

AP EAPCET 2025 May 19 Question Paper

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| 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

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 (H_2SO_4) in a reaction where it donates 2 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) Na_2O
 - (B) CO_2
 - (C) Al_2O_3
 - (D) 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 θ 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 θ is:

- (A) 15°
 - (B) 30°
 - (C) 45°
 - (D) 60°
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23. A test tube of mass 8 g and uniform cross-sectional area 12 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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