TEACHING OF LIFE SCIENCE

SECTION A

LONG QUESTIONS

1. **Why should life science be include in school curriculum? Discuss with suitable example.**
2. **Should biology be compulsory component of school curriculum? If yes, which objectives biology teaching should aim at, in our schools?**
3. **What is the present position of life science teaching in school curriculum? Justify by giving suitable reasons.**
4. **How do aims of teaching life science differ from objectives?**
5. **Discuss the broad aims and objectives of teaching of life science in our schools?**
6. **Discuss the bloom's taxonomy of educational objectives in details.**
7. **How can the bloom's taxonomy of educational objectives be used in the formation of objectives of teaching science?**
8. **Discuss the cognitive and affective domains of bloom's taxonomy?**
9. **Do you consider the present science teaching in our schools to be quite satisfactory if not what should be the aims to bring about an improvement?**
10. **What is the importance of lecture demonstration method in the teaching of science? Explain with examples.**
11. **Discuss briefly different methods of teaching science. Which of these methods do you consider best suited to your school and why?**
12. **What do you understand by the assignment method of teaching science? How far is the method applicable in the schools?**
13. **Make a list of any five projects you will undertake for teaching high school biology. How will you carry on any one of these projects? What objectives will be fulfilled by your selected project?**
14. **"The study of biology laboratory subject is certainly useful for the individual and community alike." Justify the statement.**

15. **What is the importance of lecture demonstration method in teaching of science? Explain with examples.**
16. **What is the difference between teacher centered and pupil centered approaches to teaching science? Which approach is more appropriate in teaching science in Indian schools?**
17. **Discuss briefly the merits and demerits of demonstration method of teaching science in schools.**
18. **Draw the plan of combined demonstration and practical room indicating the position of tables, sinks, teacher's table and black board.**
19. **Describe the simplest but convenient science laboratory that you would have in ordinary school for teaching of science.**
20. **What things you would keep in your mind while arranging for the equipment and material for the science laboratory? Discuss in detail with regard to their planning procuring and maintenance.**
21. **Suggest list of equipment and material for biology laboratory which factors determine the quantity and quality of laboratory apparatus and material.**

SHORT QUESTIONS

1. **Procedure for writing objectives in behavioral terms.**
2. **Cognitive objectives of teaching biology at school stage.**
3. **Distinguish between aims and objectives of teaching biology.**
4. **Explain problem solving method.**
5. **What are the essential steps of project method?**
6. **Enumerate the characteristics of good assignments.**
7. **Criteria of a good demonstration.**
8. **Demerits of lecture method.**
9. **Suggest the equipment of science laboratory cum-lecture room.**
10. **Apparatus in biology laboratory.**
11. **Draw lecture cum demonstration lab.**
12. **Explain any five steps to be kept in mind for keep of apparatus.**

SECTION B

LONG QUESTIONS

1. **What are improvised apparatus? Explain development of improvised apparatus in biology?**
2. **Discuss the need and importance of improvised apparatus for teaching science in high school classes.**
3. **Give five examples of improvised apparatus used for teaching biology. Give material requirement, procedure of making a sketch of any one of the example given by you.**
4. **What are the steps involved in the development of improvised apparatus? What are the problems encountered in the development and use of improvised apparatus.**
5. **Briefly outline preparation of skeleton, stuffing of birds and other animals equipping your biology museum.**
6. **What is meant by laboratory technique? Discuss the laboratory technique for the following-**

a. **Pressing and mounting of plants specimen.**
b. **Preparation of slides.**

7. **Discuss the technique used for the collection, culturing and preservation for different classes of plant organisms?**
8. **What is the importance of science museum in teaching science? List a few science museums? Which have been established by the government of India?**
9. **Discuss the educational value of a life science museum. How will you organize a museum for teaching life science in schools?**
10. **What are the merits of a life science museum? Discuss the organization of the museum in detail.**

11. **Discuss briefly the importance and purpose of teaching aids on science. What should be the guiding principles in their selection and use?**
12. **'A technique aid, however good it may be, cannot replace teacher'. Discuss.**
13. **What are the various audio visuals aids utilized in teaching of life science? How can you effectively use charts, models and over head projectors?**
14. **Discuss in brief the importance of film strips, charts and epidiascope in the life science teaching. What points would you bear in mind for their effective use?**
15. **What are audio-visual aids? How far are they useful for science teaching?**

