



LESSON PLAN

Faculty Name: Dr. Parveen Kr Goyal

Class: B. Pharmacy- Ist semester

Subject: Human Anatomy And Physiology-I

Subject Code: BP101T

Scope of the Subject: This subject is designed to impart fundamental knowledge on the structure and functions of the various systems of the human body. It also helps in understanding both homeostatic mechanisms. The subject provides the basic knowledge required to understand the various disciplines of pharmacy.

Course outcome: Upon completion of this course the student should be able to:

- Explain the gross morphology, structure and functions of various organs of the human body.
- Describe the various homeostatic mechanisms and their imbalances.
- Identify the various tissues and organs of different systems of human body.
- Perform the various experiments related to special senses and nervous system.
- Appreciate coordinated working pattern of different organs of each system

Number of Lectures: 45 + 5

Each lecture: 01 hour

Lecture No.	Particular	Remark/Date
Unit I		
Module 1: Introduction to human body		
1.	Definition and scope of anatomy and physiology, levels of structural organization and body systems	
2.	Basic life processes, homeostasis, basic anatomical terminology.	
Module 2: Cellular level of organization		
3.	Structure and functions of cell, transport across cell membrane	
4.	Cell division, cell junctions	
5.	General principles of cell communication	
6.	Intracellular signaling pathway activation by extracellular signal molecule, Forms of intracellular signaling: a) Contact-dependent b) Paracrine c) Synaptic d) Endocrine	
Module 3: Tissue level of organization		
7.	Classification of tissues, structure, location and functions of epithelial tissues.	
8.	Structure, location and functions of muscular tissues.	
9.	Structure, location and functions of nervous tissues.	

10.	Structure, location and functions of connective tissues.	
Unit II		
Module 4: Integumentary system		
11.	Structure of skin	
12.	Functions of skin	
Module 5: Skeletal system		
13.	Divisions of skeletal system, types of bone	
14.	Salient features and functions of bones of axial skeletal system	
15.	Salient features and functions of bones of appendicular skeletal system	
16.	Organization of skeletal muscle	
17.	Physiology of muscle contraction	
18.	Neuromuscular junction	
Module 6: Joints		
19.	Structural and functional classification	
20.	Types of joints movements and its articulation	
Unit III		
Module 7: Nervous system		
21.	Organization of nervous system, neuron, neuroglia	
22.	Classification and properties of nerve fibre	
23.	Electrophysiology, action potential	
24.	Nerve impulse, receptors	
25.	Synapse, neurotransmitters	
26.	Central nervous system: Meninges, ventricles of brain, cerebrospinal fluid.	
27.	Structure and functions of brain (cerebrum)	
28.	Structure and functions of brain (brain stem, cerebellum)	
29.	Spinal cord (gross structure, functions of afferent and efferent nerve tracts)	
30.	Reflex activity	
Unit IV		
Module 8: Peripheral nervous system		
31.	Classification of peripheral nervous system:	
32.	Structure and functions of sympathetic and parasympathetic nervous system.	
33.	Origin and functions of spinal nerves.	
34.	Origin and functions of cranial nerves.	
Module 9: Special senses		
35.	Structure and functions of eye and its disorders.	
36.	Structure and functions of ear and its disorders.	
37.	Structure and functions of nose and its disorders.	
38.	Structure and functions of tongue and its disorders.	
Unit V		
Module 10: Endocrine system		
39.	Classification of hormones	

40.	mechanism of hormone action	
41.	Structure and functions of pituitary gland and disorders	
42.	Structure and functions of thyroid gland, parathyroid gland and their disorders.	
43.	Structure and functions of adrenal gland and disorders.	
44.	Structure and functions of pancreas and disorders.	
45.	Structure and functions of pineal gland, thymus and their disorders.	
Revision		
46.	Revision and assignment of Unit I	
47.	Revision and assignment of Unit II	
48.	Revision and assignment of Unit III	
49.	Revision and assignment of Unit IV	
50.	Revision and assignment of Unit V	

Teacher in-charge

HOD

Principal