

LESSON PLAN
BASIC B.Sc. NUSING I YEAR
FIRST SEMESTER

Subject code: 1
Subject: PHYSIOLOGY
Faculty: Mrs. Jayashree Pawar

UNIT	Topic	No. of lecture	Lecture serial no.
Unit I Cell Physiology	• Tissue-- formation and repair., Membranes and glands functions	1	1
	• Alteration in disease & Application in nursing	1	2
Unit II Blood	• Formation , Composition and Functions of blood.	2	4
	• Classification of blood cells, Blood groups, blood coagulation.	2	6
	• Hemoglobin: Structure, synthesis and breakdown, variations of molecules, etimation., alteration in disease	2	8
	• Application in nursing		
Unit III Lymphatic & Immunological system.	• Circulation of lymph, Immunity, Formation of T cells & B Cells.	1	9
	• Types of immune & response., Antigens, Cytokines		
	• Antibodies. Alteration in disease	1	10
	• Application in nursing		
Unit IV Muscular System	• Muscle movements and muscle tone ,Neuro muscular Transmission.	1	11
	• Stimulus and nerve impulse definitions and mechanisms.	1	12
	• Physiology of muscle contraction.	1	13
	• Alterations in disease.		
	• Application in nursing	1	14

Unit V The Respiratory System	• Functions of Respiratory organs.	1	15
	• Physiology of Respiration. Pulmonary ventilation, Volume	1	16
	• Mechanics of respiration. & Gaseous exchange in lungs, Carriage of Oxygen and carbon dioxide.	1	17
	• Exchange of gases in tissues.	1	18
	• Regulation of respiration.	1	19
	• Alterations in disease.	1	20
	• Application in nursing	1	20
Unit VI The Digestive System	• Functions of organs of digestive tract.	1	21
	• Movements of alimentary tract.		
	• Digestion in Mouth, stomach, small intestine, large intestine.	1	22
	• Absorption of f o o d .	1	23
	• Functions of liver, Gall bladder & Pancreas	1	24
	• Metabolism of carbohydrate, protein and fat	1	24
	• Alterations in disease.	1	25
• Application in nursing			
Unit VII Circulatory System	• Functions of heart, conduction, cardiac cycle, circulation	2	27
	• Principles, control, factors influencing B.P and pulse	2	29
	• Alterations in disease & implication in nursing	2	31
Unit VIII The Excretory System.	• Functions of kidneys, ureters , Urinary bladder and urethra.	1	32
	• Composition of urine.	1	33
	• Mechanism of Urine formation. Structure & Functions of skin.	1	34
	• Regulation of body temperature. Fluid and electrolyte balance.	1	35
	• Alteration in disease.	1	36
	• Application & implication in nursing	1	36

Unit IX The Reproductive System	<ul style="list-style-type: none"> • Reproductive of cells- DNA, Mitosis.Meiosis spermatogenesis Oogenesis 	1	37
	<ul style="list-style-type: none"> • Function of Female Reproductive Organ 	1	38
	<ul style="list-style-type: none"> • Function of breast , placenta, ovaries, Female sexual cycle 	1	39
	<ul style="list-style-type: none"> • Introduction to Embryology 	1	40
	<ul style="list-style-type: none"> • Functions of the Male Reproductive Organs, Male function in reproduction, Male fertility system 	1	41
Unit X Endocrine System.	<ul style="list-style-type: none"> • Alterations in disease. 	1	42
	<ul style="list-style-type: none"> • Application & implication in nursing 	1	43
	<ul style="list-style-type: none"> • Functions of pituitary ,thymus, pineal body, thyroid, Parathyroid 	1	44
	<ul style="list-style-type: none"> • (Calcium Metabolism),Pancreas, Supra renal Glands, placenta, ovaries & testes 	1	45
	<ul style="list-style-type: none"> • Alteration in disease & implication in nursing 	1	46
Unit X Nervous System	<ul style="list-style-type: none"> • Functions of neurologia and neurons 	1	47
	<ul style="list-style-type: none"> • Functions of brain, spinal cord and cranial and spinal nerves. 	2	49
	<ul style="list-style-type: none"> • Cerebrospinal fluid---composition, circulation and function. 	1	50
	<ul style="list-style-type: none"> • Reflex arc, reflex action and reflexes Muscle tone and posture 	1	51
	<ul style="list-style-type: none"> • Autonomic functions ---Pain: somatic, visceral and referred 	1	52
	<ul style="list-style-type: none"> • Autonomic learning and biofeedback 	1	53
	<ul style="list-style-type: none"> • Application & implication in nursing 	1	54
	<ul style="list-style-type: none"> • Functions of skin, eye, ear, nose & tongue. 	2	56
Unit XII Sensory Organs	<ul style="list-style-type: none"> • Alterations in disease 	2	58
	<ul style="list-style-type: none"> • Application & implication in nursing 	2	60

REFERENCES :

1. Waugh, Anne (2003), “ Ross & Wilson’s Anatomy & Physiology in health & illness” 10th ed., Churchill Livingstone.
2. Anthony & Thibodcon (2000), “Anatomy & Physiology for nurses” 11th ed., C.V. Mosby Co., London.
3. Greig, Rhind, “ Riddle’s Anatomy & Physiology”, 7th ed., Churchill Livingstone.
4. Singh, I. B. (2005), “Anatomy & Physiology for nurses”, 1st ed., Jaypee.
5. Tortora, (2003), “Principles of Anatomy & Physiology,” 10th ed., Wiley inter.

