

B.Sc. Semester-IV Examination, 2022-23**PHYSIOLOGY [Honours]**

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 right-hand margin indicate marks.**Candidates are required to give their answers in their own words as far as practicable.*1. Answer any **five** questions of the following:

1×5=5

- What is hypercapnia.
- Define residual volume with its normal value.
- What do you mean by cyanosis?
- Why myoglobin has greater affinity for O₂ than haemoglobin?
- Write any two features of dyspnoea.
- What is Haldane effect?
- What do you mean by respiratory acidosis?
- Mention the definition of tidal volume.

2. Answer any **two** questions of the following:

5×2=10

- What do you mean by Hamburger phenomenon? Write the importance of chloride shift. 2+3
- Discuss in brief about lung surfactant. What is FEV₁. 4+1
- What is hypoxia? Discuss in brief about 'lung compliance'. 2+3
- What do you mean by physiological and anatomical dead space? Mention two conditions which increase physiological dead space. 3+2

3. Answer any **one** question of the following:

10×1=10

- What is COPD? Describe about transport of CO₂ in blood. State the factors regulating CO₂ transport. 2+6+2
- What do you mean by bucket handle movement of ribs? Write the process of artificial breathing and state its significance. 2+(6+2)
