JHARKHAND Rai University
RANCHI

MODEL PAPER FOR SUBJECTIVE QUESTIONS
End Semester (Semester I) Examination, Dec-2025

Program: B. Pharm
Subject: Human Anatomy and Physiology-I
Subject Code: BP101T

Unit I			
S No.	**Questions**	**CO**	**Bloom's Taxonomy Level**
Section II			**Questions for 5 marks**
1	Briefly describe the structure and function of different muscular tissues.	CO1	Understand
2	Comments on cell junction and their different types.	CO1	Remember
3	Depict the cycle of somatic cell division and elaborate itself.	CO1	Understand
4	Write a note on homeostasis and associate it with feedback mechanism.	CO1	Apply
5	Enlist major body cavities along with their anatomical position	CO1	Understand
6	Give the classification of connective tissue	CO1	Remember
Section III			**Questions for 10 marks**
7	Explain the structure composition and function of different types of cartilage	CO1	Evaluate
8	Describe the cellular structure and its different organelles with well labelled diagram.	CO1	Evaluate
9	What are the different forms of intracellular signaling process? Explain their mechanism.	CO1	Analyze
10	Discuss different systems of human body including their specific components and functions.	CO1	Evaluate
Unit II			
S No.	**Questions**	**CO**	**Bloom's Taxonomy Level**
Section II			**Questions for 5 marks**
11	Describe steps-based physiology of skeletal muscle contraction.	CO2	Apply
12	Classify joints on the basis of structure and function, separately.	CO2	Understand
13	Highlights the anatomical structure of vertebral column.	CO2	Remember
14	Write a short note on the neuromuscular junction (NMJ).	CO2	Remember
15	Define the synovial joints and their different structural components.	CO2	Understand
16	Express the anatomical structure of whole skull bone.	CO2	Apply
Section III			**Questions for 10 marks**

17	Explain the structural and histological composition of bone in addition draw their proper figure wherever applicable.	CO2	Analyze
18	Describe the basic structure and function of skin in details along with their accessory parts with well labelled diagram.	CO2	Evaluate
19	Describe the organization of skeletal muscle and also explain the structure of muscle fiber in details.	CO2	Evaluate
20	Draw the whole human skeleton systems and discuss the appendicular skeleton with their proper anatomical explanation.	CO2	Evaluate
21	What is the composition of axial skeleton? Describe the anatomical structure of each bone.	CO2	Evaluate
22	Discuss various types of joint on the basis of anatomical structure with the help of suitable example.	CO2	Evaluate
Unit III			
S No.	**Questions**	**CO**	**Bloom's Taxonomy Level**
Section II			**Questions for 5 marks**
23	What is ABO group system? Write a short note on blood groups.	CO3	Understand
24	How does the blood group matching procedure is carried out? Explain briefly.	CO3	Remember
25	Write the composition and function of lymph.	CO3	Understand
26	What do you understand about reticuloendothelial system (RES)? Mention its components and functions.	CO3	Remember
27	Enumerate the different parts of lymphatic system. Show the complete flow pattern of lymph.	CO3	Apply
28	What do you mean by "Rh factor"? What could be its significance in blood transfusion?	CO3	Apply
Section III			**Questions for 10 marks**
29	Discuss the term hemopoiesis. Elaborate all the steps involved in the erythropoiesis and fate of the RBCs.	CO3	Evaluate
30	Describe the mechanism of blood coagulation including intrinsic, extrinsic and common pathways.	CO3	Analyze
31	Explain the term hemostasis. Discuss all the three sequential mechanisms involved in hemostasis.	CO3	Evaluate
32	Describe the anemic conditions, its causes and their different types in details.	CO3	Analyze
33	Elaborate the physical properties, functions and composition of blood along with characteristic features of RBCs	CO3	Evaluate
Unit IV			
S No.	**Questions**	**CO**	**Bloom's Taxonomy Level**
Section II			**Questions for 5 marks**
34	Highlights the organization of peripheral nervous system	CO4	Remember
35	What do you know about autonomic nervous system?	CO4	Understand
36	Differentiate characteristics of sympathetic and parasympathetic divisions.	CO4	Apply
37	Enlist the name, type and number of all cranial nerves.	CO4	Remember
38	What are the sensory cranial nerves? Elaborate the	CO4	Remember

