

D 132492

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Name.....

Reg. No.....

**FIRST SEMESTER (CUFYUGP) DEGREE EXAMINATION
NOVEMBER 2025**

Zoology

ZOO 1CJ 101—AN OVERVIEW OF HUMAN PHYSIOLOGY : LIFE SUSTAINING
SYSTEMS

(2024 Admission onwards)

Time : Two Hours

Maximum : 70 Marks

Section A*All questions can be answered.**Each question carries 3 marks.**Ceiling : 24 marks.*

1. Describe any *two* vital organs in human body.
2. Provide a brief overview of COVID-19.
3. Define residual volume and explain its significance in respiration.
4. Describe the ABO blood grouping system and its importance in medical practice.
5. Outline the role of neurotransmitters.
6. What is Summation ?
7. Describe the neuromuscular junction and its function in muscle contraction.
8. Write a brief note on Bulimia Nervosa.
9. Discuss the nutritional requirements during pregnancy.
10. Explain the Ornithine cycle.

Section B*All questions can be answered.**Each question carries 6 marks.**Ceiling : 36 marks.*

11. Define anthropometry and explain how it is used to assess human physiology and health.
12. Elaborate on the mechanism of carbon dioxide transport in the blood.

Turn over

13. Describe the process of apheresis and discuss its clinical applications.
14. Explain the different types of neurons based on its structure and function.
15. Describe the ultrastructure of skeletal muscle.
16. Outline the hormonal regulation of digestion..
17. Discuss three common nutritional disorders.
18. Explain the counter-current mechanism involved in urine concentration.

Section C

*Answer any **one** question.*

The question carries 10 marks.

19. Describe the pacemaker and the conducting system of the heart., explaining how they regulate the cardiac cycle
20. Discuss the structure of synapse, the process of synaptic transmission and the factors that influence synaptic delay and fatigue.

(1 × 10 = 10 marks)