

# Contents

Preface .....	v
Acknowledgments .....	vi

## PART 1 NURSING FOUNDATION

<b>UNIT I</b>	<b>Introduction to Nursing .....</b>	<b>3</b>
	A General View .....	3
	Origin of Nursing.....	3
	Development of Modern Nursing.....	4
	Concepts of Nursing .....	4
	Definitions of Nursing.....	5
	Nursing—A Professional Service.....	6
	Requirements to Become a Nurse .....	7
	Etiquettes in Nursing.....	8
	Interpersonal Relationship (IPR) in Nursing.....	9
	Basic Nursing Principles .....	12
	Nursing Techniques and Procedures.....	12
	Steps of Procedure .....	13
<b>UNIT II</b>	<b>Hospital .....</b>	<b>15</b>
	Definitions and Set up.....	15
	Classification of Hospital .....	15
	Different Departments in a Hospital.....	17
	Functions of a Hospital .....	22
	Changing Role of Hospitals .....	24
	Hospital—Housekeeping and General Cleanliness.....	24
<b>UNIT III</b>	<b>Health and Illness .....</b>	<b>31</b>
	Definition.....	31
	Factors Influencing Health .....	31
	Changing Concepts of Health .....	32
	Illness, Sickness and Disease .....	33
	Illness Behavior .....	34
<b>UNIT IV</b>	<b>Basic Needs of the Patient .....</b>	<b>35</b>
	<b>Psychological Needs of the Patient .....</b>	<b>35</b>
	Definition.....	35
	Patient as an Individual—The Reaction of the Patient and his/her Family to Illness .....	35
	Routines of the Day .....	36
	Admission of the Patient.....	36
	Transferring a Patient to Another Healthcare Facility .....	40
	Discharge Procedure .....	43
	Needs of Hospitalized Patient .....	44
	<b>Physical Needs of the Patient .....</b>	<b>45</b>
	Definitions .....	45
	Importance of Physical Needs in Health and Diseases.....	45
	Patient's Unit, Requirements and Set Up .....	45

Bed and Bed Making .....	46
Ambulation .....	83
Cleaning Patient's Unit .....	96
Factors Promoting Physical Comforts .....	97
Comfort Devices .....	98
Safety Devices .....	106
Fall Risk Assessment .....	108
Restraints .....	114
Restraint Orders .....	123
Care of Casts and Splints .....	125
<b>Activity, Exercise, Rest, Sleep and Positioning .....</b>	<b>129</b>
Definitions .....	129
Importance of Activity and Exercise .....	129
Dangers of Prolonged Bed Rest .....	129
Benefits of Exercises .....	130
Classification of Exercise .....	130
Range of Motion (ROM) Exercises .....	131
Deep Breathing and Coughing Exercises .....	147
Rest and Sleep .....	150
Positioning .....	152
Moving, Turning and Transferring the Patients .....	159
Log Rolling .....	170
Turning a Client to the Lateral Side in Bed .....	174
Moving a Patient from Bed to Stretcher .....	176
Transferring the Patient from Bed to Stretcher and from the Stretcher to the Bed .....	181
<b>Hygienic Needs of the Patient .....</b>	<b>182</b>
Importance of Maintaining Good Personal Hygiene in Health and Disease .....	182
Nurse's Role in Maintaining Good Personal Hygiene .....	182
Oral Hygiene .....	182
Mouth Care (Mouth Cleaning) .....	184
Care of Dentures (Artificial Teeth) .....	193
Care of Hair .....	195
Pediculosis and its Dangers .....	197
Bed Shampoo (Washing Hair in Bed) .....	199
Care of Nose, Eyes and Ears .....	204
Care of Visual Aids .....	205
Care of the Ears .....	211
Hearing Aid .....	211
Care of Skin .....	216
Decubitus Ulcer/Pressure Ulcer/Bedsore .....	226
Back Care .....	239
Nail Care .....	245
<b>Nutritional Needs of the Patient .....</b>	<b>249</b>
Importance of Diet .....	249
Nurse's Role in Maintaining Good Nutrition .....	249
Extra Oral/Artificial Feeding .....	251
<b>Elimination Needs of the Patient .....</b>	<b>276</b>
Health Problems in Sickness .....	276
Constipation .....	276
Enema .....	277
Insertion of Suppository .....	285
Bowel Wash .....	292
Digital Evacuation of Impacted Feces .....	301
Bowel Diversions or Ostomy .....	306

