## DELHI PUBLIC SCHOOL JAMMU ASSIGNMENT (SESSION 2018-19)

## CLASS-X

# PREBOARD-2

**SUB: SCIENCE** 

<u>Chemistry</u>

Chapter 1 – Chemical Reactions and Equations.

Chapter 2 – Acids, Bases and Salts.

Chapter 3 – Metals and Non-metals.

Chapter 4 – Carbon And Its Compounds.

Chapter 5 – Periodic Classification Of Elements.

Q1. Why a combustion reaction is an oxidation reaction?

Q2. Why are food particle preferably packed in aluminum foil?

Q3. What happens to lime water when gas is bubbled through it in excess?

Q4. What happens to the crystals of washing soda when exposed to air?

Q5. What is the chemical name of washing soda? Name three raw materials used in making

Washing soda by Solvay process?

Q6. What is efflorescence? Give an example?

Q7. Why is sodium hydrogen carbonate an essential ingredient in antacids?

Q8. Why do ionic compounds have high melting points?

Q9. Why sodium is kept immersed in kerosene oil?

Q10. What will be the formula and electron dot structure of cyclopentane?

Q11. Draw the structures of the following compounds

(a) Ethanoic acid

(b) Bromopentane

(c) Butanone

Q12.Write two major shortcomings of Mendeleev's periodic table? How have these been Removed in the modern periodic table?

#### **Physics**

Chapter 1 Light-Reflection and Refraction Chapter 2 The Human eye and the Colorful world

Chapter 2 The Human eye a Chapter 3 Electricity

Chapter 4 Magnetic effect of electric current

Chapter 5 Sources of energy

Q13. A beam of light is incident on a convex mirror parallel to its principal axis. Show

Diagrammatically, the path of these rays after reflection from the mirror.

Q14. Find the power of a concave lens of focal length 2m?

Q15. Draw a diagram to show the dispersion of white light by a glass prism.

Q16. Name the phenomenon responsible for the observed twinkling of stars. Will this twinkling be observed by an observer on the moon.

Q17. (a) What is hypermetropia?

(b) What are the two causes of this defect of vision?

Q18. What is the principle of electric motor? State the function of (a) split ring (b) field magnet Used in electric motor.

Q19. State three factors on which magnetic field produced by a current carrying solenoid Depends.

Q20. On what factors does the value of induced current in a circuit depend? Name & state the rule used for determination of direction of induced current. State one application of this phenomenon in everyday life.

Q21. Write two qualities of an ideal source of energy?

Q22. What are the advantages of nuclear energy?

## **Biology**

**Chapter 1.Life Processes** 

**Chapter 2.Control and Coordination** 

**Chapter 3.How Do Organism Reproduce** 

**Chapter 4.Heredity and Evolution** 

**Chapter 5.Our Environment** 

**Chapter 6.Sustainable Management of Natural Resources** 

Q23. Where does digestion of starch begin in human body?

Q24. Give one example each of saprophytic and parasitic nutrition.

Q25. What happens at the synapse between two neurons?

Q26. What is the need for a system of control and co – ordination in an organism?

Q27. Compare nervous and hormonal mechanism for control.

Q28. Describe sexually transmitted diseases (STDs) and mention the ways to prevent them.

Q29. Name the surgical methods of birth control in human males and females respectively.

Q30. What is monohybrid cross?

Q31. What are autosomes and sex chromosomes?

Q32. Why acquired traits are not inherited?

Q33. How evolution and classification are linked?

Q34. Describe how ozone layer is formed?

Q35. What are the major components of environment?

Q36. Why are the some substances biodegradable and some non-biodegradable?

Q37. What are the chief ozone depleting substance?

Q38. What are the reasons for conservation of forest and wildlife?

Q39. Mention disadvantages of dams.

Q40. What are the effects of deforestation?

Q41. What is meant by water table? Why is it important?

Q42. What are the benefits of water harvesting?

Q43. Who are the stake holders of forests.