

**FIRST SEMESTER FYUGP EXAMINATION NOVEMBER 2024****MAJOR****ZOO1CJ101 AN OVERVIEW OF HUMAN PHYSIOLOGY: LIFE SUSTAINING SYSTEMS****Time : 1 Hrs 30 Mins****Maximum Marks : 70**

BL - Bloom's Taxonomy Level (1 to 6)

CO - Course Outcome

Section A		Ceiling Marks : 24		
Answer all questions. Each carries 3 marks.				
No.	Question	M	BL	CO
1.	Define human physiology and its importance.	3	1	CO1 CO2 CO3 CO6
2.	List the main branches of human physiology	3	1	CO1 CO2
3.	Illustrate the role of platelets in haemostasis with a diagram.	3	3	CO3
4.	Discuss the impact of blood clotting disorders on daily life.	3	5	CO3
5.	Assess the impact of lifestyle choices on the development of arteriosclerosis.	3	5	CO3
6.	Differentiate between Myelinated and unmyelinated neurons.	3	2	CO4
7.	If someone experiences frequent numbness in their hands, how might you apply your knowledge to suggest possible causes?	3	3	CO4
8.	Describe the changes in muscle physiology during rigor mortis.	3	2	CO1 CO4
9.	How might dehydration affect the process of urine formation?	3	3	CO6
10.	Design a labeled figure that visually demonstrates the counter-current multiplier and exchanger processes in the nephron.	3	6	CO6
Section B		Ceiling Marks : 36		
Answer all questions. Each question carries 6 marks.				
No.	Question	M	BL	CO
11.	Explain the importance of anthropometric measurements in assessing health.	6	2	CO1
12.	Analyze the effects of high altitude on the respiratory system and how the body adapts over time.	6	4	CO2
13.	Evaluate the effectiveness of different adaptive mechanisms for respiratory problems in newborns versus older adults	6	5	CO2
14.	Integrate your knowledge of blood components to explain how deficiencies in certain elements can lead to clotting disorders.	6	6	CO3
15.	Write a note on synaptic transmission	6	2	CO4
16.	Analyze the role of pancreatic and liver secretions in digestion, focusing on how they interact to facilitate the breakdown and absorption of nutrients.	6	4	CO1
17.	Evaluate the effectiveness of hormonal treatments in managing obesity and other nutritional disorders. Provide examples.	6	5	CO1
18.	Compare and contrast the processes of filtration, reabsorption, and secretion in the nephron.	6	4	CO6
Section C		Answer any 1 question. Each carries 10 marks. (1x10=10 marks)		
No.	Question	M	BL	CO
19.	Demonstrate how lifestyle changes can be applied to manage hypertension.	10	3	CO3
20.	Give an overview of the EM structure of myofilaments with suitable diagrams	10	2	CO1 CO4