

MHT CET 2026 Biology Memory Based Question Paper PDF

Biology

1. Identify the special tissue in the epiphytic roots of orchids that absorbs atmospheric moisture.
 - (a) Cortex
 - (b) Velamen
 - (c) Endodermis
 - (d) Pericycle
2. Which organism causes typhoid fever?
 - (a) *Escherichia coli*
 - (b) *Vibrio cholerae*
 - (c) *Salmonella typhi*
 - (d) *Staphylococcus aureus*
3. How many times does oxidation occur in the Krebs cycle?
 - (a) Two times
 - (b) Three times
 - (c) Four times
 - (d) Six times
4. What is the name for the movement of cytoplasm within a cell?
 - (a) Diffusion
 - (b) Osmosis
 - (c) Cytoplasmic streaming (Cyclosis)
 - (d) Active transport

Physics

5. What is the SI unit of magnetic induction?
 - (a) Weber (Wb)
 - (b) Tesla (T)
 - (c) Henry (H)
 - (d) Coulomb (C)
6. State the formula for the safety speed of a vehicle on a curved banked road.
 - (a) $v = \sqrt{rg \sin \theta}$
 - (b) $v = \sqrt{rg \cos \theta}$

- (c) $v = \sqrt{rg \tan \theta}$
(d) $v = \sqrt{\frac{g}{r \tan \theta}}$
7. What is the unit of the ratio L/R where L is inductance and R is resistance?
- (a) Ampere
(b) Second
(c) Ohm
(d) Volt
8. How does the maximum kinetic energy of photoelectrons relate to wavelength (λ)?
- (a) $K.E \propto \lambda$
(b) $K.E \propto \lambda^2$
(c) $K.E \propto \frac{1}{\lambda}$
(d) $K.E \propto \sqrt{\lambda}$
9. Calculate the moment of inertia for two spheres of radius 10 cm placed 20 cm apart.
- (a) $\frac{7}{5}MR^2$
(b) $\frac{14}{5}MR^2$
(c) $\frac{9}{5}MR^2$
(d) $2MR^2$

Chemistry

10. What is the IUPAC name for Acetone?
- (a) Propanal
(b) Propan-1-one
(c) Propan-2-one
(d) Butan-2-one
11. What is the IUPAC name for Glyceraldehyde?
- (a) 1,2,3-trihydroxypropane
(b) 2,3-dihydroxypropanal
(c) 1,3-dihydroxypropanone
(d) 2-hydroxypropanal
12. What is the approximate magnetic moment of Mn^{2+} ?
- (a) 4.9 BM
(b) 5.9 BM
(c) 6.9 BM
(d) 3.9 BM
13. What product is formed when Phenol reacts with concentrated Nitric acid?
- (a) Nitrobenzene
(b) o-Nitrophenol

- (c) Picric acid
 - (d) Benzoic acid
14. What is the oxidation state of Chlorine in Cl_2O_7 ?
- (a) +3
 - (b) +5
 - (c) +7
 - (d) -1

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