

Name:			
Enrolment No:			
UPES End Semester Examination, December 2025			
Program Name: B Pharm Course Name: HAP-I Course Code: BP101T No. of page(s): 2		Semester : 1st Time : 3 hrs Max. Marks : 75	
Instructions: Read all questions carefully.			
SECTION A (20Qx1M=20 Marks)			
S. No.	Short answer questions/ MCQ/T&F/ Fill in the blanks	Marks	COs
Q 1	Define homeostasis.	1	CO1
Q 2	Levels of structural organization include cells, tissues, organs, and _____.	1	CO1
Q 3	Diffusion is a process of movement of molecules from: a) Low to high concentration b) High to low concentration c) Same to same d) None	1	CO1
Q 4	Skeletal muscle is involuntary in nature. (T/F)	1	CO2
Q 5	What is apoptosis?	1	CO1
Q 6	Hemoglobin is present inside _____ cells.	1	CO3
Q 7	Eosinophils increase during: a) Viral infection b) Allergic reaction c) Bleeding d) Fungal infection	1	CO3
Q 8	Define lymph.	1	CO3
Q 9	Lymphatic system drains excess interstitial fluid. (T/F)	1	CO3
Q 10	Optic nerve is also known as Cranial Nerve No. _____.	1	CO4
Q 11	Define pulse.	1	CO5
Q 12	The pacemaker of the heart is: a) AV node b) Purkinje fibers c) SA node d) Bundle of His	1	CO5
Q 13	Enlist the no. of bones present in axial skeleton.	1	CO2
Q 14	Synovial joints allow free movement. (T/F)	1	CO2
Q 15	The largest WBC is: a) Neutrophil b) Monocyte c) Basophil d) Eosinophil	1	CO3
Q 16	Define articulation.	1	CO2
Q 17	Write the normal range of heartbeat in adult human.	1	CO5
Q 18	ECG stands for: _____.	1	CO5
Q 19	Ventricles contract during systole. (T/F)	1	CO5

Q 20	The cardiac cycle lasts about: a) 1 sec b) 0.8 sec c) 0.5 sec d) 2 sec	1	CO5
SECTION B (20 Marks) (2Qx10M=20 Marks) Attempt 2 Question out of 3			
Q 1	Write a note on transport across cell membrane.	10	CO2
Q 2	Describe the physiology of muscle contraction with the role of neuromuscular junction.	10	CO2
Q 3	Explain conduction system of the heart and regulation of heartbeat by autonomic nervous system.	5+5	CO5
SECTION-C (35 Marks) (7Qx5M=35 Marks) Attempt 7 Question out of 9			
Q 1	Describe epithelial tissue with suitable examples.	5	CO1
Q 2	Explain functions of skeletal system.	5	CO2
Q 3	Write short note on synaptic transmission.	5	CO4
Q 4	Classify joints and describe synovial joints.	2+3	CO2
Q 5	Explain the mechanism of cell communication.	5	CO3
Q 6	Describe the structure of ear.	5	CO4
Q 7	Write short note on parasympathetic nervous system.	5	CO4
Q 8	Explain cardiac output and factors affecting it.	2.5+2.5	CO5
Q 9	Describe structure and functions of arteries, veins and capillaries.	5	CO5