

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 	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 ❖ Precise writing ❖ Nurses notes ❖ Anecdotal records ❖ Diary writing ❖ Reports on health problems etc. ❖ Resume/CV 	<ul style="list-style-type: none"> • Exercise on writing <ul style="list-style-type: none"> ❖ Letter writing ❖ Nurses notes ❖ Precise ❖ 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 skills based on the check list
IV	6	Develop skill in spoken English	<ul style="list-style-type: none"> • Spoken English <ul style="list-style-type: none"> ❖ Oral report ❖ Discussion ❖ Debate ❖ Telephonic 	<ul style="list-style-type: none"> • Exercise on: <ul style="list-style-type: none"> ❖ Debating ❖ Participating in Seminar, Panel, symposium 	<ul style="list-style-type: none"> • Assessment of the skills based on the check list

Unit	Time (Hrs)	Learning Objectives	Content	Teaching Learning Activities	Assessment Methods
			conversation	❖ Telephonic conversation	
V	4	Develop skill in listening comprehension	<ul style="list-style-type: none"> • Listening Comprehension ❖ 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 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 charts, 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 	The Nervous System <ul style="list-style-type: none"> Structure of Neurologia & neurons Somatic Nervous system <ul style="list-style-type: none"> Structure of brain, spinal cord, cranial nerves, spinal nerves, peripheral nerves Autonomic Nervous System- sympathetic, parasympathetic <ul style="list-style-type: none"> Structure, location Alterations in disease Applications and implications in nursing 	<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 	The Sensory System <ul style="list-style-type: none"> Structure of skin, eye, ear, nose, tongue, (Auditory and olfactory apparatus) Alterations in disease Applications and implications in nursing 	<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 	Circulatory and lymphatic system <ul style="list-style-type: none"> The Circulatory System <ul style="list-style-type: none"> Blood – Microscopic structure Structure of Heart Structure of blood vessels- Arterial & Venous System, Circulation: systemic, Pulmonary, coronary Lymphatic system <ul style="list-style-type: none"> Lymphatic vessels and lymph <ul style="list-style-type: none"> Lymphatic tissues <ul style="list-style-type: none"> Thymus gland Lymph nodes Spleen Lymphatic nodules Alterations in disease Applications and implications in nursing 	<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
VII	5	<ul style="list-style-type: none"> Describe the structure & function 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

Unit	Time (Hrs)	Learning Objectives	Content	Teaching Learning Activities	Assessment Methods
VIII	6	<ul style="list-style-type: none"> Describe the structure & function 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 & function 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 & function 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 & function 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 disease 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 and 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 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 Neuralgia & Neurons Stimulus & Nerve- Impulse-Definitions & Mechanism Functions of brain, spinal cord, cranial and spinal nerves Cerebrospinal fluid-composition, circulation and function Reflex arc, reflex action and reflexes Autonomic functions – <ul style="list-style-type: none"> Pain: Somatic, visceral and referred 	<ul style="list-style-type: none"> Lecture Discussion Explain using charts, models and films Demonstration of 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 learning and biofeedback ▪ Alterations in disease ▪ Applications and implications in nursing 		
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 • Alterations in disease • Applications and implications in nursing 	<ul style="list-style-type: none"> • Lecture Discussion • Explain using charts, films • Demonstration of blood cell count, coagulation, grouping, Hemoglobin 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 • Alterations in disease • Applications and implications in nursing 	<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"> • Describe 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 System 	<p>The Excretory System</p> <ul style="list-style-type: none"> • Functions of kidneys, ureters, urinary bladder & urethra • Composition of urine • Mechanism of urine formation 	<ul style="list-style-type: none"> • Lecture Discussion • Explain using charts, films 	<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"> • Functions of skin • Regulation of body temperature • Fluid and electrolyte balance Alterations in disease • Applications and implications in nursing 		
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 	<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, <ul style="list-style-type: none"> • 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 – 40 hours

Practical – 20 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	Assessment Methods
	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 problem 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
III	2		<ul style="list-style-type: none"> Describe the classification, functions, sources and recommended daily allowances 	Fats <ul style="list-style-type: none"> Classification Caloric value Recommended daily allowances Dietary sources. Functions 	<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	Assessment Methods
	Th.	Pr.				
			(RDA) of fats	<ul style="list-style-type: none"> • Digestion, absorption and storage, metabolism • Malnutrition: Deficiencies and over consumption 		
IV	2		<ul style="list-style-type: none"> • Describe the classification, functions, sources and recommended daily allowances (RDA) of Protein 	Proteins <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
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
VII	4		<ul style="list-style-type: none"> • Describe the classification, functions, sources and recommended daily allowances (RDA) of Minerals 	Mineral <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 	Water & electrolytes <ul style="list-style-type: none"> • Water: Daily requirements, 	<ul style="list-style-type: none"> • Lecture Discussion 	<ul style="list-style-type: none"> • Short answers

Unit	Time (Hrs)		Learning Objectives	Content	Teaching Learning Activities	Assessment Methods
	Th.	Pr.				
			sources, functions and requirements of water & electrolytes	regulation of water metabolism, distribution of body water, <ul style="list-style-type: none"> • 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"> • Explaining using charts 	<ul style="list-style-type: none"> • Objective type
IX	5	15	<ul style="list-style-type: none"> • Describe the cookery rules and preservation of nutrients and • Prepare serve simple beverages and different types of food. 	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 different categories of people 	Balanced Diet <ul style="list-style-type: none"> • Elements • Food groups • Recommended Daily Allowance • Nutritive value of foods • Calculation of balanced diet for different categories of people • Planning the menu • Budgeting of food • Introduction to therapeutic diets: Naturopathy – Diet. 	<ul style="list-style-type: none"> • Lecture Discussion • Explaining using charts • Practice Session • Meal Planning 	<ul style="list-style-type: none"> • Short answers • Objective type • 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 	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 	<ul style="list-style-type: none"> • Lecture Discussion • Explaining using charts • Slide/ Film shows • Demonstration of 	<ul style="list-style-type: none"> • Short answers • Objective type

Unit	Time (Hrs)		Learning Objectives	Content	Teaching Learning Activities	Assessment Methods
	Th.	Pr.				
			status and nutrition education	<p>programme</p> <ul style="list-style-type: none"> ▪ 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. 	assessment of nutritional status	

Biochemistry

Placement : First Year

Time : Theory 30 Hours

Course Description: This course is designed to enable students to acquire knowledge of the normal biochemical composition and functioning of human body and understand the alterations in biochemistry in disease for practice of nursing.

