



विद्या सर्वार्थ साधिका

ANANDALAYA
PERIODIC TEST – 2
Class : XI

Subject: Biology
Date : 23/12/2019

M.M: 40
Time: 2 Hours

General Instructions:

1. This question paper consists of Section A, B, C, D and E with 15 questions. All questions are compulsory.
2. Section A contains question numbers 1 to 3 of one mark each. Section B contains question numbers 4 to 6 of two marks each. Section C and D contains question numbers 7 to 13 of 3 marks each. Section D contains question numbers 14 and 15 of 5 marks each.
3. There is no overall choice. However, internal choices have been provided in one question of one mark, one question of three marks and one question of five marks. You have to attempt only one of the choices in such questions.

Section A

1. Choose the appropriate option and complete the following sentence : (1)
Blood corpuscles are formed in _____ and _____.
(a) Bone marrow and Spleen (b) Lymph nodes and Bone marrow
(c) Bone marrow and Liver (d) Bone marrow and Lymph

OR

Bipolar nerve cells are found in _____.

- (a) Retina (b) Cornea
(c) Pituitary gland (d) Gustatory gland
2. Gorilla, Chimpanzee, Monkey and Man belong to the same _____. (1)
(a) Species (b) Genus
(c) Family (d) Order
3. Observe the relationship between first two words and fill up the suitable word in the fourth place (1)
by choosing the correct word:
Opuntia : Phylloclade : : Asparagus : _____
(a) Root (b) Cladode
(c) Stem (d) Euphorbia

Section B

4. How is the origin of coelom very important step in animal evolution? (2)
5. Identify and write the type of epithelial tissues against each of the parts clues given: (2)
(a) Thin and flat cells closely packed in the inner lining of human cheek.
(b) Found in human fallopian tube and has microvilli.
6. A farmer observed drops of water along the margins of leaves of tomato plants growing in well irrigated field on a winter morning. (2)
(a) Give reasons of this occurrence.
(b) Why had the water drops appeared only along the margins?

Section C

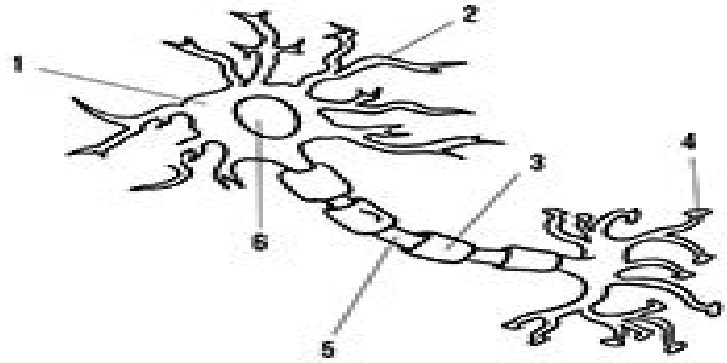
7. Explain any six adaptive features that enable the tapeworm to survive inside the body of the host? (3)

OR

All vertebrates are chordates but all chordates are not vertebrates. Justify the given statement with three scientific reasons.

8. Explain the following terms related to vascular tissue system in plants : (3)
 (a) Endarch (b) Conjoint (c) Closed

9. (a) Observe the given diagram and name the type of neuron it represents. Justify your answer by stating one scientific reason. (3)



- (b) Name the parts labelled as 1 and 6.
 (c) How are the parts labelled as 2 and 4 related?

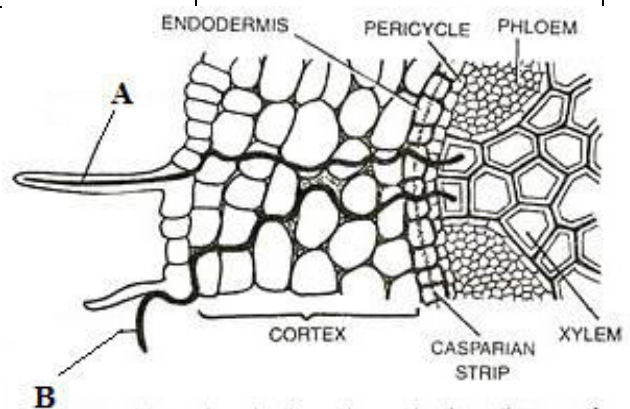
10. In rainy season, Mihir had difficulty in closing the wooden window of his room. However, in summer he faced no such problems. Being inquisitive, he found out that this is due to the phenomenon known as imbibition. (3)
 Read the above passage and answer the following questions:
 (a) How is osmosis different from imbibition?
 (b) What is the significance of osmosis?
 (c) Cite an example of practical application of osmosis in your home.
11. Draw and explain the types of aestivation exhibited in corolla of flowering plants. (3)

Section D

12. Complete the given table by replacing A, B, C, D, E and F with appropriate words. (3)

Phylum / Class	Excretory Organ	Circulatory Organ	Respiratory Organ
Arthropoda	A	B	Lungs/Gills/Tracheal system
C	Flame cells	D	Skin
Amphibia	E	Closed	F

13. A portion of transverse section of root is shown in the diagram. (3)



- (a) Identify the pathway labelled as A and B.
 (b) Which pathway is advantageous to the plant and why?
 (c) List any two differences between A and B.

Section E

14. Compare the anatomical features of monocot and dicot stem to list the similarities and differences between them. (5)

OR

Explain the role of vascular cambium in secondary growth of dicot plants.

15. The translocation of sugars in the phloem is bi-directional. Explain the mechanism of translocation of sugars with the help of 'Pressure flow hypotheses'. (5)