

# Physical Science

## PART A

**I. Each answer should not exceed half-a-page. Each answer carries 2 marks**

1. Mention any four values of teaching science in schools.
2. What are the values of school libraries?
3. What do you mean by interdisciplinary approach?
4. What is scientific attitude?
5. Define interest.
6. What is a first aid box?
7. Who is a backward child?
8. Mention the objectives of organising science exhibitions.
9. Mention the records to be maintained in the science laboratory
10. Give an example for experimental project in science.
11. What are the differences between linear programme and branched programme?
12. Write the difference between Achievement test and Standardized test.
13. What is the purpose of multimedia?
14. What is ABL method?
15. What is blue print of a question paper?
16. Define evaluation.
17. What are the requisites of a good text book in science?
18. What are the Herbartian steps of lesson planning?
19. Give four uses of A-V aids.
20. Write the differences between Seminar and Workshop.
21. What are the advantages of Demonstration method?

22. What are the basic elements of teaching model?
23. What are the principles of curriculum construction?
24. Define self evaluation.
25. What are the steps in micro teaching?

### **PART B**

**Each answer should not exceed 200 words. Each answer carries 5 marks.**

1. Explain problem solving method.
2. What is meant by Item analysis?
3. Write the features of a good lesson plan.
4. What are the objectives of teaching physical science at higher secondary level?
5. Illustrate the purpose of demonstration in Science teaching.
6. Explain with suitable diagrams the construction of any two improvised apparatus.
7. Write about six linear frames for a topic in Science.
8. Write three instruction cards which could be used for Lab practical.
9. Explain the characteristics of achievement test.
10. Discuss the advantages of educational technology.
11. What are the advantages of supervised study?
12. What are the principles of programmed instruction?
13. Write the steps in the standardisation of an Achievement test.
14. Explain the steps in Scientific method.
15. Write the GIO and SIO for any topic in science.
16. Explain the components of 'skill of explaining' with an episode.
17. Explain the special qualities of a science teacher.
18. Describe the normal probability curve.

19. Explain the principles of Microteaching.
20. Explain the components of ‘skill of reinforcement’ with an episode.
21. Write the differences between Test and Measurement.
22. Differentiate the Formative assessment from the Summative assessment.
23. What are the advantages of Self-Appraisal Scale?
24. Give a short note on Continuous and Comprehensive Evaluation.
25. Describe briefly about Positive Learning Climate.

### **PART C**

**Each answer should not exceed 600 words. Each answer carries 10 marks.**

1. Explain in detail about the Inductive and Deductive method of teaching.
  2. What do you mean by measures of Central Tendency, Standard Deviation and Quartile Deviation?
  3. Discuss the educational values of the following aids in teaching of Physical science.
    - a. Diagrams b. Models c. Charts and pictures d. Flash cards.
  4. Describe the construction of an achievement test.
  5. Explain the concept of classroom management.
  6. Write short notes for the following
    - a. Buzz group b. Group discussion c. Assignment.
  7. Describe Bloom’s Taxonomy of educational Objectives.
  8. Explain the role of technology in teaching physical science.
  9. Write an essay on classroom interaction analysis.
  10. Explain in detail about teaching and learning styles.
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