Unit	Time (Hrs)	Objectives	Content	Teaching Learning Activity	Assessment method
I	1	<ul style="list-style-type: none"> Describe the structure composition and functions of cell Differentiate between Prokaryote and eukaryote cell Identify techniques of Microscopy 	<p>Introduction:</p> <ul style="list-style-type: none"> Definition and significance in nursing Review of structure, Composition and Functions of cell <p>Prokaryote and Eukaryote cell organization</p> <ul style="list-style-type: none"> Microscopy 	<ul style="list-style-type: none"> Lecture discussion using charts, slides. Demonstrate use of microscope 	<ul style="list-style-type: none"> Short answer questions Objective type
II	6	<ul style="list-style-type: none"> Describe the structure and functions of cell membrane 	<p>Structure and functions of Cell membrane:</p> <ul style="list-style-type: none"> Fluid mosaic model tight junction, Cytoskeleton. Transport, mechanism: diffusion, osmosis, filtration, active. Channel, sodium pump. Acid base balance maintenance & diagnostic tests. PH buffers 	<ul style="list-style-type: none"> Lecture discussion 	<ul style="list-style-type: none"> Short answer questions Objective type
III	6	<ul style="list-style-type: none"> Explain the metabolism of carbohydrate 	<p>Composition and metabolism of Carbohydrates:</p> <ul style="list-style-type: none"> Types, Structure, composition and uses. <ul style="list-style-type: none"> Monosaccharide, Disaccharides, Polysaccharides, Oligosaccharides. Metabolism <ul style="list-style-type: none"> Pathways of glucose <ul style="list-style-type: none"> Glycolysis Gluconeogenesis: Cori's cycle, Tri carboxylic acid (TCA) cycle Glycogenolysis Pentose Phosphate pathways (Hexose mono phosphate) Regulation of blood 	<ul style="list-style-type: none"> Lecture discussion Demonstrate of blood glucose monitoring 	<ul style="list-style-type: none"> Short answer questions Objective type

Unit	Time (Hrs)	Objectives	Content	Teaching Learning Activity	Assessment method
			glucose level. Investigations and their Interpretations		
IV	4	<ul style="list-style-type: none"> Explain the metabolism of Lipids 	<p>Composition and metabolism of Lipids:</p> <ul style="list-style-type: none"> Types, structure, composition and uses of fatty acids : <ul style="list-style-type: none"> Nomenclature, Roles and Prostaglandins. Metabolism of fatty acid : <ul style="list-style-type: none"> Breakdown Synthesis Metabolism of triacylglycerols: Cholesterol Metabolism : <ul style="list-style-type: none"> Biosynthesis and its Regulation <ul style="list-style-type: none"> Bile salts and bilirubin Vitamin – D Steroid hormones Lipoproteins and their functions : <ul style="list-style-type: none"> VLDLs - IDLs, LDLs and HDLs Transport of lipids <p>Atherosclerosis, Investigations and their interpretations.</p>	<ul style="list-style-type: none"> Lecture discussion using charts, slides. Demonstration of laboratory tests 	<ul style="list-style-type: none"> Short answer questions Objective type
V	6	<ul style="list-style-type: none"> Explain the metabolism of amino acid and proteins 	<p>Composition and metabolism of amino acids and Proteins</p> <ul style="list-style-type: none"> Types, structure, composition and uses of amino acids and proteins. Metabolism of amino acids and proteins : <ul style="list-style-type: none"> Protein synthesis, targeting and glycosylation. Chromatography Electrophoresis Sequencing Metabolism of Nitrogen : <ul style="list-style-type: none"> Fixation and Assimilation Urea Cycle Hemes and chlorophylls Enzymes and coenzymes: <ul style="list-style-type: none"> Classification 	<ul style="list-style-type: none"> Lecture discussion using charts, slides. Demonstration of laboratory tests 	<ul style="list-style-type: none"> Short answer questions Objective type

Unit	Time (Hrs)	Objectives	Content	Teaching Learning Activity	Assessment method
			<ul style="list-style-type: none"> <input type="checkbox"/> Properties <input type="checkbox"/> Kinetics and Inhibition <input type="checkbox"/> Control Investigations and their interpretations.		
VI	2	<ul style="list-style-type: none"> • Describe types, composition and utilization of vitamins & minerals 	Composition and vitamins and minerals: <ul style="list-style-type: none"> • Vitamins and minerals <ul style="list-style-type: none"> <input type="checkbox"/> Structure <input type="checkbox"/> Classification <input type="checkbox"/> Properties <input type="checkbox"/> Absorption <input type="checkbox"/> Storage and transportation <input type="checkbox"/> Normal Concentration Investigations and their interpretations.	<ul style="list-style-type: none"> • Lecture discussion using charts, slides. • Demonstration of laboratory tests 	<ul style="list-style-type: none"> • Short answer questions • Objective type
VII	3	<ul style="list-style-type: none"> • Describe Immunochemistry 	Immunochemistry <ul style="list-style-type: none"> • Immune response. • Structure and classification of immunoglobins. • Mechanism of antibody Production. • Antigens : HLA typing • Free radical and antioxidants. • Specialized Protein: Collagen, Elastin, Keratin, Myosin, Lens Protein. • Electrophoretic and Quantitative, determination of immunoglobins, ELISA etc. Investigations and their interpretations	<ul style="list-style-type: none"> • Lecture discussion using charts, slides. • Demonstration of laboratory tests 	<ul style="list-style-type: none"> • Short answer questions • Objective type

Nursing Foundations

Placement: First Year
Practical - 650 hours (200 lab and 450 clinical)

Time: Theory - 265 hours

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

Unit	Time (Hrs)	Learning Objective	Content	Teaching Learning Activities	Assessment Methods
I	10	<ul style="list-style-type: none"> Describe the concept of health, illness and health care agencies 	<p>Introduction</p> <ul style="list-style-type: none"> Concept of Health: Health – Illness continuum Factors influencing health Causes and risk factors for developing illness Body defences: Immunity and immunization Illness and illness Behaviour: Impact of illness on patient and family Health Care services: Health Promotion and Prevention, Primary Care, Diagnosis, Treatment, rehabilitation and Continuing Care <ul style="list-style-type: none"> Health care teams Types of health care agencies: Hospitals: Types, Organisation and Functions Health Promotion and Levels of Disease Prevention Primary health care and its delivery: Role of nurse 	<ul style="list-style-type: none"> Lecture discussion Visit to health care agencies 	<ul style="list-style-type: none"> Essay type Short answers Objective type
II	16	<ul style="list-style-type: none"> Explain concept and scope of nursing Describe values, code of ethics and professional conduct for nurses in India 	<p>Nursing as a profession</p> <ul style="list-style-type: none"> Definition and Characteristics of a profession Nursing: Definition, Concepts, philosophy, objectives Characteristics, nature and scope of nursing practice Functions of nurse Qualities of a nurse 	<ul style="list-style-type: none"> Lecture discussion Case discussion Role plays 	<ul style="list-style-type: none"> Essay type Short answers Objective type

