D.A.V. PUBLIC SCHOOL, RATIA SUMMER VACATION HOME ASSIGNMENT STD. :XII SCIENCE SESSION 2023-2024



Dear Parents and Students,

Summer vacation is around the corner, bringing with itself a much-needed respite from hectic school days. We hope that you will thoroughly enjoy the vacations and make the most of this summer. While it is indeed important that you relax and refresh yourselves, it is also important that you exercise your minds.

Keeping this in mind, we have designed various exciting activities to keep the students engaged and active during the summer vacation. These fun projects/ assignments would enhance learning skills, help understand concepts better, and make for a great crash course aimed at improving academic output.

These activities will not only help you to revise what was taught, but will also enrich your knowledge. These projects will be assessed as Subject Enrichment Activity, Portfolio or Art Integrated activity.

We encourage parents to motivate and support the students to ensure that given work is completed in time, to the best of their ability. Your support and encouragement both have a huge impact on your child's learning ability.



PHYSICS

1. You have to write following four experiments in your lab manual as this is part of practical work for board examination.

SECTION A

I. To determine resistivity of two / three wires by plotting a graph for potential difference

versus current.

- II. To find resistance of a given wire / standard resistor using metre bridge.
- III. To determine resistance of a galvanometer by half-deflection method and to find its figure of merit.
- IV. To convert the given galvanometer (of known resistance and figure of merit) into a voltmeter of desired range and to verify the same.

OR

To convert the given galvanometer (of known resistance and figure of merit) into an ammeter of desired range and to verify the same.

- 2. Solve the NCERT Exemplar questions of chapter 1, 2 and 3.
- 3. Prepare a formula chart of chapter 1,2 and 3
- 4. Learn question answers of chapter 1,2 and 3 from your reference book.

CHEMISTRY

- Do Numericals of Chapter 2 (Solution), Chapter 3 (Electrochemistry), Chapter 4 (Chemical Kinetics)
- •Learn NCERT exercise Q/A of Chapter 2,3 and 4.
- Case based study questions of Chapter 2,3 and 4.
- •Learn Previous year question answer.
- Prepare a booklet or flashcard of formulas .
- Do Competition based multiple choice questions of 2,3 and 4 chapter.
- Prepare a project on One of the given topic
- Topics: Batteries, Raoult's Law, Colligative Properties, Order of reactions

BIOLOGY

- 1. Read & learn lesson:
 - Ch-2: Sexual reproduction in flowering plants
 - Ch-3: Human reproduction
 - Ch-4: Reproductive Health
 - Ch-5: Principles of Inheritance and Variation
- 2. Learn all the questions given in the question bank sent along with holidays homework.
- 3. Complete Practical file-
 - Exp.1- Study of pollen germination on a slide.
 - Exp.2- Study of plant population density by quadrate method.
 - Exp. 3- Study of plant population frequency by quadrate method.
 - Exp.4- Prepare a temporary mount of onion root tip to study mitosis.
 - Exp.5- Explain the process of extraction of DNA from plant tissue(onion)

MATHEMATICS

- Revise chapters 1-6 from NCERT exemplar .
- Do three lab manual activities as explained in class
- Solve the assignment of previous year questions.

ENGLISH

Activity: 1) Reading a Newspaper:- Read any English Daily Newspaper during your summer vacation. Go through the articles in the newspaper and select any five of them which should be of five different dates. Cut them and paste them in a file and write a response.

2) Explore the following concepts and write a brief note in your own words.

Note that all these concepts will be helpful in understanding the chapters/poems.

- Socialism Romanticism Feminism
- Racism Casteism Satire
- Patriarchy Dramatic Irony
- 3) Kindly open the link regarding Project Work and complete it.

https://docs.google.com/document/d/196gTpout1FYKZ9E4TALXOl9jiv9voMWSR3-mhxAhSos/edit?usp=share_link

Reading Section: Three unseen passages for comprehension.

Writing Section:

a) Draft Invitations on the following

- 1. M/s Shyam Lai & Sons are opening a new general store 'Galaxy Novelties' in Geetanjali Enclave, Dwarika, Delhi. The inauguration ceremony is fixed for Sunday, the 29th of June 2023 at 11 a.m. Draft a formal invitation for the purpose.
- 2. You are the Principal of Holy Heart Senior Secondary School, Ooty. The school has completed 25 years of its meritorious services to the society. The Silver Jubilee Celebrations are to be held on Sunday, 6th June, 2023. Mrs M. Kamal Kishore, the founder Principal will preside over the function .Draft a suitable invitation to be sent to important dignitaries of the city and the parents of students.
 - b) Letter Writing:
 - 1. You are Chetan Sharma, a Commerce graduate from Delhi University. You are seeking a suitable job. You came across an advertisement in The Times of India, inviting young and dynamic fresh graduates as sales assistants in a reputed company. Apply for the job along with bio-data to the Director, APEX Steel Industries, Mathura.

- 2.You are Shilpa/Sameer living in Bangalore. You have just completed your studies and looking for a job. While browsing through The Hindustan Times, you come across the following advertisement. Send your application in response to this advertisement.
 - Eat Healthy & Delicious An upcoming food processing unit in Gurugram requires the following staff Food technologist: 2 years degree/diploma in food rechnology having 1-2 years lab experience. Apply to the Manager

ARTICLE WRITING:

1. Teenagers are full of energy as well as ideas. Write an article in 150 – 200 words on "How to Channelise the Energy of the Teenagers". You are Tejinder/Simran. You may use the following clues:

Teenagers curious- full of questions-question elders- sometimes even wrongly - generation gap- may go astray- effect on society -hoe to channelise -productive – hobbies -social work-sports -part time jobs etc.

2. Children tend to become tense and nervous before the board exams. This affects their health and performance in the examination. Good counselling is, therefore, needed to help them overcome exam fear. Write an article in 150-200 words on the 'Need of Counselling Before Board Exams.' You are Gobind /Geeta.

Literature Section: Syllabus for Periodic Test -1

Flamingo: Prose-Revise Chapter 1-3

Poems: 1,3

Vistas: Chapter -1 to 3

PHYSICAL EDUCATION

- Revise Chapters 1 and 2.
- Complete notebook of unit 1 and 2.

MUSIC

- सभीप्रश्नयादकरें
- प्रश्न 1 परिभाषाएँ- गमक, ग्राम ,मूछना,
- प्रश्न 2 संगीतपारिजातग्रंथ
- प्रश्न 3 ताल- रूपकताल
- ময় 4 complete file work

AFTER SUMMER VACATION.