# NEW STANDARD ACADEMY

**Semri Kothi Super Market, Raebareli**
**CLASS 10 (Academy) 26-05-2025**

## PHYSICS

1. What is cornea ?
2. What is the function of ciliary muscles ?
3. What is the shape of eye lens ?
4. What is the structure and material of eye lens ?
5. To what are the ends of suspensory ligaments attached ?

## CHEMISTRY

1. Explain giving chemical equation any two used of chemical decomposition reaction in industry.
2. Classify the following exothermic and endothermic reactions:
   (a) Photosynthesis                    (b) Electrolysis of water
3. Write two examples of everyday life where redox reactions are taking place.
4. Write two observations that you will make when an iron nail is kept in an aqueous solution of copper sulphate. Write the chemical equation for this reaction.
5. Identify the type of each of the following reactions:
   (a) A reaction in which a single product is formed from two or more reactants.
   (b) The reaction mixture becomes warm.

## BIOLOGY

1. How does food prepared by leaves is utilized by roots? Explain.
2. Plants absorb water from the soil. How does this water reach to the top of the tree? Explain.
3. Write the constituents of blood. Why are white blood corpuscles called 'Soldiers of the body?
4. Draw a well labelled diagram of the vertical section of human heart representing the internal structure.
5. Explain how oxygenated blood from left ventricles is transferred to all parts of the body and how deoxygenated blood enter the right auricle?

## MATH

1. Find the sum of first 51 terms of the AP whose second and third terms are 14 and 18 respectively.
2. Find the AP whose fourth term is 9 and the sum of its sixth term and thirteenth term is 40.
3. The sum of first 4 terms of an AP is 40 and that of first 14 terms is 280, find the sum of its in terms.
4. Find the common difference of an AP whose first term is 5 and the sum of first four terms is half the sum of next four terms.
5. The sum of first n terms of an AP whose first term is 8 and the common difference is 20 equal to the sum of first 2n terms of another AP whose first term is -30 and the common difference is 8.