Unit	Time (Hrs)	Learning Objective	Content	Teaching Learning Activities	Assessment Methods
			<ul style="list-style-type: none"> ▪ Categories of nursing personnel <ul style="list-style-type: none"> ▪ Nursing as a profession ▪ History of Nursing in India ▪ Values: Definition, Types, Values Clarification and values in professional Nursing: Caring and Advocacy <ul style="list-style-type: none"> ▪ Ethics: ▪ Definition and Ethical Principles ▪ Code of ethics and professional conduct for nurses 		
III	4	<ul style="list-style-type: none"> • Explain the admission and discharge procedure • Performs admission and discharge procedure 	Hospital admission and discharge <ul style="list-style-type: none"> ▪ Admission to the hospital ▪ Unit and its preparation-admission bed ▪ Admission procedure ▪ Special considerations ▪ Medico-legal issues ▪ Roles and Responsibilities of the nurse ▪ Discharge from the hospital ▪ Types: Planned discharge, LAMA and abscond, Referrals and transfers ▪ Discharge Planning ▪ Discharge procedure ▪ Special considerations ▪ Medico-legal issues ▪ Roles and Responsibilities of the nurse ▪ Care of the unit after discharge 	<ul style="list-style-type: none"> • Lecture discussion • Demonstration • Lab Practice • Supervised Clinical practice 	<ul style="list-style-type: none"> • Essay type • Short answers • Objective type • Assess skills with check list • Clinical practical examination
IV	10	<ul style="list-style-type: none"> • Communicate effectively with patient, families and team <ul style="list-style-type: none"> • members and maintain effective human relations (Projecting professional image) • Appreciate the importance of patient teaching in nursing 	Communication and Nurse patient relationship <ul style="list-style-type: none"> • Communication: Levels, Elements, Types, Modes, Process, Factors Influencing Communication • Methods of Effective Communication, <ul style="list-style-type: none"> - Attending skills - Rapport building skills - Empathy skills • Barriers to effective communication, 	<ul style="list-style-type: none"> • Lecture discussion • Role play and video film on the nurses Interacting with the patient • Practice Session on patient Teaching • Supervised Clinical practice 	<ul style="list-style-type: none"> • Essay type • Short answers • Objective type

Unit	Time (Hrs)	Learning Objective	Content	Teaching Learning Activities	Assessment Methods
			<p>Helping Relationships (NPR): Dimensions of Helping Relationships, Phases of a helping relationship</p> <p>Communicating effectively with patient, families and team members and maintain effective human relations with special reference to communicating with vulnerable group (children, women, physically and mentally challenged and elderly)</p> <ul style="list-style-type: none"> • Patient Teaching: Importance, Purposes, Process, role of nurse and integrating teaching in Nursing Process 		
V	15	<ul style="list-style-type: none"> • Explain the concept, uses, format and steps of nursing process • Documents nursing process as per the format 	<p>The Nursing Process:</p> <ul style="list-style-type: none"> • Critical Thinking and Nursing Judgment • Critical Thinking: Thinking and Learning • Competencies, Attitudes for Critical Thinking, Levels of Critical Thinking in Nursing. • Nursing Process Overview: <ul style="list-style-type: none"> • Application in Practice • Nursing Process format: INC, Current format • Assessment: Collection of data: Types, Sources, Methods • Formulating Nursing Judgment: Data interpretation <ul style="list-style-type: none"> • Nursing Diagnosis: • Identification of client problems • Nursing diagnosis statement • Difference between medical and nursing diagnosis <ul style="list-style-type: none"> • Planning • Establishing Priorities 	<ul style="list-style-type: none"> • Lecture discussion • Demonstration • Exercise • Supervised Clinical practice 	<ul style="list-style-type: none"> • Essay type • Short answers • Objective type

Unit	Time (Hrs)	Learning Objective	Content	Teaching Learning Activities	Assessment Methods
			<ul style="list-style-type: none"> • Establishing Goals and Expected Outcomes, • Selection of interventions: Protocols and standing Orders • Writing the Nursing Care plan <ul style="list-style-type: none"> • Implementation • Implementation the plan of care <ul style="list-style-type: none"> • Evaluation • Outcome of care • Review and modify • Documentation and Reporting 		
VI	4	<ul style="list-style-type: none"> • Describe the purposes, types and techniques of recording and reporting 	<p>Documentation and Reporting:</p> <ul style="list-style-type: none"> • Documentation: Purposes of Recording and reporting • Communication within the Health Care Team, • Types of records; ward records, medical / nursing records, • Common Record - Keeping forms, Computerized documentation • Guidelines for Reporting: Factual Basis, Accuracy, Completeness, Currentness, Organization, Confidentiality <ul style="list-style-type: none"> • Methods of Recording, • Reporting: Change -of shift reports: Transfer reports, Incident reports. • Minimizing legal Liability through effective record keeping. 	<ul style="list-style-type: none"> • Lecture discussion • Demonstration • Practice Session • Supervised Clinical practice 	<ul style="list-style-type: none"> • Essay type • Short answers Objective type

Unit	Time (Hrs)	Learning Objective	Content	Teaching Learning Activities	Assessment Methods
VII	15	<ul style="list-style-type: none"> • Describe principles and techniques of monitoring and maintaining vital signs • Monitor and maintain vital signs 	<p>Vital signs:</p> <ul style="list-style-type: none"> • Guidelines for taking vital signs <ul style="list-style-type: none"> • Body temperature: <ul style="list-style-type: none"> • Physiology, Regulation, Factors affecting body temperature. • Assessment of body temperature: sites, equipments and technique, special Considerations. <ul style="list-style-type: none"> ○ Temperature alterations: Hyperthermia, Heatstroke Hypothermia ○ Hot and cold applications • Pulse: <ul style="list-style-type: none"> ○ Physiology and Regulation, Characteristics of the pulse, Factors affecting pulse ○ Assessment of pulse: sites, location, equipments and technique, special considerations ○ Alterations in pulse: • Respiration: <ul style="list-style-type: none"> ○ Physiology and Regulation, Mechanics of breathing Characteristics of the respiration, Factors affecting respiration ○ Assessment of respirations: technique, special considerations ○ Alterations in respiration • Blood pressure: <ul style="list-style-type: none"> ○ Physiology and Regulation, Characteristics of the blood pressure, Factors affecting blood pressure <p>35</p> <p>○ blood pr</p>	<ul style="list-style-type: none"> • Lecture discussion • Demonstration • Practice Session • Supervised Clinical practice 	<ul style="list-style-type: none"> • Essay type • Short answers • Objective type • Assess with check list and clinical practical examination

