

বিদ্যাসাগর বিশ্ববিদ্যালয় VIDYASAGAR UNIVERSITY

Question Paper

B.Sc. Honours Examinations 2022

(Under CBCS Pattern)

Semester - IV

Subject: PHYSIOLOGY

Paper: C 10-T

Respiratory Physiology

Full Marks: 40
Time: 2 Hours

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

Group-A

1	W' 1 1 1 C 1 C 1	5
1.	Write down the excretory functions of respiratory system.	3

Answer any *four* of the following questions:

- 2. What is apnoea? Write about hypercapnia and hypocapnia. 3+2
- 3. What is pulmonary surfactant? How does pulmonary surfactant cause alveolar stabilization? 2+3
- 4. What do you mean by FEV1? State the clinical significance of pulmonary function test. 2+3
- 5. Briefly discuas about neural control of respiration. 5
- 6. How can an individual compensate the high altitude hypoxia? What are the consequences of hyperoxia? 3+2

P.T.O.

 $5 \times 4 = 20$

Group-B

Answer any two of the following questions:

 $10 \times 2 = 20$

- 7. Describe the anatomy of lung with suitable diagram. State the method of transport of CO₂ in blood. 5+5
- 8. Write down the name of chemoreceptors of respiratory system. How do these receptors regulate the respiration? Mention the factors which may affect these chemoreceptors. What are the methods of artificial respiration?

 2+4+2+3
- 9. What is vital capacity? State the factors affect the vital capacity. Mention the significance of vital capacity. 1+4+2+3
- 10. Define hypoxia. Write the probable causes and symptoms of hypoxia. Briefly discuss about the effects of hypoxia on respiration. Describe the mechanism of inspiration.

1+3+2+4