

**SAINIK SCHOOL GOPALGANJ**  
**SUB: BIOLOGY**  
**CLASS – XI**

**ASSIGNMENT - 3**

**Part - I (Plant Kingdom)**

(Q1 – Q10) Given below are four options against each question. Choose the option which you consider the most appropriate as your answer.

1. Which plant kingdom can survive both on land and in water?
  - a) Tracheophyta
  - b) Pteridophyta
  - c) Thallophyta
  - d) Bryophyta
  
2. A plant that has seeds but no flowers and fruits?
  - a) Bryophyte
  - b) Gymnosperms
  - c) Mosses
  - d) Pteridophyte
  
3. Most primitive vascular plants?
  - a) Mosses
  - b) Cycads
  - c) Kelps
  - d) Ferns
  
4. Angiosperms are the dominant flora because of
  - a) Domestication by man
  - b) Power of adapting in diverse habitats
  - c) Self-pollination property
  - d) Property of producing a large number of seeds
  
5. Plants having vascular tissue without seeds
  - a) Angiosperm
  - b) Pteridophyte
  - c) Bryophyte
  - d) Gymnosperms
  
6. The plant group that possesses largest ovule, largest gametes, and largest tree
  - a) Angiosperms
  - b) Gymnosperms
  - c) Pteridophytes
  - d) Bryophytes
  
7. A colonial alga is
  - a) Volvox
  - b) Chlorella
  - c) Ulothrix
  - d) Spirogyra

8. Double fertilization is the characteristic of

- a) Algae
- b) Gymnosperms
- c) Fungi
- d) Angiosperms

9. First plants to inhabit land

- a) Angiosperms
- b) Bryophytes
- c) Gymnosperms
- d) Pteridophytes

10. Agar is commercially obtained from

- a) Blue-green algae
- b) Red algae
- c) Brown algae
- d) Green algae

**Answer the following questions.**

11. Describe the phylogenetic classification systems.

12. Why is the endosperm of angiosperms triploid?

13. Write any four characteristics features of pteridophyte.

14. Bring out the major differences between monocotyledons and dicotyledons.

15. Mention economic importance of algae.

16. What is double fertilization? Who discovered it? Explain the event and its possible significance.

17. Give a comparative account of

- (a) The nature of cell wall and
- (b) The characteristics of flagella among the three classes of algae.

18. In which plant will you look for mycorrhiza and coralloid roots? Also explain what these terms mean.

19. What is meant by?

- (a) Cytotaxonomy
- (b) Chemotaxonomy
- (c) Numerical taxonomy and
- (d) Heterosporous ferns

20. Draw a diagram of

- (a) Haplontic life cycle
- (b) Diplontic life cycle and
- (c) Haplo-diplontic life cycle.

## Part II (Animal Kingdom)

1. Which class has the largest number of animals?
  - (A) Fishes
  - (B) Reptiles
  - (C) Insects
  - (D) Mammals
2. Identify the characteristic of acoelomates.
  - (A) Absence of mesoderm
  - (B) Absence of brain
  - (C) Coelom that is incompletely lined with a mesoderm
  - (D) Solid body without a cavity surrounding internal organs
3. Salamander belongs to the class
  - (A) Pisces
  - (B) Aves
  - (C) Reptiles
  - (D) Amphibian
4. Which of the following combinations is incorrect?
  - (A) Nematoda- roundworms, pseudocoelomate
  - (B) Calcarea- gastrovascular cavity, coelom present
  - (C) Echinodermata- coelom present, bilateral symmetry
  - (D) Platyhelminthes- gastrovascular cavity, flatworms, acoelomate
5. Flame cells are the excretory structures for
  - (A) Annelida
  - (B) Coelenterates
  - (C) Platyhelminthes
  - (D) Echinodermata
6. Phylum Porifera is classified based on
  - (A) Branching
  - (B) Symmetry
  - (C) Spicules
  - (D) Reproduction
7. Select the correct pair
  - (A) Arthropoda- silver fish
  - (B) Pisces- jelly fish
  - (C) Echinodermata- cuttle fish
  - (D) Mollusca- star fish
8. Ascaris is characterized by
  - (A) Presence of true coelom and metamerism
  - (B) Presence of true coelom but absence of metamerism
  - (C) Absence of true coelom and metamerism
  - (D) Absence of true coelom but presence of metamerism
9. Cnidaria is characterized by
  - (A) Tissue level of organization

- (B) Nematoblasts
- (C) Coelenteron
- (D) All

10. Notochord occurs throughout life and all through the length of the body in
- (A) Cephalochordata
  - (B) Hemichordata
  - (C) Urochordata
  - (D) Vertebrata

**Answer the following questions.**

11. Name the phylum where animals are
- (a) Diploblastic and radial symmetrical
  - (b) Triploblastic and radially symmetrical.
12. Why is the endosperm of angiosperms triploid?
13. What is metameric segmentation in an animal body? Give an example.
14. Bring out the five major differences in between chondrichthyes and osteichthyes.
15. Mention any four features present in animals belong to phylum Porifera.
16. Describe the different levels of organization of body of animals, with an example for each.
- 17.(a) What is meant by
- (i) Open type and
  - (ii) Closed type of circulatory system in animals?
- (b) Represent diagrammatically the
- (i) Coelomate (ii) Pseudocoelomate and (iii) Acoelomate conditions among animals.
18. Write five differences between chordata and non –chordata.
19. What is meant by?
- (i) Metagenesis
  - (ii) Bioluminescence
  - (iii) Complete and incomplete digestive system
  - (iv) Poikilotherms and homoitherms and
  - (v) Germ layers.
20. (a) Give an example for each of the following
- (i) A viviparous animal
  - (ii) A fish possessing a poison sting
  - (iii) A fish possessing an electric organ
  - (iv) An organ, which regulate buoyancy and
  - (v) Oviparous animals with mammary glands
- (b) What are the excretory organs of different animals given below?
- (i) Balanoglossus
  - (ii) Leech

- (iii) Locust
- (iv) Liver fluke and
- (v) Prawn

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