Unit	Time (Hrs)	Learning Objective	Content	Teaching Learning Activities	Assessment Methods
VIII	30	<ul style="list-style-type: none"> Describe purpose and process of health assessment Describe the health assessment of each body system Perform health assessment of each body system 	Health assessment <ul style="list-style-type: none"> Purposes Process of Health assessment <ul style="list-style-type: none"> Health History Physical examination <ul style="list-style-type: none"> Methods- Inspection, Palpation, Percussion, Auscultation, Olfaction Preparation for examination: patient and unit General assessment Assessment of each body system Recording of health assessment 	<ul style="list-style-type: none"> Lecture discussion Demonstration Practice on simulators Supervised Clinical practice 	<ul style="list-style-type: none"> Essay type Short answers Objective type
IX	5	<ul style="list-style-type: none"> Identifies the Various machinery, equipment and linen and their care 	Machinery, Equipment and linen <ul style="list-style-type: none"> Types: Disposables and reusables-Linen, rubber goods, glass ware, metal, plastics, furniture, machinery Introduction: <ul style="list-style-type: none"> Indent Maintenance Inventory 	<ul style="list-style-type: none"> Lecture discussion Demonstration 	<ul style="list-style-type: none"> Essay type Short answers Objective type
X	60	<ul style="list-style-type: none"> Describe the basic, physiological and psychosocial needs of patient Describe the principles and techniques for meeting basic, Physiological and psychosocial needs of patient Perform nursing assessment, plan, implement and evaluate the care for meeting basic, physiological and psychosocial needs of patient 	Meeting needs of patient <ul style="list-style-type: none"> Basic needs (Activities of daily living) <ul style="list-style-type: none"> Providing safe and clean environment: <ul style="list-style-type: none"> Physical-environment: Temperature, Humidity, Noise, Ventilation, light, Odour, pests control Reduction of Physical hazards: fire, accidents Safety devices: Restraints, side rails, airways, trapez etc. Role of nurse in providing safe and clean environment Hygiene:- 	<ul style="list-style-type: none"> Lecture discussion Demonstration Practice sessions Supervised Clinical practice 	<ul style="list-style-type: none"> Essay type Short answers Objective type Assess with check list and clinical practical examination

Unit	Time (Hrs)	Learning Objective	Content	Teaching Learning Activities	Assessment Methods
			<ul style="list-style-type: none"> - Factors Influencing Hygienic Practice - Hygienic care: Care of the Skin-Bath and pressure points, feet and nail, Oral cavity, Hair Care, Eyes, Ears, and Nose o Assessment, Principles, Type, Equipments, Procedure, Special Considerations - Patient environment: Room Equipment and linen, making patient beds o Types of beds and bed making <input type="checkbox"/> Comfort:- <ul style="list-style-type: none"> - Factors Influencing Comfort - Comfort devices • Physiological needs: <input type="checkbox"/> Sleep and Rest: <ul style="list-style-type: none"> - Physiology of sleep - Factors affecting sleep - Promoting Rest and sleep - Sleep Disorders <input type="checkbox"/> Nutrition:- <ul style="list-style-type: none"> - Importance - Factors affecting nutritional needs - Assessment of Nutritional needs: Variables - Meeting Nutritional needs: Principles, equipments, procedure and special considerations. o Oral o Enteral : Naso/Orogastirc, gastrostomy o Parenteral: <input type="checkbox"/> Urinary Elimination <ul style="list-style-type: none"> - Review of Physiology of Urine Elimination, Composition and characteristics of urine - Factors Influencing Urination - Alternation in Urinary Elimination - Types and Collection of 	<ul style="list-style-type: none"> • 	

Unit	Time (Hrs)	Learning Objective	Content	Teaching Learning Activities	Assessment Methods
			urine specimen: Observation, urine testing – Facilitating urine elimination: assessment, types, equipments, procedures and special considerations <ul style="list-style-type: none"> ○ Providing urinal / bed pan ○ Condom drainage ○ Perineal care ○ Catheterization ○ Care of urinary drainage ○ Care of urinary diversions ○ Bladder irrigation <input type="checkbox"/> Bowel Elimination <ul style="list-style-type: none"> – Review of Physiology of Bowel Elimination , Composition and characteristics of faeces – Factors affecting Bowel elimination – Alteration in Bowel Elimination – Types and Collection of specimen of faeces: Observation – Facilitating bowel elimination: assessment, equipments, procedures and special considerations <ul style="list-style-type: none"> ○ Passing of Flatus tube ○ Enemas ○ Suppository ○ Sitz bath ○ Bowel wash ○ Care of Ostomies <input type="checkbox"/> Mobility and Immobility <ul style="list-style-type: none"> – Principles of Body Mechanics <ul style="list-style-type: none"> – Maintenance of normal body Alignment and mobility] – Factors affecting body alignment and mobility – Hazards associated with immobility – Alternation in body 		

Unit	Time (Hrs)	Learning Objective	Content	Teaching Learning Activities	Assessment Methods
			<p>Alignment and mobility</p> <ul style="list-style-type: none"> - Nursing interventions for impaired Body Alignment and Mobility: assessment, types, devices used, method and special considerations, rehabilitation aspects <ul style="list-style-type: none"> o Range of motion exercises o Maintaining body alignment: Positions o Moving o Lifting o Transferring o Walking o Restraints □ Oxygenation <ul style="list-style-type: none"> - Review of Cardiovascular and respiratory Physiology - Factors Affecting Oxygenation - Alterations in oxygenation - Nursing interventions in oxygenation: assessment, types, equipment used, procedure and special considerations. o Maintenance of patent airway o Oxygen administration o Suction o Inhalations: dry and moist o Chest Physiotherapy and postural drainage o Care of Chest drainage o Pulse oximetry o CPR-Basic life support □ Fluid, electrolyte, and Acid-Base Balances <ul style="list-style-type: none"> - Review of Physiological Regulation of Fluid, Electrolyte, and Acid-Base Balances - Factors Affecting Fluid, Electrolyte and Acid-Base Balances - Alterations in Fluid, Electrolyte, and Acid- Base Balances - Nursing interventions in 		

Unit	Time (Hrs)	Learning Objective	Content	Teaching Learning Activities	Assessment Methods
			Fluid, Electrolyte, and Acid – Base Imbalances: assessment, types, equipment, procedure and special considerations <ul style="list-style-type: none"> ○ Measuring fluid intake and output ○ Correcting Fluid, Electrolyte Imbalance: √ Replacement of fluids: Oral and Parenteral - Venipuncture, regulating IV Flow rates, changing IV solutions and tubing, Changing IV dressing, √ Administering Blood transfusion √ Restriction of fluids • Psychosocial Needs <ul style="list-style-type: none"> □ Concepts of Cultural Diversity, Stress and Adaptation, Self-concept, Sexuality, Spiritual Health Coping with loss, death and grieving □ Assessment of psychosocial needs □ Nursing intervention for psychosocial needs <ul style="list-style-type: none"> - Assist with coping and adaptation - Creating therapeutic environment Recreational and diversional therapies		
XI	20	<ul style="list-style-type: none"> • Describe principles and techniques for infection control and biomedical waste management in supervised Clinical settings 	Infection control in Clinical settings <ul style="list-style-type: none"> • Infection control <ul style="list-style-type: none"> □ Nature of infection □ Chain of infection transmission □ Defenses against infection: natural and acquired □ Hospital acquired infection (Nosocomial infection) • Concept of asepsis: medical asepsis, and surgical asepsis 	<ul style="list-style-type: none"> • Lecture discussion • Demonstration • Practice session • Supervised Clinical practice 	<ul style="list-style-type: none"> • Essay type • Short answers • Objective type

