



विद्या सर्वार्थ साधिका

ANANDALAYA

PERIODIC TEST – 1

Class : XI

Subject: Biology (044)

Date : 18-07-2023

MM : 30

Time: 1 Hr. 30 min.

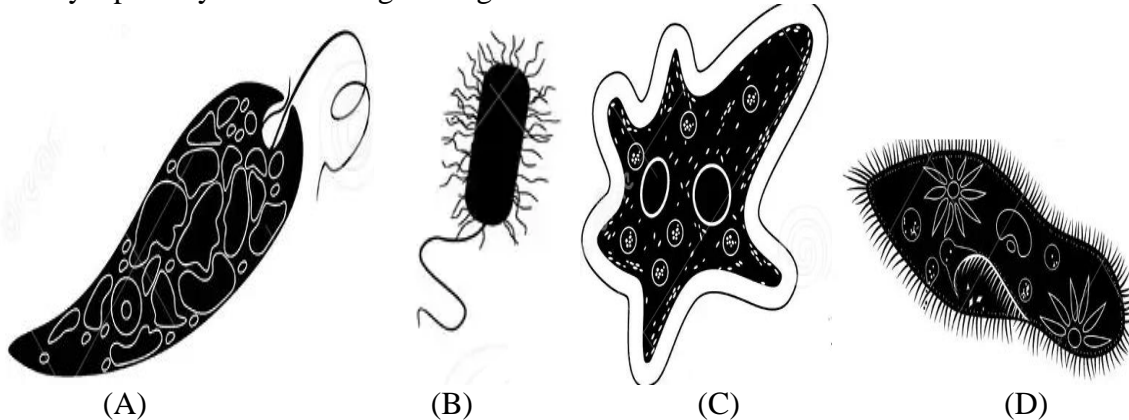
General Instructions:

1. There are 17 questions in the question paper. All questions are compulsory.
2. This question paper has five sections: Section A, Section B, Section C, Section D and Section E. All the sections are compulsory.
3. Section A consists of eleven Objective Type Questions of 1 mark each, Section B consists of two questions of 2 marks each, Section C consists of two questions of 3 marks each, Section D consists of one question of 5 marks and Section E consists of one case-based question of 4 marks.
4. Wherever necessary, neat labelled diagram should be drawn.

SECTION A

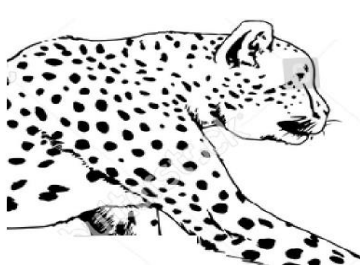
1. Diversity within a species is not expressed in the form of _____. (1)
(A) Varieties (B) Races (C) Subspecies (D) None of these
2. Which of the following statement is correct? (1)
(A) Viruses are intercellular obligate parasites.
(B) Viruses are extracellular obligate parasites.
(C) Viruses are facultative parasites.
(D) Viruses are intracellular obligate parasites.

3. Identify a prokaryote from the given figures: (1)

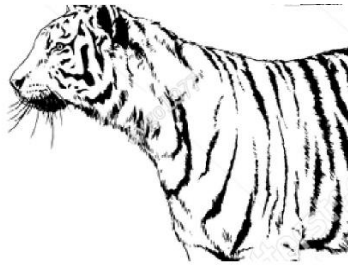


4. In Whittaker's classification, the unicellular organisms having various cell organelles constitute the Kingdom _____. (1)
(A) Monera (B) Fungi (C) Protista (D) Plantae
5. Find the incorrect statement from the given: (1)
(A) Agar-agar is produced from *Gracilaria*.
(B) *Chlorella* is used in space food.
(C) Mannitol is a food reserve of Rhodophyceae.
(D) Algin is produced in brown algae.
6. Bryophyta is distinguished from algae, because it _____. (1)
(A) is thalloid.
(B) does not have vascular tissue.
(C) possesses archegonia with outer layer of sterile cells.
(D) contains chloroplasts in their cells.

7. Taxonomic categories are identified based on the similar characters between different organisms. Order being a higher category, is the assemblage of families which exhibit a few similar characters. Observe the given figures X, Y and Z and assemble them in their appropriate order by selecting correct option from given: (1)



X



Y



Z

(A) Felidae

(B) Carnivora

(C) Panthera

(D) Mammalia

8. Name two pteridophytes that are heterosporous. (1)
9. (a) What is the genetic material of virioids? (1)
(b) Write the plant disease caused by virioids.

