

Class: VIII

Subject : Science & Tech.

Assignment No. 2

Section – A : Physics

- 1) What is friction? What are the two main factors on which the force of friction depends?
- 2) What is the principle used in ball bearings? How are ball bearings useful to us?
- 3) What is viscous drag? State three factors on which it depends.
- 4) With the help of a diagram discuss the terms: Amplitude, Time Period, and Frequency of a sound wave.
- 5) Draw a labeled diagram of human ear, explaining how the energy of the sound wave is transmitted to the nerves in the cochlea.
- 6) Name the three types of musical instruments, giving one example of each. Describe how sound is produced in each type.
- 7) Using the example of a loudspeaker, explain how sound travels.
- 8) Define the following terms: Electrolyte, Electrolysis, Electrodes,
- 9) How can you electroplate an aluminium chain with gold? Explain with the help of circuit diagram.
- 10) Describe the electrolysis of acidulated water.

Section – B : Chemistry

- 1) Write differences between metals and non-metals on the basis of malleability, conductivity, melting point and tensile strength.
- 2) What do you mean by destructive distillation of coal? Write its products and their uses.
- 3) How is coal formed?
- 4) Write the chemical equation for the following:
 - a) Reaction of sodium with water.
 - b) Reaction of magnesium oxide with water.
 - c) Reaction of iron with copper sulphate.
- 5) What is reactivity series? Arrange these elements in descending order of reactivity.
Fe , K , Zn , Na , Al , Cu , Au , Ag

Section – C : Biology

1. What is vaccine? Describe the role of micro-organisms in vaccination.
2. Define carriers. How carriers spread diseases? Explain with one example and also mention the preventive measures.
3. Explain three common methods to preserve food items along with examples.
4. 'Percentage of nitrogen in the atmosphere remains more or less constant'. Explain and justify.
5. Write four major groups of micro-organisms and draw well labeled diagram of one micro-organism of each group.
6. Define crops. How crops can be classified on the basis of the season. Explain with examples.
7. Describe two economical modern methods of irrigation.
8. Why manures should be preferred over fertilizers?
