



CAMBRIAN PUBLIC SCHOOL

KANKE ROAD, RANCHI

Revision Assignment

Subject: Science

Class: X

Class X Chemistry Assignment

NCERT Chapters 1, 2 & 3

A. Very Short Answer Questions:

- 1) What are amphoteric oxides? Give two examples.
- 2) Name the salt used for softening hard water.
- 3) Name the gas produced at the anode during the chlor-alkali process.
- 4) What is the common name of calcium oxychloride?
- 5) Which type of reaction takes place when silver chloride is exposed to sunlight?

B. Short Answer Questions:

- 6) Explain why the pH of soil is important for healthy plant growth. How can highly acidic soil be treated?
- 7) Write the chemical formula, one important property, and one use each of:
 - a) Baking soda
 - b) Plaster of Paris
- 8) Why it is recommended not to store sour food stuffs in metal containers?

C. Competency-Based Questions:

- 9) A science exhibition displayed four labelled samples—A, B, C and D.

A is used to prepare soft, spongy cakes.

B is added to hard water during washing.

C is used to make casts for fractured bones.

D is used to disinfect drinking water.

 - a) Identify A, B, C and D.
 - b) Write the chemical formula of each.
 - c) Mention one use of each substance other than the one given above.
 - d) Which of these substances is prepared from gypsum?
 - Student performed the following reactions:
 - Magnesium ribbon was burnt in air.
 - Lead nitrate solution was mixed with potassium iodide solution.
 - Ferrous sulphate crystals were heated strongly.
 - a) Identify the type of reaction in each case.
 - b) Write the balanced chemical equation for each reaction.
 - c) Which reaction produces a yellow precipitate?
 - d) Which reaction is accompanied by a change in the colour of the solid? Explain briefly.

Class X Biology Assignment

Chapters

- **Life Processes**
- **Control and Coordination**

Very Short Answer Questions

- 1) Name the pigment present in chloroplast that traps sunlight.
- 2) Which blood vessel carries oxygenated blood from the lungs to the heart?
- 3) Which part of the brain controls balance and posture?
- 4) Which hormone is responsible for the fight-or-flight response?

Short Answer Questions

- 5) Explain the process of ultrafiltration in the kidney.
- 6) Differentiate between endocrine glands and exocrine glands.
- 7) Differentiate between reflex action and a voluntary action.

Long Answer Questions

- 8) Describe the pathway of blood circulation in the human body.
- 9) Describe the mechanism of reflex action with the help of a reflex arc.
- 10) Draw and label the human digestive system.
- 11) Draw and label the human heart showing its four chambers.
- 12) Draw and label the human brain showing cerebrum, cerebellum and medulla oblongata.

CLASS 10 PHYSICS ASSIGNMENT

Chapters:

- **Light**
- **Human Eye**

Very Short Answer Questions

- 1) What defect of vision is corrected by using a concave lens?
- 2) Why do we see a rainbow in the sky after rain?
- 3) What is the focal length of a plane mirror?
- 4) A concave mirror has a focal length of 10 cm. What is its radius of curvature?

Short Answer Questions

- 5) An object is placed at 20 cm in front of a convex lens of focal length 15 cm. Find the position of the image using the lens formula.
- 6) State two causes of Myopia and two causes of Hypermetropia. How is each defect corrected?
- 7) Explain with a diagram why the Sun appears reddish at sunrise and sunset.

OR

Why is the Tyndall effect observed in a dusty room?

- 8) The magnification produced by a spherical mirror is +3.
 - a) What does this mean?
 - b) What type of mirror and image is it?
 - c) If the object distance is 10 cm, find the image distance.

Long Answer Questions

- 9) A student conducts an experiment using a convex lens. He keeps the object at different distances and records the nature of the image:
- Draw ray diagrams for:
 - Object at infinity
 - Object at $2F$
 - Object at F
 - For each case, state the position and nature of the image.
 - Where should an object be placed to get a magnified and virtual image?
- 10) Riya went to an optician and was told that she has a defect in her eye. The optician prescribed her spectacles with a lens of power -2.5 D .
- Identify the defect of vision Riya is suffering from.
 - What type of lens should be used to correct it?
 - Calculate the focal length of the lens.
 - Draw a ray diagram to show how this lens corrects the defect.