Insertion of Flatus Tube .....	310
Diarrhea .....	314
Retention of Urine .....	320
Incontinence of Urine .....	321
Urinary Catheterization .....	324
Removing an Indwelling Catheter .....	336
Bladder Irrigation .....	338
Condom Drainage .....	347
<b>UNIT V Assessment of Patient.....</b>	<b>352</b>
Observation Needs of the Patient .....	352
<b>Physical Assessment.....</b>	<b>352</b>
Objectives.....	353
Types of Physical Examination .....	353
Methods of Physical Examination .....	353
Role of the Nurse in the Physical Examination .....	353
<b>Physiological Assessment—Vital Signs .....</b>	<b>355</b>
Body Temperature .....	355
Fever .....	355
Thermometer.....	357
Rigor .....	362
Pulse.....	363
Respiration.....	367
Blood Pressure.....	369
Procedures of Checking Temperature, Pulse, Respiration (TPR) and Blood Pressure .....	370
<b>Laboratory Assessment—Collection of Specimens .....</b>	<b>392</b>
Purposes.....	392
Kinds of Specimens .....	393
Nurse's Responsibilities .....	393
General Instructions.....	396
Methods of Collecting Specimens .....	397
Blood Smear.....	425
Urine Examination .....	429
Collection of 24 Hours Urine Specimen .....	432
Characteristics of Urine .....	432
Types of Urine Examination.....	434
Pulse Oximetry .....	445
<b>UNIT VI Infection Control.....</b>	<b>453</b>
Definitions .....	453
Standard Precautions.....	453
Barrier Nursing .....	456
Personal Protective Equipment .....	468
<b>UNIT VII Therapeutic Nursing Measures .....</b>	<b>491</b>
<b>Hot Applications .....</b>	<b>491</b>
Therapeutic Effects of Heat .....	491
Therapeutic Uses of Local Hot Applications.....	491
Types of Hot Application .....	492
Inhalation.....	504
<b>Cold Applications .....</b>	<b>519</b>
Purposes of Cold Application .....	519
Effects of Cold Application and Scientific Principles .....	519
Contraindications of Cold Application.....	519
Local Dry Cold Application .....	520
General Cold Applications .....	523

<b>UNIT VIII</b>	<b>Care of Wounds .....</b>	<b>526</b>
Definitions .....	526	
Classification of Wounds .....	526	
Wound Care.....	527	
Surgical Scrubbing.....	528	
Disinfection and Sterilization.....	534	
Surgical Dressing.....	534	
<b>UNIT IX</b>	<b>Medication Needs of the Patient—Pharmacology .....</b>	<b>546</b>
Administration of Medicine .....	546	
Oral Administration of Medicine .....	550	
Sublingual Administration of Drug.....	558	
Buccal Route of Administration of Drug .....	559	
Special Acronyms .....	559	
Parenteral Administration of Medicine .....	565	
Methods of Withdrawing Medication.....	571	
Administration of Injections .....	576	
Opioids.....	598	
Individual Opioid Agonists .....	605	
Other Opioid Agonists.....	607	
Opioid Agonist—Antagonists .....	608	
Opioid Antagonists.....	609	
Total Intravenous Anesthesia (TIVA) .....	610	
Special Points to be Noted during any Injection .....	611	
Diabetes Mellitus—Special Consideration .....	612	
<b>UNIT X</b>	<b>Care of Dying Patient and Care of the Body after Death .....</b>	<b>620</b>
Signs and Symptoms of Approaching Death.....	620	
The Stages of Dying .....	621	
Needs of the Dying Patient and his/her Relatives.....	622	
Immediate Signs of Death.....	622	
Physiological Changes after Death .....	622	
Care of the Body after Death .....	623	
Placing and Releasing Body from Mortuary .....	624	
Intake Procedure and Maintenance of Mortuary Register .....	628	
<b>UNIT XI</b>	<b>Geriatric Nursing .....</b>	<b>631</b>
Geriatrics.....	631	
Old Age.....	631	
Characteristics of Aging.....	631	
Old People and Illnesses .....	632	
Problems, Needs and Care of Old Age .....	632	
Nursing Assessment of Elderly Patients.....	635	
<b>UNIT XII</b>	<b>Maternal and Newborn Care.....</b>	<b>637</b>
<b>Maternal Care .....</b>	<b>637</b>	
Introduction.....	637	
Maternity Cycle .....	637	
<b>Care of Newborn .....</b>	<b>645</b>	
Resuscitation.....	645	
Care of Umbilical Cord .....	646	
Care of the Eyes.....	646	
Care of the Skin.....	646	
Observation of Newborn for Abnormalities .....	646	
Baby Bath .....	648	
Breastfeeding .....	654	
Weaning .....	655	
<b>UNIT XIII</b>	<b>Common Operation Theater Instruments .....</b>	<b>658</b>
Let's Discuss Some Commonly used Operation Theater Instruments.....	658	

