

SYLLABUS OF CLASS

9TH

BIOLOGY- Vacation Engaging Task

Ch # 1: INTRODUCTION TO BIOLOGY

Short Questions

1. What is the difference between zoology and botany?
2. Name any four careers in biology.
3. What is horticulture?
4. Define biotechnology.
5. What are parasites? Give an example.
6. What is the scientific name of mustard plant? When is it sown?
7. Define colonial organization and give an example.
8. What is community level? Give an example.
9. What is meant by bio elements? What is their number?
10. Define biochemistry.
11. What is multicellular organization?
12. Explain macro-molecules with an example.
13. What do you mean by organ system?
14. Describe two scientific contributions of Bu Ali Sina.
15. How cell biology is different from histology?
16. What are the major biological issues today?
17. Write the names of vegetative organs of plant.
18. Name any four unicellular organisms.
19. Differentiate between morphology and anatomy.
20. How biotechnology helps mankind? Explain.
21. Write down the definition of morphology.
22. What is meant by biogeography?
23. Write down names of bio molecules groups.
24. What is biotechnology? Elaborate its usefulness.
25. What is role of Bu Ali Sena in biology?
26. Define histology.
27. Write down a few achievements of Bu Ali Sina in Biology.
28. What is meant by pharmacology?
29. What is population level?

Long Questions

- Q.1 (A) Define community and explain it with an example.
(B) Write down the function of community level in levels of organization of organisms.
- Q.2 (A) What is biology? Name its three main branches and define them.
(B) Explain population level and community level.
- Q.3 (A) How biology is related to other sciences? Describe any four.
(B) Define biology and write a note on its three branches.
- Q.4 (A) Write the relationship of biology with physics' and chemistry.
(B) Explain organelle cell level and tissue level in organisms.
- Q.5 (A) Write a comprehensive note on farming and forestry.
(B) Explain any four careers related with biology.
- Q.6 (A) Write down the contributions of Muslim Scientists in the field of biology.
(B) Describe the contributions of Jabir Bin Hayan & Bu Ali Sina in the field of biology.
- Q.7 (A) Describe the role of Muslim Scientists.
(B) Biology is divided into different branches. Explain any four.
- Q.8 (A) Write about any five careers related to biology.
(B) Write a note on organ and organ system level.

Ch # 2: BIOLOGICAL METHOD

Short Questions

1. Differentiate between qualitative and quantitative observations.
2. What is scientific law? Give two examples.
3. What is control in experiments?
4. Why do the welts appear after mosquito bites or leaves the skin?
5. Write the role of biological method in biology.
6. What is control in experiments?
7. Define deduction.
8. Differentiate between control and experimental group.
9. Write the role of control group in experiments?
10. What is theory?
11. Describe two observations of A.F.A King about malaria.
12. Describe the meaning of words "mala" and "aria".
13. Why Ronald Ross used sparrow in his experiments?
14. Why quantitative observations are better in biological method?
15. Give two examples of qualitative observations.
16. Write the role of A.F.A King.
17. Define theory and give an example.

18. Write down two characteristics of good hypothesis.
19. Differentiate between theory and law.
20. How quantitative observations are better in biology? Explain.
21. What is meant by observations? Write its types.
22. What is meant by hypothesis?
23. What is the difference between theory and law?
24. Differentiate between culex and anopheles mosquitoes.
25. Write two characteristics of a good hypothesis.
26. Write definition of bio informatics.
27. Differentiate between theory and law.
28. How hypothesis is formed?
29. What is biological problem?
30. How data is organized?
31. What is a law? Define scientific law.
32. Write down characteristics of a good hypothesis.