

Question Bank
Methodology of Teaching Science
Semester 1

1. What do you understand by general & specific objectives? Differentiate between them. Give appropriate Example.
2. State objectives of teaching Science in 21st century.
3. Differentiate between 'aims' and 'objectives' of Science teaching.
4. How can the Bloom's taxonomy of educational objectives be used in the formation of objectives of teaching Science?
5. What is lesson - planning? Discuss the importance of lesson - planning at school teaching for a teacher.
6. What do you understand by unit - planning? How is it different from lesson planning? Discuss with illustration.
7. What are the features / components / elements of a lesson plan? Explain in detail.
8. What are the advantages & disadvantages of lesson plan?
9. Prepare a lesson plan on any topic of Physics / Chemistry / Biology of standard VIII, IX & X.
10. List the advantages & drawbacks of lesson planning as well as unit - planning.
11. List the characteristics of a good lesson plan as well as a unit plan.
12. "A teaching aid, however good it may be, can not replace the teacher." Discuss.
13. List the types of teaching aids and discuss improvised teaching aids in detail with examples.
14. What are audio visual aids? How far are they useful for science teaching?
15. Discuss the need and importance of teaching aids in detail.
16. Discuss importance of a Science laboratory for a Secondary school.
17. A science laboratory for a Secondary school in which at least 25 students can be work at a time how will you manage it?
18. Describe the laboratory equipments for Secondary school students and discuss its importance with types.
19. Write briefly on a Science laboratory and try to give the detail regarding designing of Science laboratory.
20. Laboratory method is the heart of the Science teaching. Justify with its importance. List its merits and demerits?
21. State the nature of Science teaching.
22. "Lecture method is beneficial to a teacher teaching Science." Justify this statement.
23. Write a short note on processes of teaching Science.
24. How observation & inferring process helps in teaching Science?
25. How classification & measurement process beneficial in teaching Science?
26. State the techniques of teaching science. Explain any one in detail
27. Construct a brief outline of a lesson plan based on any content point of your choice focusing constructive approach.
28. Construct a brief outline of a lesson plan based on any content point of your choice focusing participatory approach.
29. State the type of teaching aids. Discuss any one improvised teaching aid of your choice.
30. What is teaching aid? State the characteristics of preparing teaching aid.
31. What is the difference between method and technique? Illustrate it.

32. List the aims and objectives of Science and discuss in detail.
33. Select any one problem of everyday science and solve using steps of problem solving method.
34. What is problem solving? State the steps of problem solving.
35. What is project method? State the steps of project method.
36. As a Science teacher select one project based on any content point and follows the steps of project method for preparing project.
37. What are the advantages and disadvantages of project method?
38. What are the advantages & disadvantages of problem solving method?
39. What are the advantages and limitations of lecture method?
40. What is lecture method? State the characteristics of lecture method.
41. What is constructivist approach? Discuss the steps of constructivist approach.
42. Why constructivist approach is essential in Science teaching?
43. How participatory approach is fruitful in Science teaching?
44. What is the significance of teaching aids?
45. State the types of teaching aids. Explain any one teaching aids of your choice.
46. What is an improvised teaching aid? Prepare any one improvised teaching aids selecting any content point of Science.
47. Which methods are based on participatory approach? Explain the principles of participatory approach using example.
48. Select the any content point of Std IX and draw a unit plan.
49. Draw a lesson plan (Classroom interaction & specific objectives only) on any content point of your choice based on constructive approach.
50. Draw a lesson plan (Classroom interaction & specific objectives only) on any content point of your choice based on participatory approach.

Question Bank
Methodology of Teaching Science
Semester 2

Questions:

1. What are the objectives of Science club?
2. State the activities carried out by the science club in your school.
3. State the significance of science club.
4. What point's science teacher should keep in mind while demonstrating experiment?
5. State the safety measures for the science practicals.
6. What should be the role of a science teacher in laboratory management?
7. Explain the concept of laboratory management.
8. You are invited to deliver a talk on Botanical garden. Prepare a script to deliver your views.
9. The school has to develop science laboratory. What points will you suggest to the management for effective science lab?
10. How will you construct aquarium to teach the science concept?
11. Write short note on science museum.
12. What points can be taught through science museum?
13. Write short note on media in teaching and learning science.
14. What are the challenges before the science teacher in 21st century?
15. State the qualities of science teacher in 21st century.
16. How will you make effective use of technology in teaching science?
17. What points will you consider while organizing science fair?
18. State the community resources used in teaching science. Explain one in detail.
19. Explain the organization of science club.
20. State the advantages of science club.