



Techno ACE

Model Question Paper

Biology

Class: XI going to XII

Time: 22.5 mints

F.M. $15 \times 4 = 60$

For every correct answer examinee will be awarded +4 marks and for every wrong answer it will be – 1 mark

- Fill in the blanks w.r.t Bryophytes
 - Zygote produces a multicellular body called A
 - The B germinates to produce Gametophyte
 - A – sporophyte, B – Gamete
 - A – Gametophyte, B – Gametes
 - A – Gametophyte, B – Spores
 - A – Sporophyte, B – Spores
- Which is false about urochordata?
 - Notochord disappears in adult
 - Excretion by neural gland
 - Close circulatory system present
 - Notochord present only in tail of larva
- Volkman's canal in mammalian bones are
 - Present in calcellous part
 - Transverse canals in spongy bone
 - Canals present in compact bone
 - Longitudinal canals in spongy bone
- If RBC are placed in 0.2% NaCl solution, they will
 - Shrink and collapse
 - Increase in volume
 - Stick together
 - Remain normal
- Acidic pH in Lysosomes
 - Is maintained by pumping of H^+ from cytoplasm
 - Protect it from membrane damage
 - Can damage its hydrolytic enzymes
 - Is maintained by synthesis of organic acid

6. VAM is an example of
(A) Endomycorrhiza (B) Ectoparasitism
(C) Endoparasitism (D) Ectomycorrhiza
7. Chemoiosmotic theory of ATP synthesis in the chloroplast and mitochondria is based on
(A) Membrane potential (B) Accumulation of Na ions
(C) Accumulation of K ions (D) Proton gradient
8. Which pair is wrong?
(A) C₃ – Maize (B) C₄ – Kranz anatomy
(C) Calvin cycle – PGA (D) Hatch and Slack cycle – OAA
9. Litmus used as acid-base indicator is obtained from
(A) Cladonia (B) Parmelia
(C) Rocella (D) Lecanora
10. Heart beat is inversely proportional to blood pressure represents
(A) Frank starling law (B) Marey's law
(C) Tachycardia (D) Bradycardia

For questions No. 11 to Question No. 15, given below, two statements are given one labelled assertion (A) and the other labelled Reason (R). Select the correct answer to these questions from the codes A, B, C and D as given below:

- (A) Both assertion (A) and reason (R) are true and reason is correct explanation of assertion.
(B) Both assertion (A) and reason (R) are true but reason is not the correct explanation of the assertion.
(C) Assertion (A) is true but reason (R) is false.
(D) Assertion (A) is false but reason (R) is true.
11. Assertion: Cyanide is a respiratory poison
Reason: Cyanide forms a complex with cytochrome a₃ and prevents the transfer of electrons from cytochrome a₃ to oxygen
12. Assertion: *Giardia* is called as grand old man of intestine
Reason: It is a protozoan transmitted by mosquito
13. Assertion: Kidneys are retroperitoneal in position
Reason: Kidneys are covered with peritoneum only on Ventral surface
14. Assertion: Resistance to the blood flow is directly proportional to the viscosity of blood
Reason: Polycythaemia increases resistance and thus the blood pressure

15. Assertion: The 'absorption spectrum' of chlorophyll 'a' shows close correlation with its 'action spectrum'.

Reason: Chlorophyll 'a' is present in both the pigment system I and II