SHORT QUESTIONS

1. **Two examples of improvised apparatus in biology.**
2. **Importance of improvised apparatus.**
3. **Need of improvised apparatus.**
4. **Pressing and mounting of plants.**
5. **Preparation of slides.**
6. **Educational significance of science museum.**
7. **Merits of life science museum.**
8. **Explain teaching aid.**
9. **Importance of teaching aid.**
10. **Need of teaching aid.**
11. **How shall you organize a science fair?**
12. **Educational value of charts diagram, picture etc.**
13. **Educational value of science fairs?**
14. **Importance of science fair.**

15. **Write short note on charts, models, overhead projectors.**
16. **Merits of film strips.**
17. **Write short note on epidiascope, computer**
18. **Merits of OHP**

SECTION C

LONG QUESTIONS

1. **What is the place of botanical garden and aquarium in teaching of biology? Discuss its organization and upkeep.**
2. **What is the place and organization of scientific hobbies to make biology teaching more effective? Explain any one hobby you will undertake with your biology students.**
3. **What are the merits of scientific hobbies? How will you develop hobbies of gardening and poultry farming among your students?**
4. **Discuss the need and importance of scientific hobbies in the teaching of science in high and senior secondary schools.**
5. **How will you prepare a model lesson in biology? How will you record observation of a biology lesson?**
6. **What are the different steps that a life science teacher should follow while preparing a lesson plan? What points should be taken into consideration to observe the lesson?**
7. **What is meant by lesson planning? Write a lesson plan on a topic of biology of class 8^{th}.**
8. **What are the duties and responsibilities of a biology teacher? Enumerate three problems of a biology teacher and suggest steps that you will take to sole them.**
9. **What do you understand by the term professional growth? Discuss various activities that contribute to that professional growth of life science teachers?**

10. **'In service teacher education programms help a lot for the professional growth of a life science teacher'. Comment in the above statement. Briefly describe the qualities which should be possessed by a biology teacher.**
11. **Describe the steps that you may take for your professional growth. Describe the steps briefly.**
12. **Describe the constitution and activities of biology club.**
13. **What steps would you suggest to popularize the science club movement in high and senior secondary schools?**
14. **What is the need and role of biological club in teaching of life science? Discuss it organization briefly.**

SHORT QUESTIONS

1. **Organization of botanical garden.**
2. **Upkeep of aquarium, botanical garden**
3. **Organization of scientific hobby**
4. **Bee keeping as a scientific hobby**
5. **Explain any one scientific hobby**
6. **Preparation of models.**
7. **Define lesson planning**
8. **Art of questioning in life science**
9. **Type of questions.**
10. **Technique of observing the lessons.**
11. **Merits of lesson planning in teaching of life science**
12. **Name various steps of lesson planning**
13. **Qualities of biology teacher**
14. **Duties of biology teacher**
15. **Science teachers diary**
16. **Steps towards the professional growth of biology teacher**
17. **Need of biological club**
18. **List some activities of biological club**

19. **Role of biological club in teaching**
20. **Biological club organization**
21. **Constitution of biological club**

SECTION D

LONG QUESTIONS

1. **What is the place and present condition of practical in teaching of biology? Suggest the improvements needed for better organization of practical work.**
2. **What is the need and importance of practical in teaching of life sciences? How as a teacher, will you effectively organize practical in biology?**
3. **Define science curriculum? Make a list of various defects in present day curriculum in our schools.**
4. **Discuss some important principles of curriculum in the content of curriculum.**
5. **"Present curriculum of life science is not curriculum indeed. It is just a jumbling of facts from different branches of science in an unorganized and unpsychological way. Comment on the statement. Suggest the way to improve the curriculum.**
6. **Define evaluation. Discuss the defects in present system of evaluation. What are the difference between an objective based and objective type tests? Explain by giving examples.**
7. **Define evaluation. Discuss the new concept and technique of evaluation in biology.**
8. **Explain biology: healthy environment.**
9. **Write any one practical of the following.**

- **Study of cell structure**
- **Study of photosynthesis**

SHORT QUESTIONS

1. **Improvements needed in conduct of biology practical work.**
2. **Define curriculum**
3. **Ant three defects in science curriculum**
4. **Any four principles for curriculum construction**
5. **Difference between examination and evaluation**
6. **Biology: healthy environment**
7. **Defects in evaluation of science**
8. **New technique of evaluation in science**
9. **Objective type question**
10. **Write practical on study of amoeba.**