	characteristic features of anyone.		
39	Justify the total number and anatomical location of plexuses in the human body.	CO4	Apply
Section III			**Questions for 10 marks**
40	Give the detail account of anatomical structure of ear and physiology of hearing phenomenon.	CO4	Analyze
41	Enlighten about the anatomy of olfactory organ including physiology of smell perception.	CO4	Analyze
42	Describe the structural organization and functionality of organ responsible for gustation process.	CO4	Evaluate
43	Elaborate the accessory and main anatomical structure of eye along with the physiology of vision.	CO4	Analyze
44	Enlist the disorder of sense organs. Discuss the pathological condition and symptoms of at least two disorders from each (ear and eye).	CO4	Evaluate
Unit V			
S No.	**Questions**	**CO**	**Bloom's Taxonomy Level**
Section II			**Questions for 5 marks**
45	Express the complete blood circulation phenomenon in the human body through flow diagram.	CO5	Apply
46	Differentiate the systemic and pulmonary blood circulation through proper depiction.	CO5	Understand
47	Discuss the following terminologies (a) Cardiac output (b) Heart sound (c) Blood pressure	CO5	Remember
48	How the blood pressure is regulated? Explain with the help of a flow chart.	CO5	Apply
49	What is cardiac cycle? Briefly elaborate all the three stages.	CO5	Understand
Section III			**Questions for 10 marks**
50	Discuss the anatomical structure of heart with the help of neat labelled diagram of heart	CO5	Evaluate
51	Draw an electrocardiogram (ECG). Explain its all three waves and intervals. Describe the ECG interpretation in each aspect.	CO5	Evaluate
52	What could be the cardiovascular system associated disorders? Discuss the anatomical alteration, symptom and risk factor for each condition.	CO5	Analyze

Course Outcomes (CO): On the successful completion of the Course, students will be able to: -

CO1: Explain the gross morphology, structure and functions of various organs of the human body.

CO2: Identify the various tissues and organs of different systems of human body.

CO3: Describe the various homeostatic mechanisms and their imbalances.

CO4: Perform the various experiments related to special senses and nervous system.

CO5: Appreciate coordinated working pattern of different organs of each system.

Summary Sheet

CO Wise		
CO	Q. No	Marks
CO1:	(1, 2, 3, 4, 5, 6) + (7, 8, 9, 10)	30 + 40 = 70
CO2:	(11, 12, 13, 14, 15, 16) + (17, 18, 19, 20, 21, 22)	30 + 60 = 90
CO3:	(23, 24, 25, 26, 27, 28) + (29, 30, 31, 32, 33)	30 + 50 = 80
CO4:	(34, 35, 36, 37, 38, 39) + (40, 41, 42, 43, 44)	30 + 50 = 80
CO5:	(45, 46, 47, 48, 49) + (50, 51, 52)	25 + 30 = 55
Total Marks: 375		
Unit Wise		
Unit	Q. No	Marks
Unit 1:	1, 2, 3, 4, 5, 6, 7, 8, 9,10	70
Unit 2:	11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22	90
Unit 3:	, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33	80
Unit 4:	34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44	80
Unit 5:	, 45, 46, 47, 48, 49, 50, 51, 52	55
Total Marks: 375		
Blooms Taxonomy Level (BTL) Wise		
BTL	Q. No	Marks
LOT = 1,2,3,4,5,6,11,12,13,14,15,16,23,24,25,26,27,28,34,35,36,37,38,39,45,46,47,48,49		145
HOT = 7,8,9,10,17,18,19,20,21,22,29,30,31,32,33,40,41,42,43,44,50,51,52		230
Total Marks: 375		

Dr. S. M. Abdullah
Prepared By:

Ms. Gauri Baraik
Reviewed By:

Disclaimer: -This is a Model Question Paper. The Question in End term examination will differ from the Model Paper. This Model paper is meant for practice only.