

CLASS-XI (BIOLOGY)

ASSIGNMENT-I (COACHING AND NON-COACHING)

* Q. NO. 1 TO 10 (MARKS-2)

* Q. NO. 11 TO 20 (MARKS-3)

* Q. NO. 21 TO 30 (MARKS-5)

1. Associate the terms in Column-I with those in Column-II.

Column-I	Column-II
A. Cyanobacteria	a. Symbiosis
B. Diatom	b. Phytoplankton
C. Protozoa	c. Fungi
D. Lichen	d. Blue green algae
	e. Holozoa Nutrition
2. Why is the two-kingdom classification inadequate?
3. What is the mode of Nutrition in Fungi.
4. Write briefly on the importance of fossils?
5. Make an outline of the five-kingdom classification ?
6. Which regions of the Earth would show rich biological diversity ?
7. What kinds of organisms are grouped under Protista ?
8. Name the botanist who used binomial nomenclature for the first time ?
9. What is meant by artificial system of classification ? Give one example ?
10. Mark the statements true (T) or False (F) :
 - (a) All autotrophs are Monerans
 - (b) Actinomycetes belong to Monera.
 - (c) In geological history complex organisms come after the simple ones.
 - (d) Leeuwenhoek was the first to observe bacteria.
 - (e) Prokaryotes are organisms without a Nucleus
11. Explain the term species ?
12. What is meant by Hierarchical classification?
13. Distinguish between Artificial system and Natural system of classification?
14. Fill in the blanks
 - (a) A group of related genera are classified as _____
 - (b) Common features of species within a genus are known as _____
 - (c) Basic unit of biological classification is _____
 - (d) The relationship between comparable structures is called _____
15. Do plants think! comment on this aspect?
16. Do all organisms reproduce sexually? Explain.
17. The common name of rice is simple than its technical name *Oryza sativa*. What then is the advantage of a technical name?
18. Define life? What are the characteristics of a living being ?
19. Discuss the concept of serendipity with example?
20. What is Biology? Who first used the term ?
21. Mark the odd one in the series :
 - (a) family, class, taxon, phylum
 - (b) *indica, ficus, mangifera, Tamarindus*
 - (c) Plantae, chordata, Tracheophyta, *Eucalyptus*
22. What is the difference between Systematics and taxonomy?
23. Why would it be unethical to destroy wild species.
24. What is the economic importance of a forest ?
25. What is biosphere? What are the main sub-divisions of the biosphere ?
26. Discuss some of the limitations of Science ?
27. Explain the concept of Homeostasis & Cybernetics ?
28. Discuss the Concept of the term 'taxon' ?
29. What do you understand by the following terms
 - (a) Phylum
 - (b) Class
 - (c) Family
 - (d) Order
 - (e) Genus
30. What is 'ENTROPY'? What will happen when it increases beyond a certain range?

CLASS-XI (BIOLOGY)

ASSIGNMENT-II(COACHING AND NON-COACHING)

* Q. NO. 1 TO 10 (MARKS-2)

* Q. NO. 11 TO 20 (MARKS-3)

* Q. NO. 21 TO 30 (MARKS-5)

1. T/F
 - (a) The seed oil of *Gossypium herbaceum* is also edible.
 - (b) Oil is extracted from the seeds of *Abrus precatorius*
 - (c) The botanical name of ground nut is *Arachis hypogea*
 - (d) The grass, *Spinifex diander* is grown for reclaiming sand dunes
2. Fill in the blanks :
 - (a) A classification evaluating a taxon as it exists in nature is said to be _____
 - (b) *Engler & Prantel* placed bacteria under _____
 - (c) Plants having 11 to 19 stamens were placed by Linnaeus under the class _____
 - (d) The best artificial system of plant classification was proposed by _____
 - (e) While dividing the living world, Whittaker used _____ criteria.
3. Comment on Chemotaxonomy and Numerical taxonomy?
4. Discuss the Economic importance of Bacteria.
5. Match items of **Column I** with **Column II**