**PART 2 ANATOMY AND PHYSIOLOGY**

<b>UNIT I</b>	<b>Introduction .....</b>	<b>673</b>
	Definitions .....	673
	Human Body .....	673
<b>UNIT II</b>	<b>Cell and Body Cavities .....</b>	<b>675</b>
	The Cell .....	675
	Body Cavities .....	676
<b>UNIT III</b>	<b>Major Systems of the Human Body .....</b>	<b>678</b>
	Introduction.....	678
	Integumentary System (Skin).....	678
	Skeletal System .....	679
	Muscular System .....	686
	Endocrine System .....	689
	Cardiovascular System (Heart, Blood Vessels and Blood) .....	691
	Blood.....	697
	Lymphatic System .....	699
	Respiratory System .....	701
	Digestive System .....	703
	Urinary System.....	705
	Reproductive System .....	705
	Nervous System.....	708
	Special Sense Organs .....	711
<b>UNIT IV</b>	<b>Fluid and Electrolyte Balance .....</b>	<b>714</b>
	Introduction.....	714
	Edema.....	714
	Dehydration .....	715
	Oral Rehydration Solution.....	715

**PART 3 MICROBIOLOGY**

<b>UNIT I</b>	<b>Introduction .....</b>	<b>721</b>
	Definition.....	721
	Application of Microbiology in Nursing.....	721
	Discoveries and Inventions.....	722
<b>UNIT II</b>	<b>Microorganisms .....</b>	<b>724</b>
	Distribution of Microorganisms .....	724
	Classification of Microorganisms .....	724
<b>UNIT III</b>	<b>Infection Process .....</b>	<b>727</b>
	Definition.....	727
	Types of infection .....	727
	Disease Transmission .....	728
	Portals of Entry of Organisms .....	729
	Portals of Exit .....	730
	Methods of Transmission of Microorganisms .....	730
	Common Types of Hospital Infection (Nosocomial Infection) .....	731
<b>UNIT IV</b>	<b>Immunity .....</b>	<b>733</b>
	Infection and Resistance .....	733
	Immunity .....	733

<b>UNIT V</b>	<b>Control of Bacteria (Methods of Disinfection and Sterilization) .....</b>	<b>741</b>
Control of Bacteria.....	.....	741
Terminologies.....	.....	741
Methods of Sterilization and Disinfection.....	.....	742
Control of Microorganisms in the Human Body .....	.....	748
Precautions to be Observed While Administering Antimicrobial Agents.....	.....	749

## PART 4 PSYCHOLOGY

<b>UNIT I</b>	<b>Introduction .....</b>	<b>753</b>
Definition.....	.....	753
Purpose of Studying Psychology .....	.....	753
Scope of Psychology .....	.....	753
<b>UNIT II</b>	<b>Psychology of Human Behavior .....</b>	<b>754</b>
Dynamics of Behavior .....	.....	754
Body-Mind Relationship .....	.....	754
Motivation.....	.....	754
Main Human Needs.....	.....	754
Unconscious Motives.....	.....	755
Mental Health .....	.....	755
Emotions .....	.....	756
Habits.....	.....	757
Attitudes.....	.....	757
<b>UNIT III</b>	<b>Learning, Thinking, Reasoning and Problem Solving .....</b>	<b>758</b>
Learning.....	.....	758
Types of Learning Theories .....	.....	759
Thinking.....	.....	759
Reasoning and Problem-Solving.....	.....	760
<b>UNIT IV</b>	<b>Personality .....</b>	<b>761</b>
Definition .....	.....	761
Components of Personality .....	.....	761
Traits of Personality .....	.....	761
Process of Development of Personality.....	.....	762
Factors Influencing Growth and Development .....	.....	762
<b>UNIT V</b>	<b>Intelligence .....</b>	<b>764</b>
Definition .....	.....	764
Types of Intelligence .....	.....	764
Intelligence Quotient (IQ) .....	.....	764

## PART 5 SOCIOLOGY

<b>UNIT I</b>	<b>Introduction .....</b>	<b>769</b>
Definition of Sociology .....	.....	769
Importance of Sociology in Nursing .....	.....	769
<b>UNIT II</b>	<b>Individual .....</b>	<b>770</b>
Rights of an Individual.....	.....	770
Responsibilities for Achieving Health.....	.....	770
Policies of the Government to Safeguard the Health of the Citizens.....	.....	771

