Integrated Holiday Homework – 2021

Class X

ENGLISH

1. Draw a pen picture of Nelson Mandela. Describe his achievements in brief.
2. Draw a picture of Lencho with his waving crops. Give reasons how his happiness suddenly changed into sadness.
3. Write about the surgery of Mr Herriot and how he treated a dog possibly with pictorial reference.
   Complete the following activities:
4. Make notes from Chapter 1- a letter to God. Remember Answer all the questions.
5. Remember the Poem "Dust of snow". Answer all the questions from this chapter in your notes.
6. Makes notes from Chapter –Nelson Mandela a Long walk to freedom.
7. Make notes from Chapter – triumph of Surgery (Footprints without feet) and answer all the questions from exercise.
8. The Thief story - Answer all the questions from the chapter in your note-copy.
9. The Midnight Visitor- Complete your Notes from the chapter.
10. Write an essay on following in about 400 words:
    a. Women Empowerment
    b. Colour based Discrimination

SCIENCE

CHEMISTRY

1. What is chemical reaction? Explain the types of chemical reaction with two examples each.
2. What is corrosion? Write its chemical reaction.
3. What is Rancidity? Explain how to prevent food from this.
4. Write balanced chemical equations for following chemical reactions:
   a. Calcium Hydroxide + carbon dioxide $\rightarrow$ Calcium carbonate + water
   b. Zinc+ Sulphur+ Nitrate $\rightarrow$ Zinc Nitrate + Silver
5. Identify any ten chemical reactions taking place around you and try to write the corresponding balanced chemical equations yourself.
6. Make a table for the nature of the various samples like milk, Soap water mixture, common salt solution, lemon juice, tap water .baking soda solution etc by using natural indicators like red cabbage juice ,turmeric etc. (Note: Surf the internet to learn how to make natural indicators at home)

BIOLOGY

1. Draw a diagram of Human digestive system. Explain the following:
   a. Stomach
   b. Anus
   c. Small Intestine
   d. Food Pipe
   e. Liver
2. What is respiration? Explain different types of respiration with chemical reaction.
3. What is Blood pressure? What are the factors used to express blood pressure of a person.
4. What is Transportation of food means? Explain the role of Xylem and Phloem in Plant transport system.
5. Draw a labeled diagram of Human excretory system. Explain these:
   a. Kidney
   b. Ureter
   c. Bladder
   d. Urethra

PHYSICS

1. What is Ohm's law? Draw circuit diagram with graph and explain.
2. How much work is done in moving a charge of 4 coulomb?
3. Draw diagrams of the following electrical component:
   a. Galvanometer
   b. Closed Switch
   c. Cell
   d. Battery
4. Prove the resistance in series with circuit diagram.
5. Calculate the equivalent resistance when 2 resistance of 6 Ω and 10 Ω are connected in parallel
6. What is Power? SI unit of power.

SOCIAL STUDIES

1. Find about role of Mahatma Gandhi in India's National movement.
2. Make a Project showing consumption and conservation of resource in your locality.
3. Locate Federal countries on Map of World.
4. Explain the criteria which is used by the UNDP
   Answer the following questions:
5. Why do you think average income is an important criterion for development?
6. Explain the different forms of power sharing
7. Explain the classification of resource
8. What do you mean by Nationalism?
9. Write the steps to conserve natural resource.
10. What do you mean by development?
11. What are Nation states?
12. Explain the classification of soils in India.

MATHS

1. Explain and prove $\sqrt{2}$ and $\sqrt{3}$ are irrational number.
2. Explain the condition for terminating rational number.
3. Solve the question from exercise 1.1, 1.2 and 1.3.
4. Define Polynomial. Explain different types of Polynomial and It's operation.
5. Explain the relation of coefficient and zeroes of quadratic polynomial and cubic polynomial.
6. Draw the graph of quadratic polynomial $X^2 + 5x + 6$
7. Define Linear Equation in two variables. Give example of different forms of the equation.
8. Explain different conditions for solution of linear equation with proper example.
9. Explain the different methods of solution of equation (in two variable)
   a. Graphical
   b. Elimination
   c. Substitution
   d. Cross Multiplication
10. Define quadratic equation. It's condition and forms.
11. Explain the conditions for root of a quadratic equation.
12. Solve any 5 question from chapter of your book with all possible methods of quadratic equation.
13. Solve word problems of different types from exercises.