

HOLIDAY HOMEWORK

SUBJECT: SCIENCE

CLASS X

Session 2023- 24

1.Prepare a Write up on any one of the following topics.

- a) Management of natural resources
- b) Our environment and Environmental related issues
- c) Sources of energy

Instruction to prepare the above write up

- 1. The write up to be prepared in A4 sheets, and to be submitted in a stick file
- 2. You must stick some pictures to support your write up
- 3. way to proceed with the write up
 - i) The first page Must Contain The topic, the subject (science), school name, cadet name , class section and the roll number.
 - ii) 2nd page must contain index
 - iii) The write up
 - iv) Last page must contain the summary of your write up.

2.Complete the following experiment in record book

- a. A. Finding the pH of the following samples by using pH paper/universal indicator:
 - (i) Dilute Hydrochloric Acid
 - (ii) Dilute NaOH solution
 - (iii) Dilute Ethanoic Acid solution
 - (iv) Lemon juice
 - (v) Water
 - (vi) Dilute Hydrogen Carbonate solution
- b). Studying the properties of acids and bases (HCl & NaOH) on the basis of their reaction with:
 - a) Litmus solution (Blue/Red)
 - b) Zinc metal
 - c) Solid sodium carbonate
- C). Determination of the focal length of:
 - i) Concave mirror

ii) Convex lens by obtaining the image of a distant object

d). Tracing the path of a ray of light passing through a rectangular glass slab for different angles of incidence. Measure the angle of incidence, angle of refraction, angle of emergence and interpret the result.

e). Tracing the path of the rays of light through a glass prism.

f). Studying

(a) binary fission in Amoeba, and

(b) budding in yeast and Hydra with the help of prepared slides.

g). Experimentally show that carbon dioxide is given out during respiration.