Unit	Time (Hrs)	Learning Objective	Content	Teaching Learning Activities	Assessment Methods
			<ul style="list-style-type: none"> • Isolation precautions (Barrier nursing): <ul style="list-style-type: none"> □ Hand washing: simple, hand antiseptics and surgical antiseptics (scrub) □ Isolation: source and protective □ Personal protecting equipments: types, uses and technique of wearing and removing □ Decontamination of equipment and unit □ Transportation of infected patients □ Standard safety precautions (Universal precautions) □ Transmission based precautions • Biomedical waste management: <ul style="list-style-type: none"> □ Importance □ Type of hospital waste □ Hazards associated with hospital waste □ Decontamination of hospital waste □ Segregation and Transportation and disposal 		
XII	40	<ul style="list-style-type: none"> • Explain the principles, routes, effects of administration of medications • Calculate conversions of drugs and dosages within and between systems of measurements 	Administration of Medications General Principles/Considerations <ul style="list-style-type: none"> □ Purposes of Medication □ Principles: 5 rights, Special Considerations, 	<ul style="list-style-type: none"> • Lecture discussion • Demonstration • Practice session • Supervised Clinical practice 	<ul style="list-style-type: none"> • Essay type • Short answers • Objective type • Assess with check list and clinical practical

Unit	Time (Hrs)	Learning Objective	Content	Teaching Learning Activities	Assessment Methods
		<ul style="list-style-type: none"> • Administer drugs by the following routes – oral, Intradermal, Subcutaneous, Intramuscular, Intra Venous topical, inhalation 	<p>Prescriptions, Safety in Administering Medications and Medication Errors</p> <ul style="list-style-type: none"> <input type="checkbox"/> Drug forms <input type="checkbox"/> Routes of administration <input type="checkbox"/> Storage and maintenance of drugs and Nurses responsibility <input type="checkbox"/> Broad classification of drugs <input type="checkbox"/> Therapeutic Effect, Side Effects, Toxic Effects, Idiosyncratic Reaction, Allergic Reactions, Drug Tolerance, Drug Interactions, <input type="checkbox"/> Factors Influencing drug Action, <input type="checkbox"/> Systems of Drug Measurement: Metric System, Apothecary System, Household Measurements, Solutions. <input type="checkbox"/> Converting Measurements Units: Conversion within one system, Conversion between systems, Dosage Calculation, <input type="checkbox"/> Terminologies and abbreviations used in prescriptions of medications • Oral Drugs Administration: Oral, Sublingual and Buccal: Equipment, procedure • Parenteral <ul style="list-style-type: none"> <input type="checkbox"/> General principles: decontamination and disposal of syringes and needles <input type="checkbox"/> Types of parenteral therapies <input type="checkbox"/> Types of syringes, needles, canula, and 		examination

Unit	Time (Hrs)	Learning Objective	Content	Teaching Learning Activities	Assessment Methods
			<p>infusion sets</p> <ul style="list-style-type: none"> □ Protection from Needle stick Injuries: Giving Medications with a safety syringes □ Routes of parenteral therapies <ul style="list-style-type: none"> - Intradermal: purpose, site, equipment, procedure, special considerations - Subcutaneous: purpose, site, equipment, procedure, special considerations - Intra Venous: purpose, site, equipment, procedure, special considerations - Advanced techniques: Epidural, intrathecal, intraosseous, intraperitoneal, intraplural, intraarterial-Role of nurse • Topical Administration: purposes, site, equipment, procedure, special considerations for <ul style="list-style-type: none"> □ Application to Skin □ Application to mucous membrane - Direct application of liquids-Gargle and swabbing the throat - Insertion of Drug into body cavity: Suppository/ medicated packing in rectum/vagina - Instillations:, Ear, Eye, Nasal, Bladder, and Rectal - Irrigations:Eye, Ear, Bladder, Vaginal and 		

Unit	Time (Hrs)	Learning Objective	Content	Teaching Learning Activities	Assessment Methods
			Rectal – Spraying: Nose and throat <ul style="list-style-type: none"> • Inhalation: Nasal, oral, endotracheal/tracheal (steam, oxygen and medications)- purposes, types, equipment, procedure, special considerations □ Recording and reporting of medications administered 		
XIII	10	<ul style="list-style-type: none"> • Describe the pre and post operative care of patients • Explain the process of wound healing • Explain the principles and techniques of wound care • Perform care of wounds 	Meeting needs of Perioperative patients <ul style="list-style-type: none"> • Definition and concept of Perioperative Nursing • Preoperative Phase <ul style="list-style-type: none"> □ Preparation of patient for surgery • Intraoperative <ul style="list-style-type: none"> □ Operation theatre set up and environment □ Role of nurse • Postoperative Phase <ul style="list-style-type: none"> □ Recovery unit □ Post operative unit □ Postoperative care, • Wounds: types, Classifications, wound Healing Process, Factors affecting Wound, Complications of Wound Healing • Surgical asepsis • Care of the sound: types, equipments, procedure and special considerations <ul style="list-style-type: none"> □ Dressings, Suture care, □ Care of Drainage □ Application of Bandages, Binders, Splints & Slings □ Heat and Cold Therapy 	<ul style="list-style-type: none"> • Lecture discussion • Demonstration • Practice session • Supervised Clinical practice 	<ul style="list-style-type: none"> • Essay type • Short answers • Objective type • Assess with check list and clinical practical examination
XIV	15	<ul style="list-style-type: none"> • Explain care of patients having alterations in body 	Meeting special needs of the patient <ul style="list-style-type: none"> • Care of patients having 	<ul style="list-style-type: none"> • Lecture discussion • Case 	<ul style="list-style-type: none"> • Essay type • Short answers

Unit	Time (Hrs)	Learning Objective	Content	Teaching Learning Activities	Assessment Methods
		functioning	alternation in <ul style="list-style-type: none"> - Temperature (hyper and hypothermia); Types, Assessment, Management - Sensorium (Unconsciousness); Assessment, Management - Urinary Elimination (retention and incontinence)Assessment, Management - Functioning of sensory organs: (Visual & hearing impairment) - Assessment of Self-Care ability - Communication Methods and special considerations - Mobility (physically challenged, cast), assessment of Self-care ability: Communication Methods and special considerations - Mental state (Mentally challenged) assessment of Self-Care ability; - Communication Methods and special considerations - Respiration (distress); Types, Assessment, Management - Comfort- (Pain)- Nature, Types, Factors influencing pain, Coping, assessment, Management; • Treatments related to gastrointestinal system: nasogastric suction, gastric irrigation, gastric analysis 	discussions <ul style="list-style-type: none"> • Supervised Clinical practice 	<ul style="list-style-type: none"> • Objective type

