## **ARJUNA (NEET)**

## **Breathing and Exchange of Gases**

**DPP-04** 

- 1. Hemoglobin that is bonded to carbon monoxide and therefore cannot transport oxygen, is called
  - (A) Carboxyhemoglobin
  - (B) Methemoglobin
  - (C) Reduced hemoglobin
  - (D) Carbaminohemoglobin
- **2.** Which of the following does not shift the oxyhaemoglobin dissociation curve to the right?
  - (A) Increase pH
  - (B) Increased carbon dioxide
  - (C) Increased temperature
  - (D) Increased 2, 3-DPG
- **3.** The partial pressure of oxygen is equal to
  - (A) Atmospheric air and Alveoli
  - (B) Alveoli and oxygenated blood
  - (C) Alveoli and Deoxygenated blood
  - (D) Deoxygenated blood and Tissues
- **4.** The solubility of carbon dioxide is about times higher than that of oxygen across the respiratory membrane.
  - (A) 20-25
- (B) 25-50
- (C) 125-150
- (D) 200-250
- **5.** The partial pressure of oxygen in the alveoli of the lungs is
  - (A) equal to that in the blood
  - (B) more than that in the blood
  - (C) less than that in the blood
  - (D) less than that of carbon dioxide

- **6.** A large proportion of oxygen is left unsused in the human blood even after its uptake by the body tissues. This O<sub>2</sub>
  - (A) raises the  $P_{CO2}$  of blood to 75 mm of Hg
  - (B) is enough to keep oxyhaemoglobin
  - (C) helps in relasing more  $O_2$  to the epithelial tissues
  - (D) acts as a reserve during muscular exercise
- **7.** Oxyhemoglobin dissociates into oxygen and deoxyhaemoglobin at
  - (A) low O<sub>2</sub>, pressure in tissue
  - (B) high O<sub>2</sub>, pressure in tissue
  - (C) equal  $O_2$ , pressure inside and outside tissue
  - (D) all times irrespective of O<sub>2</sub>, pressure
- **8.** The haemoglobin content per 100 ml of blood of a normal healthy human adult is:
  - (A) 5-11 g
- (B) 25-30 g
- (C) 17-20 g
- (D) 12-16 g
- **9.** Which of the following is a true statement?
  - (A) Oxygen binding with Hb is a reversible process
  - (B) Oxygen binding with Hb is an irreversible process
  - (C) Hb is not a protein
  - (D) It's not a pigment
- **10.** The binding of Hb with oxygen forms
  - (A) Methamoglobin
  - (B) Carbhaminohaemoglobin
  - (C) Oxyhaemoglobin
  - (D) Carbaminohaemoglobin
- **11.** Each Hb can carry a maximum of \_\_\_\_oxygen molecules.
  - (A) 2
- (B) 4
- (C) 8
- (D) 6

## **Answer Key**

- **1.** (A)
- **2.** (A)
- **3.** (D)
- **4.** (A)
- **5.** (B)
- **6.** (D)
- **7.** (A)
- **8.** (D)
- **9.** (A)
- **10.** (C)
- **11.** (B)

