



विद्या सर्वार्थ साधिका

ANANDALAYA
PERIODIC TEST - 3
Class : XI

Subject: Biology
Date : 06-01-2023

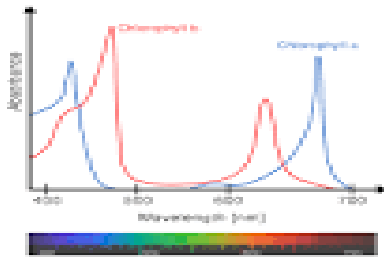
MM : 35
Time: 1 Hr. 30 min.

General Instructions:

1. There are 15 questions in this question paper. All questions are compulsory.
2. There is no overall choice. However, internal choice has been provided in one of the 3marks questions and one of the 5marks questions. Attempt accordingly.
3. Illustrate your answers with supporting diagrams and examples.

1. With respect to fungal sex cycle, choose the correct sequence of events. (1)
(A) Karyogamy, Plasmogamy, Meiosis (C) Plasmogamy, Karyogamy, Meiosis
(B) Meiosis, Plasmogamy, Karyogamy (D) Meiosis, Karyogamy, Plasmogamy
2. A dikaryon is formed when _____. (1)
(A) Meiosis is arrested (C) Cytoplasm does not fuse.
(B) The two cells do not fuse immediately (D) Cytoplasm does not divide
3. Members of Phycocyanetes are found in _____. (1)
(A) terrestrial habitat (C) decaying wood
(B) aquatic habitat (D) moist and damp places
4. Protonema is _____ and is found in _____. (1)
(A) haploid, mosses (C) diploid, Pteridophytes
(B) diploid, Liverworts (D) haploid, Pteridophytes
5. Which of the sets of animals belong to a single taxonomic group? (1)
(A) Cuttle fish, Jelly fish, Dog fish, Star fish (C) Monkey Chimpanzee, Man
(B) Bat, Pigeon, Butterfly (D) Silk worm, Tape worm, Earth worm
6. Differentiate between the following: (2)
I. Red algae and Brown algae
II. Liver worts and Moss
III. Homosporous and Heterosporous Pteridophytes
IV. Syngamy and triplite fusion
7. Provide appropriate technical term for the following sentences: (2)
I. Blood- filled cavity in arthropod
II. Free-floating form of Cnidaria
III. Stinging organs of Jelly fish
IV. Lateral appendages in Aquatic mammals
8. Give an example for each of the following: (2)
I. Round worm
II. Fish possessing poison sting
III. Limbless Amphibian
IV. An oviparous mammal

9. Suppose Euphorbia and Maize are grown in tropical area; (2)
 I. Which one of them, you think, will be able to survive better under such conditions?
 II. Which one of them is more efficient in terms of photosynthetic activity? Give reason.
10. Cyanobacteria and heterotrophic bacteria are put in Eubacteria of Kingdom Monera as per five kingdom classification. Can it be justified? Give your reasons. (3)
11. What is the relationship between germinal layers and the formation of body cavity in case of coelomate, acoelomate and pseudocoelomate animals? (3)
12. Give a schematic representation of glycolytic pathway. What is the product formed in this cycle? What is the fate of this product in aerobic and anaerobic respiration? (3)
13. Why is RUBISCO enzyme more appropriately called RUBP Carboxylase- Oxygenase? What important role does it play in Photosynthesis? (3)
- OR**
- What are the important events and products of light reaction? Explain the raw materials, reactions, enzymes and products.
14. A graph depicting the action spectrum and absorption of photosynthesis is given below. (5)



- I. What does the action spectrum indicate?
 II. How can you derive an absorption spectrum for any substrate?
 III. Why is the rate of photosynthesis higher in the red and blue spectrum of the light?
15. I. What is meant by oxidative decarboxylation? (5)
 II. Represent the steps that pyruvate undergoes to produce energy schematically.
 III. What is the fate of the end products of the above pathway?
- OR**
- I. Compare the C_3 and C_4 pathways of photosynthesis.
 II. Even though the end products are the same, why there are two pathways? Justify.