FACULTY OF SCIENCE & HUMANITIES

PGDMLT (Semester-1)

In Effect from Academic Year 2020-21

Subject Code: 1SC2060101	**Subject Title: HUMAN ANATOMY & PHYSIOLOGY**
COURSE TYPE: CORE COURSE	-----

Course Objective: To make the students aware about the various organs of human body and its physiology.

Teaching scheme (hours) per week		**Credit**			**Theory Marks**		**Practical Marks**		**Total**
Theory	**Practical**	**Theory**	**Practical**	**Total**	**Uni. Assessment**	**Cont. Assessment**	**Uni. Assessment**	**Cont. Assessment**	
4	**--**	**4**	**--**	**4**	**60**	**40**	**--**	**--**	**100**

Unit	Content	Lectures	Weightage
1	**Introduction:** • Different systems of Human body, Cell- Structure & function; Body Tissue their functions, Common anatomical terms (Anterior/Ventral, lateral, medial, median, posterior/dorsal etc.), Anatomical Position & Planes (Supine, prone, recumbent, lithotomy) planes- coronal, sagittal. **Skeletal system:** • Bones: Number, Type and Classification. Joints: Type and Classification. **Muscular system:** • Types of muscular tissue. Property and function of muscular tissue. Muscle metabolism	15	25%
2	**Digestive (Alimentary) system:** • General features and functions of organs involved in digestive system. Composition of gastric juice, pancreatic juice, bile and digestion of food by different Enzymes, Absorption and Defecation. • Introduction to bowl diseases like - Gastric ulcer, Carcinoma, Inflammatory Bowel disease, Liver – Cirrhosis Cholelithiasis and Pancreatitis. **Respiratory system:** • General features of different parts of the respiratory system. Functions played by different parts of respiratory system. • Introduction to Respiratory Diseases like Tuberculosis, Pneumonia, Asthma, ARDS, Respiratory failure, carcinoma.	15	25%
3	**Circulatory system:** • Systemic circulation of blood. Structural and functional features of heart. Lymphatic & reticuloendothelial system. • Blood pressure, factors affecting it, cardiovascular diseases- hypertension, Congestive Cardiac Failure, Ischemic heart disease. **Nervous system:** • Classification of nervous system. Structure & function of parts of brain. Structure & function of spinal cord. • Introduction to central nervous system diseases - Stroke, Alzheimer's disease, Epilepsy, Myasthenia Gravis Parkinson's disease.	15	25%
4	**Excretory and Reproductive systems:** • General features & functions of excretory system. Parts of male reproductive	15	25%

	system and their functions. Parts of female reproductive system and their functions. **Endocrine system:** • Definition of endocrine gland. Different endocrine glands and hormones secreted by them. Major actions hormones secreted by endocrine system.		

Learning Outcome: The students will be able to understand organization of organs in human body, their functions and some diseases associated with the few organs.

Reference Books:

1. Handbook of Christen Medical Association, India (CMAI) Medical Laboratory Technology- Robert H. Carman. 2nd edn. CMAI, New Delhi.
2. Text book of Medical Laboratory Technology, P.B. Godkar 2nd Edn. 2003 Bhalani Publication.
3. Human Physiology (Vol. I, IV) C.C. Chatterjee 1992. 11th Edn. Medical Allied Agencies, Calcutta.
4. Human Anatomy (3- Vol) B.D. Chaurasia. 1995 .3rd Edn. CBS. New Delhi.
5. Cunningham's Manual of Practical Anatomy (3- Vol) Cunningham 1986 15th ELBS Oxford University.
6. Tortora and Derrickson. Principles of Anatomy and Physiology. John Wiley & Sons, Inc.
7. Ghai C. L. Textbook of Practical Physiology. Jaypee Publishers, New Delhi.
8. Srinageswari K. and Sharma R. Practical workbook of Human Physiology. Jaypee Publishers, New Delhi.
9. Goyal R. K. Elements of Human Anatomy Physiology & Health Education. B. S. Shah Publishers.