

AP EAPCET 2026 May 19 Shift 2

Question Paper (Memory Based)

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General Instructions

- (i) The test is of 3 hours duration.
- (ii) This test paper consists of 160 questions. The maximum marks are 160.
- (iii) Physics and Chemistry contains 40 questions each and Biology contains 80 questions.
- (iv) Each question carries +1 marks for correct answer and there is no negative marking for wrong answer.

Physics

1. A charge $q = 2 \text{ C}$ moves with velocity 3 m/s perpendicular to a magnetic field $B = 2 \text{ T}$. Force on charge is:

- (A) 6 N
- (B) 12 N
- (C) 3 N
- (D) 0 N

2. At a place, horizontal component of Earth's field is 0.3 T and angle of dip is 60° . Total magnetic field is:

- (A) 0.3 T
- (B) 0.6 T
- (C) 0.15 T

(D) 0.9 T

3. In an EM wave, electric field amplitude is 300 V/m. Magnetic field amplitude is:

(A) 1×10^{-6} T

(B) 1×10^{-5} T

(C) 1×10^{-7} T

(D) 3×10^{-6} T

Chemistry

4. Which one of the pairs will form a buffer solution?

(A) CH_3COONa & NaOH

(B) $\text{CH}_3\text{COONH}_4$ & NH_4Cl

(C) NH_4Cl & NH_4OH

(D) CH_3COONa & HCl

5. When 30 ml of 0.2 M NH_4OH is added to 30 ml of 2 M NH_4Cl solution. If the pH of the buffer formed is 8.2, what is the pK_b of NH_4OH ?

(A) 7.2

(B) 5.8

(C) 6.8

(D) 4.8

6. The solubility of $\text{Mg}_3(\text{PO}_4)_2$ is 'S' mol L^{-1} . The solubility product is given by the relation

- (A) S^5
 - (B) $36S^6$
 - (C) $6S^5$
 - (D) $108S^5$
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Botany

7. The primary purpose of PCR is to:

- (A) Cut DNA into fragments
 - (B) Amplify specific DNA sequences
 - (C) Translate proteins
 - (D) Sequence RNA
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8. In the fertilization process of Angiosperms, the pollen grain is usually shed at which stage?

- (A) 1-celled stage
 - (B) 2-celled stage (Vegetative and Generative)
 - (C) 4-celled stage
 - (D) No specific stage
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Zoology

9. Thymectomy (removal of the Thymus) in early childhood would primarily result in:

- (A) Lack of antibodies only
- (B) Loss of Lymph nodes
- (C) Impaired Cell-mediated immunity (Lack of T-lymphocytes)

(D) Hyperactive immune response

10. The method of "Periodic Abstinence" is based on which physiological fact?

- (A) Ovum remains viable for about 1-2 days.
 - (B) Sperm survive for about 3 days.
 - (C) Ovulation occurs around the 14th day of the cycle.
 - (D) All of the above facts combined.
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11. The hypothesis of the "Hot Dilute Soup" (Prebiotic Soup) regarding the origin of life was proposed by:

- (A) Urey
 - (B) Haldane
 - (C) Oparin
 - (D) Darwin
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