

General Science - Biological Science Model Paper

Biological Science · Answer Key · 13 Questions

1. What is the equation for photosynthesis?

- A) $6\text{CO}_2 + 6\text{H}_2\text{O} \rightarrow \text{C}_6\text{H}_{12}\text{O}_6 + 6\text{O}_2$
- B) $\text{CO}_2 + \text{H}_2\text{O} \rightarrow \text{C}_6\text{H}_{12}\text{O}_6 + \text{O}_2$
- C) $6\text{CO}_2 + \text{H}_2\text{O} \rightarrow \text{C}_6\text{H}_{12}\text{O}_6 + 6\text{O}_2$
- D) $\text{CO}_2 + 6\text{H}_2\text{O} \rightarrow \text{C}_6\text{H}_{12}\text{O}_6 + 6\text{O}_2$

2. What is the primary function of the ozone layer?

- A) Absorbs ultraviolet radiation from the sun
- B) Regulates Earth's temperature
- C) Filters harmful gases
- D) Provides oxygen for respiration

3. What is the role of DNA in genetics?

- A) Carries genetic information
- B) Synthesizes proteins
- C) Regulates cell growth
- D) Transmits nerve impulses

4. In a number pyramid showing trophic levels, which group of organisms has the highest number of individuals?

- A) Producers
- B) Primary Consumers
- C) Secondary Consumers
- D) Tertiary Consumers

5. On which plant did Gregor Johann Mendel conduct his famous experiments on inheritance?

- A) Pea plant
- B) Rose plant
- C) Sunflower
- D) Maize plant

6. Why is the use of iodised salt advisable?

- A) Prevents iodine deficiency disorders
- B) Enhances taste
- C) Improves digestion
- D) Strengthens bones

7. What is the longest part of the human alimentary canal?

A) Small intestine

B) Large intestine

C) Stomach

D) Esophagus

8. Which part of the alimentary canal connects the mouth to the stomach?

A) Esophagus

B) Pharynx

C) Duodenum

D) Jejunum

9. What is the role of decomposers in an ecosystem?

A) Break down dead organic matter

B) Produce oxygen

C) Consume producers

D) Control population size

10. What is ozone and how does it affect an ecosystem?

A) A gas that absorbs UV radiation, protecting life

B) A gas that causes pollution, harming life

C) A gas essential for plant growth

D) A gas that helps in water purification

11. Write the differences between autotrophic and heterotrophic nutrition.

A) Autotrophs make their own food, heterotrophs obtain food from others

B) Autotrophs consume plants, heterotrophs consume animals

C) Autotrophs are carnivores, heterotrophs are herbivores

D) Autotrophs are producers, heterotrophs are decomposers

12. How many chambers are there in the human heart?

A) Four

B) Two

C) Three

D) One

13. Which chamber of the human heart receives deoxygenated blood?

A) Right atrium

B) Left atrium

C) Right ventricle

D) Left ventricle