



SACRED HEART SCHOOL

Jhumri Telaiya, Koderma

SUMMER VACATION ASSIGNMENT (2023-24)

Class - XII

Subject –ALL

Physics

1. Make a mind map of chapter 1, 2, 3 in a chart paper
2. Make a project to demonstrate the series and parallel combination of bulb (resistor) with the help of 1.5 V battery and 1W bulbs.

Chemistry

- *To prepare a list of phenomenon occurring in our daily life related to science.
- *At least -10 phenomenon with proper explanation.

Biology

1. Write a short biography about famous scientist, G. J. Mendel as father of genetics, who performed hybridization experiment on a garden pea plant (Pisum sativum) in 500 words.
2. In present time India's populations is increasing more and more . What methods and contraceptive methods are adoptive to control population and VDs.
3. Students will visit the garden and observe the garden pea plant .Name the scientists, who are associated with the hybridization experiment related to garden pea 🌱. Find its related experiment of hybridization of monohybrid and dihybrid cross and obtain its ratio as phenotypic and genotypic ratio 3:1, 1:2:1, 9:3:3:1 & 1:2:1:2:4:2:1:2:1.

Maths

Q no. 1 Solve 20-20 Questions of PYQ of CBSE board JEE of chapters 1. Matrix and determinant 2. Relation and function
Project work

1. To verify that the relation R in the set L of all the line in a plane defined by $R = \{(l, m) : l \perp m\}$ is symmetric but neither reflexive nor transitive.
2. To verify that the relation R in the set L of all the line in a plane defined by $R = \{(l, m) : l \parallel m\}$ is an Equivalence relation.
3. Draw the graph of $\sin^{-1} x$ using the graph of $\sin x$ and demonstrate the concept of mirror reflection about line $y = x$.
4. Verify Rolle's theorem.

IT

1. Write a program to print cubes of a number in the range of 15 to 25.
2. Write a program to find sum of all the number store in a list.
3. Write a program to display students marks from record.
4. Write a program to find the average of 50 students marks of IT.

English

Q:-write an article on following topic:-

1. Indian TV – serving the nation
2. Hazards of TV – watching for the kids
3. Value education – a part of curriculum in schools
4. Keeping your school neat and clean
5. Role of students in eradicating illiteracy

Q:- water is precious and each one of us must stop wastage of water , prepare a Poster in not more than 50 words urging people to employ various methods of Rain water harvesting in their colonies.

Q. All the students are suggested to watch the movie “Mrs. Chatterjee and Norway” and write the summary of the same. With the reference to the movie how would you analyse the significance of your mother in your life?