

**DELHI PUBLIC SCHOOL  
BOKARO STEEL CITY**

ASSIGNMENT FOR THE SESSION 2009-2010

Class : VII

**Subject : Science & Technology**

Assign. No. 3

**Section-A (Physics)**

1. Name three conditions that, when present together can cause a thunderstorm.
2. What do you mean by lightning conductor? Write the safety measures against lightning strike.
3. What is a spherical mirror? Write differences between concave and convex mirror.
4. Where should an object be kept so that a virtual and erect image of the magnified size is obtained using a concave mirror? Draw a ray diagram to satisfy the answer.
5. What is a lens? Draw a ray diagram to show the image formed by a convex lens, when the object is placed on the principle focus. Write the characteristics of the image.
6. Define reflection of light. Write its two laws.
7. Define image? Write differences between real image and virtual image.
8. What do you mean by dispersion of light? What colour are we likely to see when we rotate Newton's colour disc rapidly?
9. Write differences between regular and irregular reflection.
10. Where should an object be placed so that a real and inverted image of the same size is obtained using a concave mirror? Draw a ray diagram to satisfy the answer.

**Section-B (Chemistry)**

1. Name the acids found in lemon juice, vinegar, tea and curd.
2. Why are glass containers used for storing mineral acids?
3. A solution has bitter test and is soapy to touch. It is used to manufacture soap. Is the solution an acid or a base?
4. Differentiate acids and bases with example.
5. Why do doctors prescribe antacids tablets to patients suffering from acidity?
6. How does tooth decay occur?
7. A farmer tasted his farm land soil with a moist litmus paper. It turned red. How can he neutralize the soil?
8. Why is most of the water not useful to us?
9. Why dams are considered as an ecological disaster?
10. Rainfall either scanty or in excess in both cases is harmful. Justify.
11. Explain the terms -- precipitation, infiltration, aquifer, water table, drip irrigation and rainwater harvesting.
12. Why should we not use polythene bags?

13. Explain the term sludge. How is it disposed?
14. What are the harms and problems due to improper management of sewage?
15. What do you mean by eutrophication? Describe its cause and harmful effects.

**Section-C (Biology)**

16. Explain with the help of suitable example holozoic mode of nutrition.
17. Prepare a synopsis of digestive organs in human beings mentioning the functions.
18. Draw a well labelled diagram of alimentary canal in human.
19. Describe the structure and function of human heart and draw diagram.
20. What would happen if our body lack proper excretory system.
21. How does forests help in purifying air enlists the ways of conservation of forests.
22. Discuss the flow of energy in the food chain giving suitable example.

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