

Assam Board Class 9 Science Syllabus

SCIENCE PRACTICAL

(For Class-IX)

List of Experiments (Class-IX)

Sl No.

BIOLOGY

1. Demonstration of different parts of one Dicot and one Monocot plant
2. Identification of plants
3. Morphological study of Honey bee/Ant/Fish/Spider/Mollusca
4. Charts on: (i) Animal Cell
(ii) Plant cell.
(iii) Types of tissues.
(iv) List of of three bacterial and two protozoal diseases with their symptoms.

PHYSICS:

1. To determine velocity and acceleration of a moving body.
2. To Verify Newton's Second Law of Motion.
3. To Study variation of Potential Energy with height.
4. To measure temperature of liquid at various state in Celsius and Fahrenheit scale.

CHEMISTRY :

1. To prepare sulphide from iron filings and sulphur

powder and to observe the changes in the properties on the constituent elements as they combine to form the compound.

3. To separate the components from mixture of (a) sand and ammonium chloride (b) Common salt and sand.
4. To Study the extent of cooling caused by evaporation on (i) Water (ii) Ethanol (alcohol) (iii) Ether.
5. To determine the Boiling point of water.

List of equipments and materials (Class-IX)

BIOLOGY:

1. Freshly collected paddy plant with roots, stem and leaves intact.
2. White drawing sheet.
3. Eraser
4. Scale
5. Freshly collected mustard plant with roots, stem and leaves intact.
7. Specimen of (i) Basket, grass, (ii) Bermuda grass, (iii) Honey bee (worker) (iv) Termite (worker), (v) Butterfly, (vi) Fish, (vii) Spider, (viii) Mollusca

PHYSICS:

1. A small rubber or marble

2. Two small wooden blocks or match- boxes
3. A foot scale
4. A small toy car
5. A few long paper strips
6. Paper clips
7. An inclined plane
8. a timer cup
9. Thread
10. Wire
11. Colored solution or ink
12. A few coins
13. A spring balance
14. Flour paste
15. A stone (Small size)
16. Cellotape
17. Scissors
18. A support with a hook adn scale
19. A glass beaker
20. Thermometer
21. Few pieces of ice
22. Tripod stand
23. Water
24. Spirit burner

25. Wire holder

CHEMISTRY:

1. Porcelain basin
2. Tripod stand
3. Iron fillings
4. Sulphur powder
5. Carbon disulphide
6. Bar or horse shoe magner
7. Test tubes (3 nos)
8. Beakers (3 nos)
9. Funnel
10. Filter paper
11. Bottle of distilled water
12. Lemon, salt/sugar
13. Sand
14. Starch or egg albumin
15. Spirit lamp
16. Wire gauze
17. Srirrer (glass rod)
18. Ammonium Chloride
19. Cotton
20. Water

21. Ethanol or rectified spirit
22. Ether
23. Thermometer
24. Petridish
25. Stopwatch
26. Pipette/syringe
27. Spring balance



SCIENCE PRACTICAL **(For Class X)**

List of Experiments (Class - X)

Sl. No. BIOLOGY

1. To prepare a temporary mount of a leaf to demonstrate its stomata.
2. To show that light is essential for photosynthesis.
3. To study binary fission of Amoeba or yeast with the help of prepared slide.
4. To dissect and display different parts of a complete flower (China rose)
5. To study the morphological characters of cockroach.

PHYSICS

6. To find the image distance due to an object placed in front of convex lens and hence to determine its focal length.
7. To study the image distance corresponding to an object placed at $2f$, $3f$, $4f$ distance in front of a convex lens.
8. To study the phenomenon of refraction through prism (by pin method) and hence to determine the angle of deviation.
9. To study the change of current due to variation of resistance in an electric circuit.
10. To study and demonstrate the principle of working of electric motor.

CHEMISTRY

11. To show that electrovalent compounds are soluble in

GENERAL SCIENCE

Subject Code : C3

Class -IX

Time : 3 hours

Full Marks : 100

Pass Marks : 30

(Theory : 90, Internal Assessment : 10

Pass marks in written examination : 27)

| Sl. No. | Chapters | Marks |
|---------|-------------------------------|-------|
| 1. | Matter in our surroundings | 5 |
| 2. | Is matter around us pure | 5 |
| 3. | Atoms and molecules | 6 |
| 4. | Structure of the atom | 6 |
| 5. | The fundamental unit of life | 5 |
| 6. | Tissues | 6 |
| 7. | Diversity in living organisms | 7 |
| 8. | Motion | 7 |
| 9. | Force and Laws of Motion | 8 |
| 10. | Gravitation | 7 |
| 11. | Work and energy | 7 |
| 12. | Sound | 6 |

| Sl. No. | Chapters | Marks |
|---------|-------------------------------|-------|
| 13. | Why do we fall ill | 5 |
| 14. | Natural resources | 5 |
| 15. | Improvement in Food resources | 5 |
| | Total | 90 |

Experimental Activities Practicals/ Internal Assessment

Marks- 10

| Sl. No. | Chapters | Marks |
|---------|---|--------|
| 1. | Category A : Teacher's activity-- (Teacher will evaluate the students as he/she demonstrates) | 2 |
| 2. | Category B : Student's activity-- Activity Practical record book | 3 3 |
| 3. | Category C : Chart/Model/Specimen Collection | 2 |
| | Total | 10 |
| | Grand Total : | 100 |

Textbook : Science (for Class IX). The Assam State
Textbook Production and Publication Ltd.
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