



D.A.V. NANDRAJ PUBLIC SCHOOL

Affiliated to CBSE, New Delhi (10+2)
Marwari ArogyaBhawan No-3, Bariatu, Ranchi



HOLIDAY ASSIGNMENT SESSION 2024-25 CLASS - X

ENGLISH

Topic

I. Do any ONE out of the two projects given below. Use a stick file for this purpose. Prepare a travelogue of a place where you have visited or would like to visit in future. Include details like:

1. Tourist attractions
2. How to reach there.
3. Where to stay.
4. Art and Culture
5. Learning experience.

OR

Design a project titled ' Nothing Gold Can Stay' on the life and works of Robert Frost. Remember to include the following:

1. Birth
2. Early life
3. Career
4. Personal Life
5. Impression of poetry
6. Mention two short poems other than the ones you have read in the class.

HINDI

क्षितिज भाग - 2

पाठ सूरदास के पद का भावार्थ अपने शब्दों में लिखिए।

परियोजना कार्य

'विश्व में हिंदी का बढ़ता वर्चस्व' विषय पर उद्घोष (स्लोगन) सहित संक्षिप्त लेख लिखें।
परियोजना बनाते समय प्रमाण पत्र, आभार प्रदर्शन, विषय सूची, उद्देश्य, उपसंहार भी लिखें।

SANSKRIT

- 1- (पाठ्यपुस्तक) पाठ - 1, 2, (व्याकरण) व्यञ्जन संधि पत्र एवं प्रश्न निर्माण का अभ्यास करें -
- 2- विसर्ग संधि -उत्वं, रुत्वं, विसर्ग लोप; विसर्ग स्थाने (स, श, ष) का प्रयोग करते हुए लिखें एवं याद करें (उदाहरण - कम से कम 10 शब्द प्रत्येक संधि के लिये लिखें)
- 3 परियोजना कार्य - पिता एवं पुत्र के संबन्ध को दर्शाते हुए चित्र के आधार पर संस्कृत (100 शब्दों) में कहानी लिखें

MATHEMATICS

Solve all the questions

1. Show that $5 \times 11 \times 13 + 13$ is a composite number.
2. Show that 4^n never ends with digit zero.
3. Show that 6^n never ends with digit zero.
4. Find the HCF and LCM of 126 and 156 using prime factorization method.
5. The HCF of two number is 18 and their product is 12960 find their LCM.
6. Prove that $\sqrt{3}$ is an irrational number.
7. Prove that $3 + 5\sqrt{2}$ is an irrational number.
8. Prove that $\sqrt{2} + \sqrt{3}$ is an irrational number.
9. Find the zeros of the polynomial $2x^2 + 5x - 12$ and verify the relationship between its zeros and coefficient.
10. Find the quadratic polynomial whose zeros are 2 and -6 .
11. Find the quadratic polynomial the sum of zeros is 0 and their product is -1 , hence find the zeros of the polynomial.
12. If α and β are the zeros of the polynomial $f(x) = 6x^2 + X - 2$ find the value of $\frac{\alpha}{\beta} + \frac{\beta}{\alpha}$.
13. If α and β are the zeros of the polynomial $p(x) = 2x^2 + 7x + 5$, write the value of $\alpha + \beta + \alpha \cdot \beta$.
14. Solve the following system of equation graphically $2x + 3y = 2$ and $x - 2y = 8$.
15. Show that the system of equations $2x - 3y = 5$ and $6x - 9y = 15$ has an infinite number of solutions.
16. For what value of k does the following system of equations $X + 2y = 3$ and $5x + KY + 7 = 0$ have
(i) unique solution (ii) no solution
17. Taxi charges in a city consist of fixed charges and the remaining depending upon the distance travelled in kilometers. If a person travel 60 kilometer, he pays rupees 960, and for travelling 80 kilometer, he pays rupees 1260. Find the taxi charges and the rate per kilometer.
18. The monthly incomes of A and B are in the ratio 8:7 and their expenditures are in the ratio 19:16. If each saves rupees 5000 per month, find the monthly income of each.
19. If three times the larger of two numbers is divided by the smaller one, we get 4 as the quotient and three of the remainder. Also, if seven times the smaller number is divided by the larger one, we get 5 as the quotient and 1 as the remainder. Find the numbers.
20. A man travels 370 kilometer, partly by train and partly by car. If he covers 250 km by train and the rest by car, it takes him 4 hours. But if he travelled 130 km by train and the rest by car, he takes 18 minutes longer. Find the speed of the train and that of the car.
21. A man can row downstream 20 km in 2 hours, and upstream 4 kilometer in 2 hours. Find his speed of rowing in still water. Also, find the speed of the current.

