

Physiology of Body Fluids

Physiology · Answer Key · 10 Questions

1. What percentage of total body weight in humans is typically represented by total body water (TBW)?

- A) 10-20%
- B) 45-75%**
- C) 80-90%
- D) 5-10%

2. What is the approximate pH level of Extracellular Fluid (ECF)?

- A) 7.0
- B) 6.8
- C) 7.4**
- D) 8.0

3. Which substance is found in high quantities in Intracellular Fluid (ICF)?

- A) Sodium
- B) Potassium**
- C) Bicarbonate
- D) Glucose

4. Which of the following is a primary component of Extracellular Fluid (ECF)?

- A) Proteins
- B) Magnesium
- C) Sodium**
- D) Phosphates

5. What is the primary function of water inside cells regarding tissue structure?

- A) Temperature regulation
- B) Energy production
- C) Maintaining form and texture**
- D) Digestion

6. What is the pH level of Intracellular Fluid (ICF)?

- A) 7.0**
- B) 7.4
- C) 7.8
- D) 6.5

7. Which of these is considered an Extracellular Fluid (ECF) compartment?

- A) Cytoplasm
- B) Plasma**
- C) Nucleus
- D) Endoplasmic Reticulum

8. Water plays a vital role in which physiological process related to body balance?

- A) Maintaining normal body temperature**
- B) Bone density
- C) Vision
- D) Hair growth

9. What fraction of the total body is composed of fluids?

- A) Less than 1/3
- B) Exactly 1/2
- C) More than 2/3**
- D) 1/4

10. Which of the following is found in high quantities in Intracellular Fluid (ICF)?

- A) Chlorides
- B) Oxygen
- C) Proteins**
- D) Fatty acids