

B.Sc. 4th Semester (Honours) Examination, 2021

PHYSIOLOGY

Course ID: 42513

Course Code: SH/PHY/403/C-10(T)

Course Title: Respiration

Time: 1 Hour 15 Minutes

Full Marks: 25

The figures in the margin indicate full marks.

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

1. Answer any five questions from the following:

1×5=5

- (a) State the function of dust cells.
- (b) What is vital capacity?
- (c) Mention the importance of Hering-Breuer reflex.
- (d) What is bucket handle movement?
- (e) What is lung compliance?
- (f) Name the surfactant present in the lungs.
- (g) What is respiratory acidosis?
- (h) What do you mean by physiological dead space?

2. Answer any two questions from the following:

5×2=10

- (a) What is decompression sickness? Mention its causes. How it is prevented? 1+2+2= 5
- (b) Define chloride shift. Write the importance of chloride shift. 2+3 =5
- (c) Briefly mention different occupational respiratory disorders. What is COPD?
4+1=5
- (d) What is hypoxia? Classify different types of hypoxia. 1+4=5

3. Answer any one question from the following:

10×1=10

- (a) What is O₂ dissociation curve? How CO₂ is transported in blood? Why CO₂ acts as a main regulator of respiration? 2+6+2 =10
- (b) Name the muscles, nerves and ribs involved in inspiration. Mention the role of muscles in inspiration. Define artificial respiration. State its significance.

1+1+1+3+1+3=10