Column I	Column II
A Parasitic alga	i) <i>Cephaleuros</i>
B Lichen	ii) <i>Laminaria</i>
C Alginates	iii) <i>Gelidium</i>
D Agar-Agar	iv) <i>Algae-Fungi</i>
E Chlorellin	v) <i>Chlorella</i>
6. Comment on the pigmentation in Algae?
7. Name the causative agent of following fungal infections :
 - a) Athletes foot
 - b) Ringworm
 - c) *Aspergillosis*
 - d) Candidiasis
8. Comment on Lytic & Lysogenic cycle in Viruses?
9. Discuss the economic importance of Bryophytes?
10. What are resurrection plants? Give example
11. Fill in the blanks :
 - a) The plants of *Salvinia* & *Azolla* are
 - b) The archegonia in Pteridophytes lack a
 - c) Occurrence of more than one steles or in seleginella is called.....
 - d) In Petridophytes the suspensor of embryo, if present, is derived fromcell.
12. Comment on the following :
 - a) Why the walking fern is so named?
 - b) Name the source of Sanjavaznni booti?
 - c) What is the kidney shaped covering of sorus in Bryophytes?
 - d) What is maiden hair fern?
13. Comment on the Economic importance of Gymnosperms?
14. What are living fossils? Give examples?
15. Name the sources of Amber, canada balsam, spruce gum, cedar wood oil and chilgosa?
16. T/F
 - a) A tap root always develops from the radicle.
 - b) Nodulated roots are found in mango-ginger.
 - c) All orchids possess velamen tissue.
 - d) Epiphytic orchids possess velamen tissue.
 - e) Edible portion in carrot comprises root only.
17. Comment on the underground modifications of stem?
18. Differentiate between Phylloclade, cladode and Phyllode with examples?
19. Write a short note on Phyllotaxy?
20. What is Inflorescence? Comment on its types?

21. What is a flower? Explain its essential parts with the help of a diagram?
22. Discuss the various types of Aestivation?
23. What is a Perianth?
24. Define Fruit? What are true & false fruits?
25. Comment on the concept of Parthenocarpy?
26. What are albuminous seeds & exalbuminous seeds?
27. What is hypogeal & epigeal germination of seed?
28. Write a short note on dispersal of seed and fruits.
29. Comment on the concept of Viviparous seed?
30. T/F
 - a) Seed of angiosperms is truly a mature megasporangium.
 - b) Dark grown seeds are etiolated.
 - c) Aleurone grains contain spherosomes.
 - d) Seeds of lotus were found to remain viable for 8000 years.
 - e) Dormancy period of seeds must terminate before germination

26. Name one animal which possesses :

- | | |
|-----------------|----------------|
| (a) Flame cells | (b) Spongocoel |
| (c) Pseudopodia | (d) Flagella |
| (e) Tentacles | |

27. Match the items in Column I with those in Column II

Column I

Column II

- | | |
|---------------|--------------------|
| A. Ascaris | i) Echinoderms |
| B. Leech | ii) Coelentrates |
| C. Sea urchin | iii) Round worm |
| D. Hydra | iv) Segmented worm |
| E. Millipede | v) Arthropoda |

28. Describe briefly the reproductive system of Earthworm?

29. Comment on the External features of Cockroach?

30. Name the three types of respiration in Frog? How does frog respire during hibernation.

CLASS-XI (BIOLOGY)

ASSIGNMENT-IV (COACHING AND NON-COACHING)

* Q. NO. 1 TO 10 (MARKS-2)

* Q. NO. 11 TO 20 (MARKS-3)

* Q. NO. 21 TO 26 (MARKS-5)

1. Write two features of living organisms.
2. Define Taxon.
3. Write full forms of
 - (i) ICBN
 - (ii) ICZN
4. Name any two taxonomical aids?
5. What are Botanical Gardens? Give examples.
6. What is Classification
7. Name the preservative Solution, used to preserve biological specimens in museums.
8. What do you understand by taxonomic aids?
9. Which of the following share more common characters? Species or Class, Kingdom or Family, Species or Genus
10. Why growth is not the defining property of living organisms?
11. Why growth is not the defining property of living organisms?
12. Answer the following questions
 - (i) Name the family in which *Solanum*, *Petunia* and *Datura* are placed.
 - (ii) What is the title of the publication based on systematics published by Linnaeus?
13. What are the universal rules of nomenclature?
14. Write a short note on zoological parks.
15. What are flora, monographs and catalogues?
16. Who gave binomial nomenclature? Why is it necessary?
17. Explain
 - (i) Key
 - (ii) Museum
18. Why manual are used as taxonomical aids?
19. Mention three aims of Zoological Park.
20. Discuss the utility of classification?
21. Explain process of making herbarium .
22. Explain Taxonomic hierarchy in detail?
23. Write difference between Archaeobacteria and Eubacteria .
24. Write features of Kingdom Monera.
25. Explain reproduction in bacteria.
26. Who gave five kingdom classification? Explain it.