Unit	Time (Hrs)	Learning Objective	Content	Teaching Learning Activities	Assessment Methods
XV	5	<ul style="list-style-type: none"> Explain care of terminally ill patient 	<p>Care of Terminally ill patient</p> <ul style="list-style-type: none"> □ Concepts of Loss, Grief, grieving Process □ Signs of clinical death □ Care of dying patient: special considerations <p>– Advance directives: euthanasia, will, dying declaration, organ donation etc</p> <ul style="list-style-type: none"> □ Medico-legal issues □ Care of dead body: equipment, procedure and care of unit □ Autopsy □ Embalming 	<ul style="list-style-type: none"> Lecture discussion Demonstration Case discussions <p>/Role play</p> <ul style="list-style-type: none"> Practice session Supervised Clinical practice 	<ul style="list-style-type: none"> Essay type Short answers Objective type
XVI	6	<ul style="list-style-type: none"> Explain the basic concepts of conceptual and theoretical models of nursing 	<p>Professional Nursing concepts and practices</p> <ul style="list-style-type: none"> Conceptual and theoretical model of nursing practice: Introduction to models- holistic model, health belief model, health promotion model, etc Introduction to Theories in Nursing; Peplau's, Henderson's, Orem's, Neuman's, Roger's and Roy's Linking theories with nursing process 	<ul style="list-style-type: none"> Lecture discussion 	<ul style="list-style-type: none"> Essay type Short answers Objective type

Nursing Foundations - Practical

Placement: First Year

Time: Practical - 650 hours

(200 lab and 450 clinical)

Course Description: This course is designed to help the students to develop an understanding of the philosophy, objectives, theories and process of nursing in various clinical settings. It is aimed at helping the students to acquire knowledge, understanding and skills in techniques of nursing and practice them in clinical settings.

Area	Time (Hrs)	Objective	Skills	Assignments	Assessment Methods
Demonstration Lab General, Medical and Surgery ward	200- 450 Minimum practice time in clinical area	<ul style="list-style-type: none"> Performs admission and discharge procedure Prepares nursing care plan as per the nursing process format 	<p>Hospital admission and discharge (III) : -</p> <ul style="list-style-type: none"> Admission Prepare Unit for new patient Prepare admission bed Performs admission Procedure <ul style="list-style-type: none"> New Patient Transferin Prepare patient records <p>Discharge / Transfer out :</p> <ul style="list-style-type: none"> Gives discharge counseling Perform discharge procedure (Planned discharge, LAMA and abscond, Referrals and transfers) Prepare records of discharge / transfer. <ul style="list-style-type: none"> Dismantle, and disinfect unit and equipment after discharge / transfer. <p>Perform assessment :</p> <ul style="list-style-type: none"> History taking, Nursing diagnosis, problem list, Prioritization, Goals & Expected Outcomes, Selection of interventions. Write Nursing Care plan Given care as per the plan 	<ul style="list-style-type: none"> Practice in Unit/hospital Write nursing process records of patient Simulated – 1 Actual -1 	<ul style="list-style-type: none"> Evaluate with checklist Assessment of clinical performance with rating scale Completion of practical record Assessment of nursing process records with checklist Assessment of actual care given with rating scale

Area	Time (Hrs)	Objective	Skills	Assignments	Assessment Methods
		<ul style="list-style-type: none"> • Communicate effectively with patient, families and team members and • Maintain effective human relations • Develops plan for patient teaching • Prepare patient reports • Presents reports • Monitor vital signs • Perform health assessment of each body system • Provide basic nursing care to patients 	<p>Communication :</p> <ul style="list-style-type: none"> • Use verbal non verbal communication techniques <p>Prepare a plan for patient teaching session</p> <p>Write patient report :</p> <ul style="list-style-type: none"> • Change -of shift reports, Transfer reports, incidents reports etc. • Presents patient report <p>Vital signs :</p> <ul style="list-style-type: none"> • Measure, Records and interpret alterations in body temperature, pulse respiration and blood pressure. <p>Health assessment :</p> <ul style="list-style-type: none"> • Health History taking • Perform assessment : <ul style="list-style-type: none"> • General • Body system • Use various methods of physical examination <ul style="list-style-type: none"> • Inspection, Palpation, Percussion, Auscultation, Olfaction. • Identification of system wise deviations. <p>Prepare patient's unit :</p> <ul style="list-style-type: none"> • Prepare beds: <ul style="list-style-type: none"> • Open, closed, occupied, operation, amputation, • Cardiac, fracture, burn, Divided, & Fowlers bed • Pain assessment and provision for comfort. Use comfort devices Hygienic care <ul style="list-style-type: none"> • Oral Hygiene 	<ul style="list-style-type: none"> • Role-plays in simulated situations on communication techniques-1 • Health talk-1 • Write nurses notes and present the patient report of 2-3 assigned patient • Lab practice • Measure Vital signs of assigned patient • Practice in lab & hospital • Simulated exercise on CPR manikin 	<ul style="list-style-type: none"> • Assess role plays with the check-list on Communication techniques • Assess health talk with the check list • Assessment of communication techniques by rating scale • Assessment of performance with rating scale • Assessment of each skill with checklist • Completion of activity record • Assessment of each skill with rating scale • Completion of activity

Area	Time (Hrs)	Objective	Skills	Assignments	Assessment Methods
			<ul style="list-style-type: none"> • Baths and care of pressure points. • Hair wash, Pediculosis treatment. Feeding : • Oral, Enteral, Naso / Orogastric, gastrostomy and Parenteral feeding. • Naso -gastric insertion, suction, and irrigation. Assisting patient in urinary elimination: • Provides urinal / bed pan • Condom drainage • Perineal care • Catheterization • Care of urinary drainage Bladder irrigation Assisting bowel Elimination : • Insertion of Flatus tube. • Enemas • Insertion of suppository. Bowel wash, Body Alignment and Mobility : • Range of motion exercises • Positioning: - Recumbent, Lateral (rt / lt) Fowlers, Sims, Lithotomy, Prone, Trendelenburg position. • Assist patient in moving lifting, transferring , walking. • Restraints. • Oxygen administration • Suctioning: Oropharyngeal, nasopharyngeal • Chest physiotherapy and postural drainage Care of Chest drainage • CPR - Basic life support • Intravenous therapy 	<ul style="list-style-type: none"> • Observation study -2 • Department of Infection 	record

