

IGCSE Biology: Cells, Nutrition, and Human Physiology

Biology · Answer Key · 15 Questions

1. Which characteristic of living things is represented by the 'H' in MRS H NERG?

A) Homeostasis

B) Habitation

C) Hydration

D) Heartbeat

2. Which organelle is the site of aerobic respiration?

A) Ribosome

B) Mitochondria

C) Chloroplast

D) Nucleus

3. Which of these is a difference between plant and animal cells?

A) Animal cells have a cell wall

B) Plant cells have a permanent vacuole

C) Animal cells have chloroplasts

D) Plant cells lack a cell membrane

4. What is the primary function of a root hair cell?

A) Photosynthesis

B) Absorption of water and minerals

C) Nerve impulse transmission

D) Muscle contraction

5. What is the function of the acrosome in a sperm cell?

A) Energy production

B) Swimming

C) Enzymes to penetrate an egg

D) Genetic material storage

6. What is the term for an undifferentiated cell that can become a specialized cell?

A) Gamete

B) Zygote

C) Stem cell

D) Neuron

7. Which reagent is used to test for starch?

- A) Benedict's solution
- B) Biuret solution
- C) Iodine solution**
- D) Ethanol

8. What are enzymes made of?

- A) Carbohydrates
- B) Lipids
- C) Proteins**
- D) Nucleic acids

9. What happens to an enzyme when it is denatured by high heat?

- A) It works faster
- B) The active site changes shape**
- C) It becomes a carbohydrate
- D) It is destroyed and disappears

10. What is the net movement of particles from a high to low concentration called?

- A) Osmosis
- B) Active Transport
- C) Diffusion**
- D) Respiration

11. Which process requires energy to move substances against a concentration gradient?

- A) Diffusion
- B) Osmosis
- C) Active Transport**
- D) Evaporation

12. What is the word equation for aerobic respiration?

- A) Glucose + Oxygen -> Carbon Dioxide + Water + Energy**
- B) Carbon Dioxide + Water -> Glucose + Oxygen
- C) Glucose -> Lactic Acid + Energy
- D) Glucose -> Ethanol + Carbon Dioxide

13. Where is bile produced?

- A) Gall bladder
- B) Pancreas
- C) Stomach
- D) Liver**

14. What is the main function of the xylem in plants?

- A) Transporting sugars
- B) Transporting water**
- C) Photosynthesis
- D) Storage

15. Which component of blood is responsible for clotting?

- A) Red blood cells
- B) White blood cells
- C) Plasma
- D) Platelets**