



Dr. D.Y. Patil Vidyapeeth's

## Padmashree Dr. D. Y. Patil College of Nursing

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### Basic B.Sc. Nursing I Year

**Subject code: 1**

**Subject:** PHYSIOLOGY

**Faculty:** Ms. MONIKA BAGCHI (Internal Faculty)

UNIT	Topic	No.of lecture	Lecture serial no.
Cell Physiology	<ul style="list-style-type: none"><li>Tissue-- formation and repair., Membranes and glands functions</li></ul>	1	1
	<ul style="list-style-type: none"><li>Alteration in disease &amp; Application in nursing</li></ul>	1	2
Blood	<ul style="list-style-type: none"><li>Composition and functions of blood</li></ul>	2	3-4
	<ul style="list-style-type: none"><li>Classification of blood cells Blood groups, blood coagulation.</li></ul>	2	5-6
	<ul style="list-style-type: none"><li>Hemoglobin:Structure, synthesis and breakdown, variations of molecules, etimation.</li></ul>	2	7-8
Lymphatic & immuniological system.	<ul style="list-style-type: none"><li>Circulation of lymph, Immunity, Formation of T cells &amp; B Cells</li></ul>	1	9
	<ul style="list-style-type: none"><li>Types of immune &amp; response., Antigens, Cytokines</li></ul>	1	10
	Antibodies	1	11
Muscular System	<ul style="list-style-type: none"><li>Neuro muscular transmission</li></ul>	1	12
	<ul style="list-style-type: none"><li>Stimulus and nerve impulse definitions and mechanisms.</li></ul>	1	13
	<ul style="list-style-type: none"><li>Physiology of muscle contraction</li></ul>	1	14
	<ul style="list-style-type: none"><li>Alterations in disease.</li></ul>	1	15
The Respiratory System	<ul style="list-style-type: none"><li>Functions of Respiratory organs</li></ul>	1	16
	<ul style="list-style-type: none"><li>Physiology of Respiration. Pulmonary ventilation, Volume</li></ul>	1	17
	<ul style="list-style-type: none"><li>Mechanics of respiration.&amp; Gaseous exchange in lungs,Carriage of Oxygen and carbon dioxide.</li></ul>	1	18
	<ul style="list-style-type: none"><li>Exchange of gases in tissues.</li></ul>	1	19
	<ul style="list-style-type: none"><li>Regulation of respiration.Alterations in disease</li></ul>	1	20

<b>The Digestive System</b>	<ul style="list-style-type: none"> <li>• Functions of organs of digestive tract.</li> </ul>	1	21
	<ul style="list-style-type: none"> <li>• Movements of alimentary tract.</li> </ul>	1	22
	<ul style="list-style-type: none"> <li>• Digestion in Mouth, stomach, small intestine, large intestine.</li> </ul>	1	23
	<ul style="list-style-type: none"> <li>• Absorption of food.</li> </ul>	1	24
	<ul style="list-style-type: none"> <li>• Functions of liver, Gall bladder &amp; pancreas</li> </ul>	2	25-26
<b>Circulatory System</b>	<ul style="list-style-type: none"> <li>• Functions of heart, conduction, cardiac cycle, circulation--• Principles, control, factors influencing B.P and pulse</li> </ul>	4	27-30
	<ul style="list-style-type: none"> <li>• Alterations in disease</li> </ul>	4	31-34
<b>The Excretory System.</b>	<ul style="list-style-type: none"> <li>• Functions of kidneys, ureters , urinary bladder and urethra</li> </ul>	1	35
	<ul style="list-style-type: none"> <li>• Composition of urine.</li> </ul>	1	36
	<ul style="list-style-type: none"> <li>• Mechanism of Urine formation. Structure &amp; Functions of skin.</li> </ul>	1	37
	<ul style="list-style-type: none"> <li>• Regulation of body temperature.Fluid and electrolyte balance</li> </ul>	1	38
	<ul style="list-style-type: none"> <li>• Alteration in disease.</li> </ul>	1	39
<b>Endocrine System</b>	<ul style="list-style-type: none"> <li>• Functions of pituitary ,thymus, thyroid, Parathyroid</li> </ul>	1	40
	<ul style="list-style-type: none"> <li>• (Calcium Metabolism</li> </ul>	1	41
	<ul style="list-style-type: none"> <li>• Pancreas,</li> </ul>	1	42
	<ul style="list-style-type: none"> <li>• Supra renal Glands.</li> </ul>	1	43
	<ul style="list-style-type: none"> <li>• Alteration in disease</li> </ul>	1	44
<b>Nervous System</b>	<ul style="list-style-type: none"> <li>• Functions of neurologia and neurons</li> </ul>	1	45
	<ul style="list-style-type: none"> <li>• Functions of brain, spinal cord, and cranial and spinal nerves.</li> </ul>	2	46-47
	<ul style="list-style-type: none"> <li>• Cerebrospinal fluid---composition, circulation and function</li> </ul>	1	48
	<ul style="list-style-type: none"> <li>• Reflex arc, reflex action and reflexes Muscle tone and posture</li> </ul>	1	49
	<ul style="list-style-type: none"> <li>• Autonomic functions ---Pain: somatic, visceral and referred</li> </ul>	1	50
	<ul style="list-style-type: none"> <li>• Autonomic learning and biofeedback</li> </ul>	1	51
	<ul style="list-style-type: none"> <li>• Alterations in disease</li> </ul>	1	52

<b>Sensory Organs</b>	• Functions of skin, eye, ear, nose & tongue.	2	53-54
	• Alterations in disease	2	55-56
<b>Skeletal system</b>	• Bone formation and growth	2	57-58
	• Bones	1	59
	• Joints	1	60

**Paper -1, Subject -Anatomy, Duration -1.5HRS**

**EVALUATION:**

<b>SR NO</b>	<b>EXAMINATION</b>	<b>MARKS</b>	<b>TOTAL</b>
1.	Unit test I (combined with anatomy 12 marks)	13	150
2.	Unit test II ( combined with anatomy 12 marks)	13	
3.	Prelim ( combined with anatomy 37 marks))	38	
4.	Journal	25	
5.	External Assessment (Theory) (University Examination) ( combined with anatomy 37 marks)	38	100
6.	Internal Assessment	25	

**REFERENCES:**

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