Area	Time (Hrs)	Objective	Skills	Assignments	Assessment Methods
		<ul style="list-style-type: none"> • Perform infection control procedures • Provide care to pre and post operative patients • Perform procedures for care of wounds • Administer drugs 	<ul style="list-style-type: none"> • Blood and blood component therapy • Collect / assist for collection of specimens for investigations urine, sputum, faces, vomitus, blood and other body fluids <ul style="list-style-type: none"> <input type="checkbox"/> Perform lab tests:- <ul style="list-style-type: none"> Urine: - Sugar, albumin, acetone Blood: - Sugar (with strip/ gluco-meter) Hot and cold application: local and general Sitz bath Communicating and assisting with self-care of visually & hearing impaired patients. Communicating and assisting with self-care of mentally challenged / disturbed patient. Recreational and divertional therapies Caring of patient with alteration in sensorium. Infection control: - Perform following Procedures: <ul style="list-style-type: none"> <input type="checkbox"/> Hand washing techniques <input type="checkbox"/> Simple, hand antisepsis and surgical antisepsis (scrub). <input type="checkbox"/> Prepare isolation unit in lab / ward. <input type="checkbox"/> Practice technique of wearing and removing Personal protective equipment (PPE) <input type="checkbox"/> Practice Standard safety Precautions (Universal Precautions) Decontamination of 	<ul style="list-style-type: none"> control & CSSD • Visits CSSD write observation report – 1 • Collection of samples for culture • Do clinical posting in infection control department and write report • Practice in lab/ward 	<ul style="list-style-type: none"> • Assess observation study with checklist • Evaluate all procedures with checklist

Area	Time (Hrs)	Objective	Skills	Assignments	Assessment Methods
		<ul style="list-style-type: none"> • Provide care to dying and dead • Counsel and support relatives 	<p>equipment and unit: -</p> <ul style="list-style-type: none"> • Surgical asepsis: • Sterilization <ul style="list-style-type: none"> <input type="checkbox"/> Handling sterilized equipment <input type="checkbox"/> Calculate strengths of lotions, <input type="checkbox"/> Prepare lotions <input type="checkbox"/> Care of articles <p>Pre and post operative care: -</p> <ul style="list-style-type: none"> • Skin Preparations for surgery: Local • Preparation of post operative unit • Pre & Post operative teaching and counseling. • Pre & Post operative monitoring. • Care of the wound • Dressings, Suture Care, care of Drainage, Application of Bandages, Binders, splints & Slings. • Bandaging of various body parts. <p>Administration of Medications: -</p> <ul style="list-style-type: none"> • Administer Medications in different forms and routes. • Oral, Sublingual and Buccal, • Parenteral: Intradermal, subcutaneous, Intramuscular etc. • Assist with Intra venous medications • Drug measurements and dose calculations. • Preparation of lotions and solutions. • Administers topical applications. • Insertion of drug into body cavity: Suppository & medicated packing etc. • Instillation of medicines and spray into Ear, Eye, Nose, and throat. 		

Area	Time (Hrs)	Objective	Skills	Assignments	Assessment Methods
			<ul style="list-style-type: none"> • Irrigations: - Eye, Ear, Bladder, vagina and rectum. • Inhalations: dry and moist Care of dying patient: - • Caring and packing of dead body. • Counseling and supporting grieving relatives. • Terminal care of the unit. 		

Psychology

Placement: First Year

Time: Theory - 60 hours

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

Unit	Time (Hrs)	Learning Objective	Content	Teaching Learning Activities	Assessment Methods
I	2	<ul style="list-style-type: none"> Describe the history, scope and methods of psychology 	Introduction: <ul style="list-style-type: none"> History and origin of science of Psychology Definitions and scope of Psychology Relevance to Nursing Methods of Psychology 	<ul style="list-style-type: none"> Lecture Discussion 	<ul style="list-style-type: none"> Essay type Short answers
II	4	<ul style="list-style-type: none"> Explain the biology of human behaviour. 	Biology of behavior: - Body mind relationship – Modulation process in Health and illness. Genetics and behavior : Heredity and environment Brain and Behavior: Nervous system, Neurons and synapse. <ul style="list-style-type: none"> Association Cortex, Rt and Lt Hemispheres Psychology of Sensations Muscular and glandular controls of behavior. Nature of behavior of an organism / integrated responses 	<ul style="list-style-type: none"> Lecture Discussion 	<ul style="list-style-type: none"> Essay type Short answers

III	20	Describe various cognitive processes and their applications	<p>Cognitive Processes:</p> <ul style="list-style-type: none"> • Attention: Types, determinants, Duration, and Degree, alterations. • Perception: - Meaning, Principles, factors affecting, errors. • Learning Nature: - Types, learner and learning, factors influencing, laws and theories, process, transfer, study habits. • Memory: - Meaning, types, nature, factors influencing, development theories methods of memorizing and Forgetting. • Thinking: - Types and levels, stages of development, Relationship with language and communication. 	<ul style="list-style-type: none"> • Lecture Discussion • Psychometric assessment: • Practice Sessions 	<ul style="list-style-type: none"> • Essay type • Short answers
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Unit	Time (Hrs)	Learning Objective	Content	Teaching Learning Activities	Assessment Methods
			<ul style="list-style-type: none"> • Intelligence: - Meaning, Classification, Uses, theories. • Aptitude: - Concept, types, Individual differences and variability. • Psychometric assessments of cognitive, Processes. • Alterations in cognitive processes • Applications 		
IV	8	Describe the motivation, emotions, stress, attitudes and their influence on behavior.	<p>Motivation and Emotional Processes:</p> <ul style="list-style-type: none"> • Motivation: Meaning, Concepts, Types, Theories, Motives and behavior, Conflict and frustration, conflict resolution. • Emotions & Stress : <ul style="list-style-type: none"> □ Emotion: - Definition, components, Changes in emotions, theories, emotional adjustments, emotions in health and illness. □ Stress : Stressor, cycle, effect, adaptation & Coping • Attitude: - Meaning, nature, development, factors affecting. Behavior and attitudes. □ Attitudinal Change • Psychometric assessments of emotions and attitudes. Alterations in emotions • Applications. 	<ul style="list-style-type: none"> • Lecture • Discussion • Role plays • Case Discussion • Demonstration 	<ul style="list-style-type: none"> • Essay type • Short answers
V	7	Explain the concepts of personality and its influence on behavior	<p>Personality:</p> <ul style="list-style-type: none"> • Definitions, topography , factors affecting personality, types, theories. • Psychometric assessments of personality. • Alterations in personality • Applications. 	<ul style="list-style-type: none"> • Lecture • Discussion • Demonstration 	<ul style="list-style-type: none"> • Essay type • Short answers
VI	7	Describe psychology of people during the life cycle	<p>Developmental Psychology:</p> <ul style="list-style-type: none"> • Psychology of people at different ages from infancy to old age. • Psychology of vulnerable individuals – Challenged, women, sick, etc. • Psychology of groups. 	<ul style="list-style-type: none"> • Lecture • Discussion • Case Discussion 	<ul style="list-style-type: none"> • Essay type • Short answers