<b>UNIT III</b>	<b>The Family .....</b>	<b>772</b>
	Definition.....	772
	The Family Cycle .....	772
	Types of Families .....	772
	Basic Needs of the Family .....	773
<b>UNIT IV</b>	<b>Society .....</b>	<b>774</b>
	Definitions .....	774
	Structure of a Society.....	774
	Classification of Society .....	774
	Social Problems .....	775
<b>UNIT V</b>	<b>The Community .....</b>	<b>777</b>
	Definition.....	777
	Characteristics of a Community .....	777
	Culture and Cultural Patterns .....	777

## PART 6 FIRST AID IN EMERGENCIES

<b>UNIT I</b>	<b>Introduction .....</b>	<b>781</b>
	First Aid.....	781
	Qualities Required for a First Aider .....	782
	Rules of First Aid.....	783
	Scope of First Aid.....	783
	Approach to First Aid .....	784
	Important Points of Attending a Casualty.....	784
	Concept of Emergency .....	785
<b>UNIT II</b>	<b>Procedures and Techniques in First Aid .....</b>	<b>787</b>
	<b>First Aid Kit.....</b>	<b>787</b>
	Definition.....	787
	Preparation of First Aid Kit .....	787
	<b>Dressing, Bandaging and Splinting .....</b>	<b>789</b>
	Definition.....	789
	Purposes of bandaging.....	790
	Slings.....	803
	Special Bandages .....	805
	Knots.....	806
	<b>Transportation of the Injured .....</b>	<b>808</b>
<b>UNIT III</b>	<b>First Aid in Emergencies.....</b>	<b>816</b>
	Respiration and Asphyxia .....	816
	Artificial Respiration (External Respiratory Resuscitation) .....	819
	External Cardiac Massage (External Cardiac Resuscitation).....	821
	Cardiopulmonary Resuscitation (CPR) [Basic Life Support (BLS)] .....	822
	Common Casualties and Management.....	826
<b>UNIT IV</b>	<b>Community Emergencies and Community Resources.....</b>	<b>850</b>
	Disaster.....	850
	Disaster Management (or Emergency Management) .....	852

**PART 7 NUTRITION**

<b>UNIT I</b>	<b>Introduction .....</b>	<b>859</b>
Definitions .....	859	
Nutrients or Nutriments (Food) .....	859	
Interrelation of Nutrients.....	861	
<b>UNIT II</b>	<b>Food Factors—Functions and Sources .....</b>	<b>862</b>
Carbohydrates .....	862	
Protein .....	863	
Fats .....	864	
Vitamins.....	865	
Minerals.....	871	
Water.....	875	
<b>UNIT III</b>	<b>Normal Dietary Requirements .....</b>	<b>876</b>
Metabolism .....	876	
Basal Metabolic Rate.....	876	
Energy Metabolism .....	877	
Balanced Diet .....	877	
Menu Planning.....	878	
Special Diets .....	879	
<b>UNIT IV</b>	<b>Cooking .....</b>	<b>880</b>
Why do we Need Cooking? .....	880	
Purposes of Cooking .....	880	
Methods of Cooking.....	880	
Kitchen Equipment Required for Cooking Food .....	881	
Recipes.....	882	
Recipes of Light Puddings .....	882	

**APPENDICES**

<b>Appendix ①</b>	Tracheal Suctioning .....	885
<b>Appendix ②</b>	Oral Suctioning .....	896
<b>Appendix ③</b>	Nasopharyngeal Suctioning.....	903
<b>Appendix ④</b>	Maintaining Intake Output Chart.....	909
<b>Appendix ⑤</b>	Gargling.....	914
<b>Appendix ⑥</b>	Instillation of Ear Drops.....	919
<b>Appendix ⑦</b>	Instillation of Eye Drops .....	923
<b>Appendix ⑧</b>	Instillation of Nasal Drops or Spray .....	932
<b>Appendix ⑨</b>	Nasal Sprays .....	937
<b>Appendix ⑩</b>	Radiologic Procedures.....	942
<b>Appendix ⑪</b>	Endoscopic Procedures .....	946
<b>Appendix ⑫</b>	Blood Transfusion .....	957
<b>Appendix ⑬</b>	Chest Physiotherapy .....	970
<b>Appendix ⑭</b>	Urinary Diversion Procedure .....	987
<b>Appendix ⑮</b>	Vaginal Irrigation .....	991