22. The students of a class are made to stand in rows. If 4 students are extra in each row, there would be 2 rows less. If 4 students are less in each row, there would be four rows more. Find the number of students in the class.

23. There are two classrooms A and B. If 10 students are sent from A to B, the number of students in each room becomes the same. If 20 students are sent from B to A, the number of students in A becomes double the number of students in B. Find the number of students in each room.

PROJECT TOPIC

POLYNOMIALS

Project topic must include

Introduction of polynomials

Types of polynomials

Zeros of the polynomials

Relationship between zeros and coefficient of polynomials

Geometrical meaning of polynomials

SCIENCE

PHYSICS.

Write the following experiments in prescribed lab manual practical notebook .

Experiment 1: Studying the dependence of potential difference (V) across resistor on the (I) passing through it and determine its resistance . Also, plotting a graph between V and I .

Experiment 2: Determination of equivalent resistance of two resistors when connected in
a) series b) parallel.

Experiment 3: Determination of focal length of
a) concave mirror. b) convex lens
by obtaining the image of a distant object.

Experiment 4: Tracing the path of a ray of light passing through a rectangular glass slab for different angles of incidence . Measure the angle of incidence , angle of refraction, angle of emergence and interpret the result.

Experiment 5: Tracing the path of rays of light through a glass prism.

CHEMISTRY.

Q1) Make a note on chemical reaction with characteristics of chemical reaction and different types of chemical reaction with suitable examples. you can take pictures from your interest.

Q2) From chapter 01 solve the exercise questions of your NCERT book.

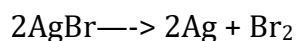
Q3) Write a short note on given terms:

a) Oxidation

b) Reduction

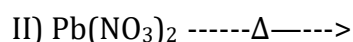
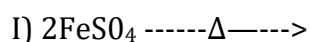
c) Precipitation reaction

Q4. (a) Write the essential condition for the following reaction to take place:



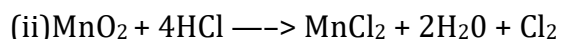
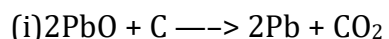
Write one application of this reaction.

(b) Complete the following chemical equation of a chemical reaction .



(c) What happens when water is added to quick lime. Write chemical equation.

Q5) What is redox reaction? Identify the substance oxidised and the substance reduced in the following reactions.



BIOLOGY .

Experiment 1: Preparing a temporary mount of a leaf to show stomata.

Experiment 2: Experimentally show that CO₂ is given out during respiration.

Experiment 3: With the help of prepared slides , study of
a) binary fission in amoeba b) budding in Yeast and hydra

Experiment 4: Identification of the different parts of an embryo of a dicot stem.
Complete the question answers of chapter 5 : life Processes in notebook.

SOCIAL SCIENCE

ECONOMICS :

A project on consumer Rights: Define consumer, consumer protection act 1986, consumer movement in India, consumer rights, three- tier system, collect related photograph and fact from newspaper and other sources and paste them . (stick file)

INFORMATION TECHNOLOGY

PORTFOLIO/ PRACTICAL FILE(in Stick file)

(Portfolio should contain Hardcopies of the following Practical activity)

1. Apply Styles in the document
2. Insert and use images in document
3. Create and use template
4. Create table of contents
5. apply mail merge wizard in document