

Aerospace Medicine Quiz

- Critical minimum value of mitochondrial pO_2 required is
 - 0.8–2 mm Hg
 - 2–5 mm Hg
 - 0.5–3 mm Hg
 - 3–5 mm Hg
- In the brain, loss of function occurs within how much time of sudden loss of O_2 supply
 - 10–16s
 - 5–8s
 - 15–20s
 - 40–45s
- Vital capacity of the lung is
 - FRC+TV
 - TLC-FRC
 - FRC-RV
 - TLC-RV
- Phrenic nerve roots are
 - C4, C5, C6
 - C2, C3, C4
 - C3, C4, C5
 - None of the above
- At rest, breathing air at sea level, after how much time the pO_2 of alveolar gas and blood in pulmonary capillaries become equal.
 - 0.25s
 - 0.50s
 - 0.75s
 - 1s
- Solubility of O_2 in blood in ml/L blood/mm Hg
 - 0.3
 - 0.03
 - 0.003
 - 0.0003
- “Clo” value is use for measurement of
 - Clothing insulation
 - Wind velocity
 - Radiant heat
 - Humidity
 - None of the above
- According to FITS, caution zone lies between
 - 30–32°C
 - 32–36°C
 - 32–38°C
 - 36–38°C
 - 38–40°C
- Loss of sensation occurs in which degree of frostbite
 - Third degree
 - First degree

- c. Second degree
 - d. Fourth degree
10. For each cm above heart level, pressure within artery is reduced by
- a. 0.68 mm Hg
 - b. 0.78 mm Hg
 - c. 0.87 mm Hg
 - d. None of the above
11. Baroreceptors are located inside
- a. Aortic arch and carotid body
 - b. Aortic body and carotid sinus
 - c. Aortic arch and carotid sinus
 - d. None of the above
12. The following points regarding Haldane effect are correct, except
- a. Occurs at tissue level
 - b. Occurs at the level of lungs
 - c. Release of O₂
 - d. Release of CO₂
13. During continuous PPB, which of the following decreases
- a. ERV
 - b. IRV
 - c. RV
 - d. All of the above
14. Physiological requirements of oxygen system is/are
- a. Appropriate temperature
 - b. Minimal resistance
 - c. Disposal of expirate
 - d. Safety pressure
15. The relationship between resistance(R) and radius(r) of airway is
- a. $R \propto r^2$
 - b. $R \propto r^4$
 - c. $R \propto 1/r^3$
 - d. $R \propto 1/r^4$



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Answers for Aerospace Medicine Quiz

Ans.: 1. (c), 2. (b), 3. (d), 4. (c), 5. (a), 6. (b), 7. (a), 8. (c), 9. (a), 10. (b), 11. (c), 12. (a) and (c), 13. (b), 14. (b) and (c), 15. (d).