For question numbers 10 and 11, two statements are given - one labelled Assertion and the other labelled Reason. Select the correct answer to these questions from the codes (A), (B), (C) and (D) as given below.

(A) Both Assertion and Reason are true and Reason is the correct explanation of Assertion.

(B) Both Assertion and Reason are true but Reason is not the correct explanation of Assertion.

(C) Assertion is true but Reason is false.

(D) Assertion is false and Reason is also false.

10. Assertion: Gymnosperms do not produce fruits. (1)
Reason: Ovules in these plants remain exposed on the megasporophylls.
11. Assertion: Dinoflagellates are photosynthetic protists. (1)
Reason: They synthesise their own food from carbondioxide and water with the help of photosynthetic pigments making use of sunlight.

SECTION B

12. Most of the parasitic organisms have an infectious spore-like stage in their life cycle. Explain. (2)
13. The members of Kingdom Monera are grouped into categories based on their shape. Draw the shapes and name each of them. (2)

SECTION C

14. Write any three universal rules of nomenclature followed by the Biologists. (3)
15. Tabulate the differences among the classes of Kingdom Fungi based on the morphology of the mycelium and mode of spore formation. (3)

SECTION D

16. (a) Cyanobacteria and heterotrophic bacteria are classified under Eubacteria, which comes under the kingdom Monera as per the "Five Kingdom Classification" given by R.H. Whittaker. Even though the above two bacteria are very different, they are grouped in the same kingdom. Justify why is it so? (5)
(b) Describe the characteristic features of four major groups of protozoans of Kingdom Protista with an example for each group.

OR

Distinguish the three groups of Kingdom Algae based on their habitat, major and accessory pigments present, plant body structures, storage product and mode of reproduction.

SECTION E

Based on the passage and related studied concepts, answer the questions given below:

17. Bryophytes are fundamentally terrestrial plants and usually grow in moist and shady places on damp soil, rocks, walls, bark of trees and on decaying wood logs. The life cycle of bryophytes consists of two distinct phases, the gametophyte and the sporophyte. The plant body consists of leaf-like appendages with stem-like central axis. Roots are replaced by rhizoids. These do not have vascular tissues.

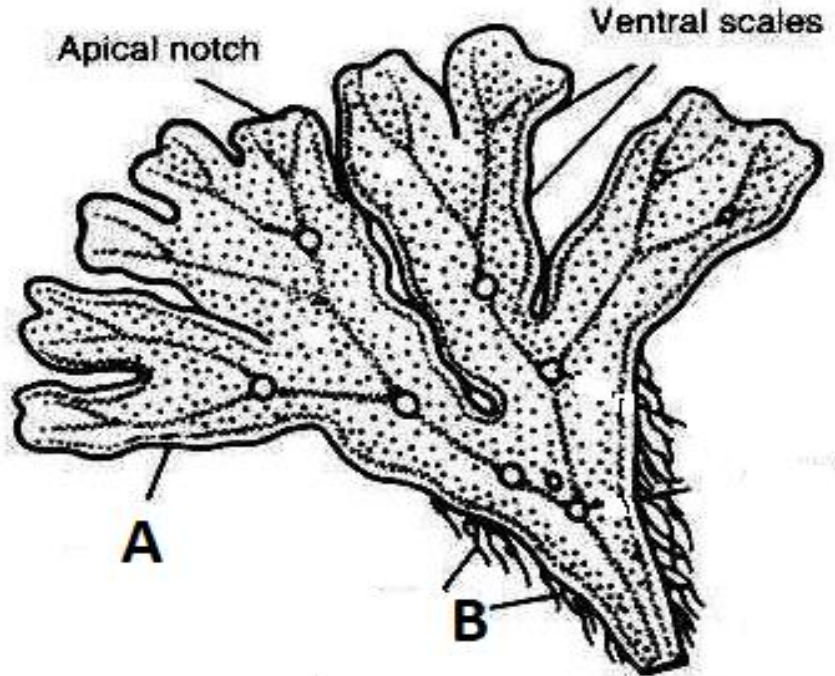


Figure X

- (a) Identify the figure X and also name the parts A and B associated with it. (1)
(b) The figure represents one of the phases of its life cycle. Name it. (1)
(c) Draw the diagram to show the two distinct phases of bryophyte. (2)

OR

- (c) Draw the diagram to show the asexual structures of bryophytes and explain.