • National programmes related to nutrition <ul style="list-style-type: none"> □ Vitamin A deficiency programme □ National iodine deficiency disorders (IDD) programme □ Mid-day meal programme □ Integrated child development scheme (ICDS) • National and International agencies working towards food/nutrition <ul style="list-style-type: none"> □ NIPCCD, CARE, FAO, NIN, CFTRI(Central food technology and research institute) etc • Assessment of nutritional status • Nutrition education and role of nurse 	<ul style="list-style-type: none"> • Lecture • Discussion • Explaining with • Slide /Film shows • Demonstration of Assessment of nutritional status 	<ul style="list-style-type: none"> • Short answers • Objective type