VII	8	Describe the characteristics of mentally healthy person,	Mental hygiene and mental Health: • Concepts of mental hygiene and mental health. • Characteristics of mentally healthy person.	• Lecture Discussion • Role plays • Case	• Essay type • Short answers
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Unit	Time (Hrs)	Learning Objective	Content	Teaching Learning Activities	Assessment Methods
		explain ego defense mechanisms	<ul style="list-style-type: none"> • Warning signs of poor mental health • Promotive and Preventive mental health strategies and services. • Ego Defense mechanisms and implications. • Personal and social adjustments. • Guidance and Counseling • Role of nurse 	Discussion <ul style="list-style-type: none"> • Demonstration 	
VIII	4	<ul style="list-style-type: none"> • Explain the psychological assessments and role of nurse 	Psychological assessment & tests: - Types, development, Characteristics, Principles, Uses, Interpretations, and role of nurse in psychological assessment.	<ul style="list-style-type: none"> • Lecture • Discussion • Demonstration • Practice sessions 	<ul style="list-style-type: none"> • Assessment of Practice

Microbiology

Placement: First Year

Time: Theory - 60 Hours (Theory 45+15 lab)

Course Description: - This course is designed to enable students to acquire understanding of fundamentals of Microbiology and identification of various Microorganisms. It also provides opportunities for practicing infection control measures in hospital and community settings.

Unit	Time (Hrs)		Learning Objective	Content	Teaching Learning Activities	Assessment Methods
	Th	Pr				
I	5		<ul style="list-style-type: none"> Explain concepts and principles of microbiology and their importance in nursing. 	Introduction: - <ul style="list-style-type: none"> Importance and relevance to nursing Historical Perspective Concepts and terminology Principles of microbiology 	<ul style="list-style-type: none"> Lecture Discussion 	<ul style="list-style-type: none"> Short answers Objective type
II	10	5	Describe structure, classification morphology and growth of bacteria, identify microorganisms.	General characteristics of Microbes: - <ul style="list-style-type: none"> Structure and classification of Microbes. Morphological types. Size and form of bacteria. Motility Colonization Growth and nutrition of microbes: <ul style="list-style-type: none"> Temperature Moisture Blood and body fluids Laboratory methods for Identification of Micro – Organisms. Staining Techniques, Gram staining, Acid fast staining, Hanging drop preparation Culture: Various Medias. 	<ul style="list-style-type: none"> Lecture Discussion Demonstration 	<ul style="list-style-type: none"> Short answers Objective type
III	10	2	Describe the methods of infection control, identify the role of nurse in hospital infection control programme	Infection Control: - <ul style="list-style-type: none"> Infection: Sources Portals of entry and exit, transmission. Asepsis Disinfection: Types and methods. Sterilization: Types and Methods. Chemotherapy and antibiotics. Standard safety measures. 	<ul style="list-style-type: none"> Lecture Discussion Demonstration Visits to CSSD Clinical practice 	<ul style="list-style-type: none"> Short answers Objective type

Unit	Time (Hrs)		Learning Objective	Content	Teaching Learning Activities	Assessment Methods
	Th	Pr				
				<ul style="list-style-type: none"> • Biomedical waste management. • Role of nurse . • Hospital acquired infection. • Hospital infection control programme <input type="checkbox"/> Protocols, collection of samples, preparation of report and status of rate of infection in the unit/ hospital nurses accountability, continuing education etc. 		
IV	12	4	Describe the different disease producing organisms.	Pathogenic organisms: - <ul style="list-style-type: none"> • Micro-organisms : <ul style="list-style-type: none"> Cocci – gram positive and gram negative Bacilli – gram positive and gram negative Spirochaete <input type="checkbox"/> Mycoplasma <input type="checkbox"/> Rickettsiae Chlamydiae • Viruses • Fungi – Superficial and Deep mycoses • Parasites • Rodents & vectors Characteristics, Source, Portal of entry, transmission of infection. Identification of disease producing micro – organisms Collection , handling and transportation of various specimens.	<ul style="list-style-type: none"> • Lecture • Discussion • Demonstration • Clinical practice 	<ul style="list-style-type: none"> • Short answers • Objective type
V	8	4	Explain the concept of immunity, hypersensitivity and immunization	Immunity: <ul style="list-style-type: none"> • Immunity – Types, Classification • Antigen and antibody reaction. • Hypersensitivity – skin test • serological tests. • Immunoprophylaxis : <ul style="list-style-type: none"> <input type="checkbox"/> Vaccines & sera– Types & Classification, Storage and handling cold chain. <input type="checkbox"/> Immunization for various diseases <input type="checkbox"/> Immunization Schedule 	<ul style="list-style-type: none"> • Lecture • Discussion • Demonstration • Clinical practice 	<ul style="list-style-type: none"> • Short answers • Objective type

Introduction to Computer

Placement: First Year

Time: Theory - 45 Hours

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

Unit	Time (Hrs)		Learning Objective	Content	Teaching Learning Activities	Assessment Methods
	Th	Pr				
I	3		Identify and define various concepts used in computer, identify application of computer in nursing.	Introduction: <ul style="list-style-type: none"> • Concepts of computers. • Hardware and Software: trends and technology • Application of computers in nursing 	<ul style="list-style-type: none"> • Lecture • Discussion • Demonstration 	<ul style="list-style-type: none"> • Short answers • Objective type
II	6	20	Describe and use the Disk Operating System, Demonstrate skill in the use of MS Office.	Introduction to disk – operating system: <ul style="list-style-type: none"> • DOS • Windows (all version) Introduction : <ul style="list-style-type: none"> • MS – Word • MS – Excel with pictorial presentation • MS – Access • MS – Power point 	<ul style="list-style-type: none"> • Lecture • Discussion • Demonstration • Practice session 	<ul style="list-style-type: none"> • Short answers • Objective type • Practical Exam
III	2	3	Demonstrate skill in using multi- media, identify features of computer aided teaching and testing	Multimedia: - types & uses <ul style="list-style-type: none"> • Computer aided teaching & testing. 	<ul style="list-style-type: none"> • Lecture • Discussion • Demonstration 	<ul style="list-style-type: none"> • Short answers • Objective type • Practical Exam and Viva Voce
IV	1	3	Demonstrate use of internet and Email.	Use of Internet and e – mail	<ul style="list-style-type: none"> • Lecture • Discussion • Demonstration • Practice session 	<ul style="list-style-type: none"> • Short answers • Objective type • Practical Exam and Viva Voce

V	2	2	Describe and use the statistical packages.	Statistical packages: Types and their features.	<ul style="list-style-type: none"> • Lecture Discussion • Demonstration • Practice session 	<ul style="list-style-type: none"> • Short answers • Objective type • Practical Exam and Viva Voce
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VI	1	2	Describe the use of Hospital Management System.	Hospital Management System: Types and uses.	<ul style="list-style-type: none"> • Lecture Discussion • Demonstration 	<ul style="list-style-type: none"> • Short answers • Objective type • Practical Exam and Viva Voce
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