


Name:			
Enrolment No:			
UPES End Semester Examination, December 2024			
Course: Human Anatomy and Physiology		Semester : I	
Program: M.Sc. in Nutrition and Dietetics		Duration : 3 Hours	
Course Code: HSND7017		Max. Marks : 100	
Instructions: Draw neat labelled diagrams wherever necessary			
	Section A	Marks	COs
	Short answer questions/ MCQ/T&F (20Qx1.5M= 30 Marks)		
Q 1	Define Epidemiology.	1.5	CO1
Q 2	Quote one main difference between endemic and epidemic outbreak.	1.5	CO1
Q 3	The Somatic nervous system controls skeletal and voluntary movements- True/False.	1.5	CO1
Q 4	List the two types of nervous tissue.	1.5	CO1
Q 5	Axon receive and carry information- True/False.	1.5	CO1
Q 6	State the exocrine functions of the pancreas.	1.5	CO2
Q 7	List two functions of the small intestine.	1.5	CO2
Q 8	Define saliva and list its main components.	1.5	CO2
Q 9	Chemical digestion begins in the mouth and involves the physical breakdown of food into smaller pieces without altering its chemical structure- True/False.	1.5	CO2
Q 10	Define Crohn's disease.	1.5	CO2
Q 11	Identify and list the hollow organs that make up the gastrointestinal tract.	1.5	CO2
Q 12	The cardiovascular system is the transport system of body comprising of heart and blood vessels- True/ False	1.5	CO3
Q 13	Enumerate two main functions of CVS.	1.5	CO3

Q 14	The heart do not ensure adequate blood pressure in the body- True/False.	1.5	CO3
Q 15	Identify and list the main parts of the human heart.	1.5	CO3
Q 16	State the primary differences in function between the oropharynx and laryngopharynx.	1.5	CO4
Q 17	Define the tidal volume in lung capacity.	1.5	CO4
Q 18	Enumerate two main functions of kidney.	1.5	CO4
Q 19	Identify the hormones released by pancreas.	1.5	CO4
Q 20	Endocrine function of pancreas helps in digestion-True/False	1.5	CO4
Section B (4Qx5M=20 Marks)			
Q 1	Briefly explain the structure and functions of a synapse. Compare and contrast chemical and electrical synapse.	5	CO1
Q2	Describe the functions of each type of blood cell and explain how they contribute to the body's overall health.	5	CO3
Q3	Describe the function of liver and list its disorders and diseases.	5	CO2
Q4	Briefly explain the structure, functions and disorders of thyroid glands.	5	CO2
Section C (2Qx15M=30 Marks)			
Q 1	Explain how blood coagulation would occur if there were a small injury to a blood vessel. Detail how each step of the coagulation process would respond to stop bleeding.	15	CO3
Q2	Compare and discuss in detail the roles of sodium and potassium ions in the generation of an action potential and describe its different stages. Explain the structure and parts of a neuron.	15	CO1
Section D (2Qx10M=20 Marks)			
Q 1	Create a detailed diagram illustrating the structure of the heart, labeling each chamber, valve, and major vessel. Explain how each part of the heart contributes to its function as a circulatory pump.	10	CO3
Q2	Explain the structure of lungs and mechanism of breathing.	10	CO4