



**SARDAR PATEL UNIVERSITY**  
Vallabh Vidyanagar, Gujarat  
(Reaccredited with 'A' Grade by NAAC (CGPA 3.25))  
Syllabus with effect from the Academic Year 2021-2022

**P.G.Diploma in Dietetics**  
**Semester-I**

Course Code	PH1CPGDD53	Title of the Course	Human Physiology-I
Total Credits of the Course	04	Hours per Week	04

Course Objectives	<ul style="list-style-type: none"><li>• Understanding various tissues and organs of the body and their functions.</li><li>• Different systems of the body and their functions with special reference to the digestion, absorption, transport and uptake of nutrients and elimination of waste products.</li></ul>
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Course content		
Unit	Description	Weightage %
1	<b>Tissues</b> <ul style="list-style-type: none"><li>• Structure, physiological properties and function of epithelial tissue.</li><li>• Structure, physiological properties and function of Muscle tissue.</li><li>• Structure, physiological properties and function of Nervous tissue.</li><li>• Structure, physiological properties and function of skeletal tissue (bone and cartilage).</li></ul>	20%
2	Blood and Circulatory System – Blood and its composition, Functions of each constituent of blood, Blood groups, Blood transfusion and its importance, Coagulation of blood, Blood vessels, Structure and functions of heart, Blood pressure, heart rate, Cardiac output and their regulation	20%
3	Lymphatic System – Lymph, Lymph glands and functions, Spleen – Structure and Functions. Respiratory System – Organs, Structure and Functions, Mechanism of Respiration, Chemical Respiration.	20%
4.	Digestive System – Structure and Functions of Alimentary tract. Functions of various secretions and juices – Saliva, Gastric, Bile, Intestinal, Pancreatic. Functions of enzymes in digestion.	20%



	Digestion of nutrients – Proteins, Fats, Carbohydrates. Common problems of Digestive tract – Vomiting, Constipation, Diarrhea.	
5.	Excretory System – Structure and Functions of (a) Kidney (b) Ureter (c) Bladder (d) Skin. Urine - Formation of urine, Composition of normal and abnormal urine. Role of excretory system in homeostasis, fluid balance, Regulation of body temperature.	20%

Teacher Learning Methodology	Classroom lectures (Blackboard/Power Point Presentations), Discussion on recent updates with related examples.
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Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage %
1.	Internal Written examination	15%
2.	Internal Continuous Assessment in the form of Viva voce, Quizzes, Seminars, Assignments, Attendance	15%
3.	University Examination	70%

Note: Students will have to score a minimum of 40 % to pass the course.

Course Outcomes	
1.	Get knowledge of various physiological changes of different organs system in human body.

Suggested References:	
Sr. No.	References
1.	Mukherjee K L (1988, Medical Laboratory Techniques – A procedure manual for routine diagnostic tests, New Delhi: Tata McGraw Hill Publishing Co. Ltd.
2.	Ross and Wilson: Anatomy and Physiology in Health an Illness, 8 <sup>th</sup> edition Church Hill Livingstone, N.Y.
3.	Gyton (1996): Test Book of Medical Physiology, 9 <sup>th</sup> Edition, Prism Books Pvt. Ltd., W.B Sanders Company, USA.
4.	Chaurasia B.D (1992), Human Anatomy, ed Singh Indorbir, New Delhi: CBS publishers & distributors
5.	Chatterjee, C.C. (1980): Human Physiology: Medical Allied Agency, Calcutta

