



'সমানো মন্ত্র: সমিতি: সমানী'

**UNIVERSITY OF NORTH BENGAL**  
B.Sc. Honours 4th Semester Examination, 2023

**CC10-PHYSIOLOGY**

Time Allotted: 2 Hours

Full Marks: 40

*The figures in the margin indicate full marks.*

**GROUP-A**

1. Answer any **five** of the following: 1×5 = 5
- (a) What is Bohr effect?
  - (b) What is dyspnea for air hunger?
  - (c) What is anatomical dead space?
  - (d) Define intrathoracic pressure.
  - (e) What is asphyxia?
  - (f) What is Residual Volume (RV)?
  - (g) What is spirometer?
  - (h) What is cough reflex?
  - (i) Define lung compliance.
  - (j) What do you mean by expiratory reserve volume?

**GROUP-B**

**Answer any three of the following** 5×3 = 15

- 2. Explain Hering-Breuer reflex. 5
- 3. Write a short note on lung function test. 5
- 4. What is CO<sub>2</sub> dissociation curve? Define edema. 3+2
- 5. State the different types of hypoxia. 5
- 6. Describe the exchange of respiratory gases at tissue level. 5
- 7. Write briefly the peculiarities of pulmonary circulation. 5

**GROUP-C**

**Answer any two of the following** 10×2 = 20

- 8. (a) Is there any difference between shape of red blood cells of artery and vein? 2
- (b) Discuss the chemical regulation of respiration. Where is the respiratory centre located? 7+1
- 9. What is intrapleural pressure? Explain its normal value, cause, measurement and significance. 2+2+2+2+2
- 10. Describe about respiratory movements of thoracic cage and lungs. 5+5
- 11.(a) Write a brief note on ventilation perfusion ratio. 3
- (b) Write a short note on respiratory quotient. 3
- (c) What is hypocapnia? Describe its cause and effects. 1+1+2

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