

## AP EAPCET 2025 May 19 Question Paper

Time Allowed :3 Hours	Maximum Marks :160	Total questions :160
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**1. In which group of algae are food materials stored in pyrenoids?**

- (A) Phaeophyceae
  - (B) Rhodophyceae
  - (C) Chlorophyceae
  - (D) Cyanobacteria
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**2. Which plant hormone is responsible for apical dominance?**

- (A) Cytokinin
  - (B) Auxin
  - (C) Gibberellin
  - (D) Ethylene
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**3. The genetic material in bacteriophages is:**

- (A) Only RNA
  - (B) Only DNA
  - (C) Either DNA or RNA
  - (D) Both DNA and RNA
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**4. Which of the following is the structural and functional unit of the kidney?**

- (A) Nephron
  - (B) Glomerulus
  - (C) Bowman's capsule
  - (D) Loop of Henle
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**5. Which of the following organisms exhibits alternation of generations?**

- (A) Amoeba
- (B) Hydra

- (C) Funaria
  - (D) Plasmodium
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**6. Which blood vessel carries oxygenated blood from the lungs to the heart?**

- (A) Pulmonary artery
  - (B) Aorta
  - (C) Pulmonary vein
  - (D) Vena cava
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**7. Which of the following enzymes is secreted by the stomach and helps in protein digestion?**

- (A) Amylase
  - (B) Pepsin
  - (C) Lipase
  - (D) Trypsin
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**8. Which part of the human brain is responsible for maintaining posture and balance?**

- (A) Cerebrum
  - (B) Cerebellum
  - (C) Medulla oblongata
  - (D) Pons
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**9. Which among the following diseases is caused by a protozoan?**

- (A) Tuberculosis
  - (B) Typhoid
  - (C) Malaria
  - (D) Influenza
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**10. What is the primary function of xylem tissue in plants?**

- (A) Transport of food
- (B) Transport of water and minerals
- (C) Photosynthesis

(D) Support during reproduction

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**11. What is the chromosome number in human gametes?**

- (A) 23 pairs
  - (B) 46
  - (C) 23
  - (D) 46 pairs
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**12. Which among the following is not a connective tissue?**

- (A) Cartilage
  - (B) Blood
  - (C) Tendon
  - (D) Muscle
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**13. Which part of the human eye controls the amount of light entering it?**

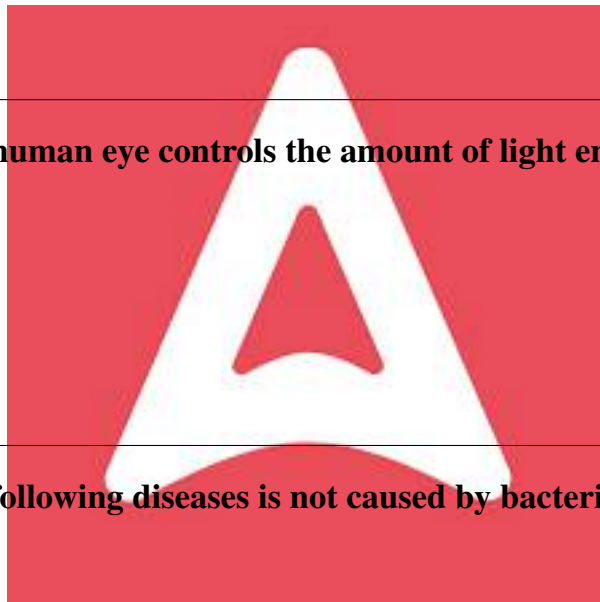
- (A) Lens
  - (B) Retina
  - (C) Iris
  - (D) Cornea
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**14. Which among the following diseases is not caused by bacteria?**

- (A) Tuberculosis
  - (B) Cholera
  - (C) Typhoid
  - (D) Dengue
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**15. Which organelle is known as the powerhouse of the cell?**

- (A) Nucleus
  - (B) Endoplasmic reticulum
  - (C) Mitochondrion
  - (D) Golgi apparatus
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**16. Which of the following has the highest ionization energy?**

- (A) Lithium
  - (B) Beryllium
  - (C) Fluorine
  - (D) Neon
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**17. What is the equivalent weight of sulphuric acid ( $\text{H}_2\text{SO}_4$ ) in a reaction where it donates 2  $\text{H}^+$  ions?**

- (A) 49
  - (B) 98
  - (C) 24.5
  - (D) 36.5
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**18. Which of the following oxides is amphoteric in nature?**

- (A)  $\text{Na}_2\text{O}$
  - (B)  $\text{CO}_2$
  - (C)  $\text{Al}_2\text{O}_3$
  - (D)  $\text{SO}_2$
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**19. A ball is thrown vertically upward with a speed of 20 m/s. How high will it rise before coming to rest momentarily? (Take  $g = 10 \text{ m/s}^2$ )**

- (A) 15 m
  - (B) 20 m
  - (C) 25 m
  - (D) 30 m
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**20. What is the power consumed by an electrical device that uses 2 A current at 220 V?**

- (A) 110 W
  - (B) 220 W
  - (C) 440 W
  - (D) 880 W
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**21. A body of mass 5 kg is moving with a velocity of 10 m/s. What is its kinetic energy?**

- (A) 100 J
  - (B) 150 J
  - (C) 200 J
  - (D) 250 J
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**22. Two particles are projected at angles  $\theta$  and  $(90^\circ - \theta)$  with the same speed of 25 m/s. If the second particle reaches 15 m higher than the first, then the angle of projection  $\theta$  is:**

- (A)  $15^\circ$
  - (B)  $30^\circ$
  - (C)  $45^\circ$
  - (D)  $60^\circ$
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**23. A test tube of mass 8 g and uniform cross-sectional area  $12 \text{ cm}^2$  is floating vertically in water. It contains 12 g of lead at the bottom. When the tube is slightly depressed and released, it performs vertical oscillations. Find the time period of oscillation.**

- (A) 0.21 s
  - (B) 0.28 s
  - (C) 0.36 s
  - (D) 0.44 s
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