

## SCIENCE

Book Preferred - N.C.E.R.T and Living Science for Physics, Chemistry and Biology (Published by Ratna Sagar)

### Unit Test -1

Chemistry	Ch-1	Matter in our surroundings
Biology	Ch-5	The fundamental unit of life
Physics	Ch-8	Motion

### Unit Test -2

Chemistry	Ch-2	Is matter around us pure?
Biology	Ch-6	Tissues
Physics	Ch-9	Force and Laws of Motion

### HALF YEARLY EXAMINATION

Chemistry	Ch-1	Matter in our surrounding
	Ch-2	Is matter Around Us pure?
	Ch-3	Atoms and Molecules
Biology	Ch-5	The Fundamental Unit of Life
	Ch-6	Tissues
	Ch-13	Why do we fall ill ?
	Ch-14	Natural resources
Physics	Ch-8	Motion
	Ch-9	Force and Laws of Motion
	Ch-10	Gravitation'

### Practicals :

#### Chemistry

- Preparation of :
    - a true solution of common salt, sugar and alum
    - a suspension of soil, chalk powder and fine sand in water
    - a colloidal solution of starch in water and egg albumin/ milk in water and distinguish between these on the basis of
      - transparency
      - filtration criterion
      - stability
  - Preparation of Unit - I
    - A mixture
    - A compoundUsing iron filings and sulphur powder and distinguishing between these on the basis of :
    - appearance, i.e., homogeneity and heterogeneity
    - behaviour towards a magnet
    - behaviour towards carbon disulphide as a solvent
    - effect of heat
  - Separation of the components of a mixture of sand, common salt and ammonium chloride (or camphor)
- Unit - I
- Perform the following reactions and classify them as physical or chemical changes.  
Unit - I
    - Iron with copper sulphate solution in water
    - Burning of magnesium ribbon in air
    - Zinc with dilute sulphuric acid
    - Heating of copper sulphate crystals
    - Sodium sulphate with barium chloride in the form of their solutions in water

#### Biology

- Preparation of stained temporary mounts of (a) onion peel, (b) human cheek cells and to record observations and draw their labeled diagrams.
- Identification of parenchyma, collenchyma & sclerenchyma tissues in plants, striated, smooth and cardiac muscle fibers and nerve cells in animals, from prepared slides. Draw their labeled diagrams.

- Physics 1. Determination of the density of solid (denser than water) by using a spring balance and a measuring cylinder.

2. Establishing the relation between the loss in weight of a solid when fully immersed in Tap water Unit - III
- a. Tap water Unit - III
- b. Strongly salty water with the weight of water displaced by it by taking at least two different solids.

**Unit Test - III**

Chemistry	Ch-4	Structure of Atom
Biology	Ch-7	Diversity in Living Organisms
	Ch-15	Improvement in food resources
Physics	Ch-11	Work and Energy

**ANNUAL EXAMINATION**

Chemistry	Ch-1	Matter in our surroundings
	Ch-2	Is matter Around us pure ?
	Ch-3	Atoms and Molecules
	Ch-4	Structure of Atom
Biology	Ch-5	The Fundamental Unit of Life
	Ch-6	Tissues
	Ch-7	Diversity in living organisms
	Ch-13	Why do we fall ill ?
	Ch-14	Natural resources
Physics	Ch-15	Improvement in food resources
	Ch-8	Motion
	Ch-9	Force and Laws of Motion
	Ch-10	Gravitation
	Ch-11	Work and Energy
	Ch-12	Sound

**Practicals :**

Chemistry :

1. Determination of the melting point of ice and the boiling point of water. Unit -I
2. Verification of the law of conservation of mass in a chemical reaction. Unit -III

Physics

1. Verification of the laws of reflection of sound.
2. Determination of the speed of a pulse propagated through a stretched string/slinky (helical springs)

Biology. 1.

Study of the characteristics of Spirogyra, agaricus, Moss, Fern, Pinus (either with male or female cone) and an Angiosperms plant. Draw and give two identification features of the groups they belong to.

2. Observe the given pictures / charts / modals of earthwork, cockroach, bony fish and bird.

For Each organism, draw their picture and record : Unit-II

- a. One specific feature of its phylum
- b. One adaptive feature with reference to its habitat
3. Study of the external features of root, stem, leaf and flower of monocot and dicot plants.

**Note :**

4. Both annual and half yearly activities along with whole syllabus will come in annual examination
5. Prepare question / answer from Reference book also
6. In modal test whole syllabus will come.