

## SCIENCE QUIZ DEC. 2021

**Kumud Bala**

**DIRECTION:** The following question consist of two statements - Assertion (A) and Reason (R). Answer these questions selecting the appropriate option given below:

- (a) Both A and R are true and R is the correct explanation of A.
- (b) Both A and R are true but R is not the correct explanation of A.
- (c) A is true but R is false.
- (d) A is false but R is true.
- (e) Both Assertion and Reason are false.

1. **Assertion:** Bile is essential for digestion of lipids.

**Reason:** Bile juice contains enzymes.

2. **Assertion:** In anaerobic respiration, one of the end product is alcohol.

**Reason:** There is an incomplete breakdown of glucose.

3. **Assertion:** Plants excrete various waste products during their life processes.

**Reason:** They produce urea just like humans.

4. **Assertion:** Excretion is the biological process by which harmful wastes are removed from an organism's body.

**Reason:** The mode of excretion is completely same in both unicellular and multicellular organisms.

5. **Assertion:** Alveoli contain an extensive network of blood vessels.

**Reason:** Alveoli is the site where exchange of gases occurs.

6. **Assertion:** In humans, there is a complex respiratory system.

**Reason:** Human skin is impermeable to gases.

7. **Assertion:** Photosynthesis is an anabolic process.

**Reason:** The process of photosynthesis occurs in chlorophyll

8. **Assertion:** In humans, major amount of water is absorbed by the tubular part of nephron.

**Reason:** Absorption of water depends on the dissolved waste to be excreted from the body.

9. **Assertion:** Hemodialysis can save the life of patients with kidney failure.  
**Reason:** Waste products like urea can be removed from the blood by hemodialysis.
10. **Assertion:** Blood of insects is colourless.  
**Reason:** The blood of insect does not play any role in transport of oxygen.
11. **Assertion:** Interarticular septum separates left from right atrium.  
**Reason:** Interventricular septum separates left from right ventricle.
12. **Assertion:** Autotrophic nutrition occurs in green plants.  
**Reason:** Green plants self-manufacture their food
13. **Assertion:** Hemoglobin is the respiratory pigment in human beings.  
**Reason:** It transports oxygen in the human body
14. **Assertion:** HCl converts pepsinogen into active enzyme pepsin.  
**Reason:** Pepsin converts protein into proteoses and peptones.
15. **Assertion:** Photorespiration decreases net photosynthesis.  
**Reason:** Rate of respiration in dark and light is almost same in all plants.
16. **Assertion:** All the arteries carry oxygenated blood from the heart to various organs.  
**Reason:** Pulmonary vein carries deoxygenated blood to the heart.
17. **Assertion:** Human body produces highly toxic substances, which if not eliminated may cause the death.  
**Reason:** Excretory substance removes nitrogenous waste from the body.
18. **Assertion:** Amoeba is an omnivore organism.  
**Reason:** Lion is a carnivore organism.
19. **Assertion:** Liver is known as the smallest gland of the body.  
**Reason:** It secretes salivary amylase.
20. **Assertion:** Carbohydrate digestion mainly takes place in small intestine.  
**Reason:** Pancreatic juice contains the enzyme lactase.
21. **Assertion:** Valves are present in the arteries.  
**Reason:** Arteries carry oxygenated blood from heart to different body parts except pulmonary artery.

22. **Assertion:** Plants lack excretory organs.

**Reason:** Plants usually absorb essential nutrients.

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### Answers

1. (c) 2. (a) 3. (c) 4. (c) 5. (a) 6. (b) 7. (c) 8. (b) 9. (a) 10. (b) 11. (b) 12. (a) 13. (a) 14. (b) 15. (d) 16. (e) 17. (b) 18. (b) 19. (e) 20. (b) 21. (d) 22. (b)

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