



DAV PUBLIC SCHOOL, BAZPUR
SUMMER HOLIDAY ASSIGNMENT 2020-21
CLASS- XI SCIENCE

ENGLISH : Write the summary of all the chapters completed upto yet.

1. The Summer Of The Beautiful White Horse.

2. The Portrait Of A Lady.

3. A Photograph (Poem).

4. The Address.

GRAMMAR:

TENSES : TYPES (12 TENSES WITH ITS EXAMPLES).

LEAVE APPLICATION.

CHEMISTRY :

1. Make an investigatory project on one of the following topics.

[30 marks]

- Percentage Purity Of Iron Wire
- Pesticides in Fruits and Vegetables
- Preparation Of Cuprammonium Rayon Threads
- Preparation of Ink
- Acidity In Tea
- Analysis Of Honey
- Analysis Of Vegetables And Fruit Juices
- Comparing Lactose Percentage between Whole Milk and Powdered Milk
- Comparison of the Citric Acid Concentration
- Content of Cold Drinks Available in the Market
- Evaluation of Drinking Water from Various Sources
- Determination Of Caffeine In Tea Samples
- Determination of Contents of Tooth Powder
- Determine the Quantity of Casein in Milk
- Discoveries In The Field Of Chemistry
- Dyeing of Wool, Silk and Cotton in Malachite Green
- Effect Of Sodium Carbonate On Foaming Capacity Of A Soap
- Effects of Dye on Different Types of Fabric
- Effects of Heat on Vitamin C in Tomatoes
- Electrical Cleavage of Mineral Ore
- Electrolyte Turns On the Solar Cell
- Environmental Pollution
- Evaluation of Drinking Water from Various Sources
- Extraction of Nicotine Sulphate from Samples of Cigarettes
- Preparation Of Soyabean Milk
- Preparation of Toilet Soaps

- Removal of Alcohol from the Body through Esterification
 - Study of Constituents of an Alloy
 - Study of Content of Ascorbic Acid in Citrus Fruits
 - Study of Diffusion of Solids in Liquids
 - To Analyze a Sample of Brass Qualitatively
 - To Check The Ions Present In The Toothpaste And Determine The Quality
 - To Compare The Rate Of Fermentation Of Given Samples Of Wheat Flour
 - To Prepare a Smoke Bomb
 - To Study the Digestion of Starch by Salivary Amylase
 - To Study the Effect of Metal Coupling on the Rate of Corrosions
 - To Study the Presence of Insecticides and Pesticides in Various Fruits and Vegetables
 - To Study the Presence of Oxalate Ion In Guava Fruit
 - Variation of Conductance with Temperature in Electrolytes
 - Water Concentration and Texture
 - Which Grease Is Good for You?
 - Which of the Plant Material Used Would Make the Best Red Color on Fabric
 - Which Road Deicer Corrodes Steel the Most?
2. To do NCERT example and exercise questions in holiday homework copy and learn (chapter 01, 02 and 03). [20 Marks]
3. To complete and learn following chapters and topics: [20 marks]
- i. Environmental Chemistry (Chapter 14)-Tropospheric pollution, GreenHouse effect, Global Warming and its impacts, Acid rain and its impacts, Ozone layer formation reactions, Smog and its kind, Source of air, water and soil pollution, International standard of drinking water, Waste management, Green Chemistry and its use to reduce pollution.
 - ii. Hydrogen (Chapter 09) Hard and Soft water, Methods of removing permanent and temporary hardness, Hydrides and its classification , Heavy water.
 - iii. p- block elements(Chapter-11) Borax Orthoboric acid, Boron Hydrides and its chemical properties, Allotropes of carbon, Zeolites, Silicone dioxide and silicates, Silicones, Anomalous behaviour of carbon and boron.
 - iv. S- block elements(Chapter-10) Electronic configuration, reactivity with air, water, ammonia, hydrogen and halogens, Important compounds - Washing soda, Common salt, Caustic soda, Baking soda, Quick lime, slaked lime, Calcium carbonate, plaster of paris, gypsum, cement, Biological importance of Na, K, Mg and Ca.
- Write an experiment in the lab manual that I will send you in whatsapp group. [30 marks]

PHYSICS :

Q- 1 Make any investigatory project with project file related to Physics

Q-2 Prepare these topics and learn by heart

1-fundamental forces and their fundamental particles

2-Dimension applications

3-Types of errors

4- Scalar product and their properties

5- Rectangular components of a vector

6- Relative velocity and their numericals

7- Equations of motion by graphical and calculus method

Q3- Write first 5 experiments from physics lab manual from section A

Q4- Write any five activities from physics lab manual

Q5- Write 2 question and answers daily and learn by heart

NOTE- (Total 54 question and answers are required)

MATHEMATIC :

CHAPTER-1- SETS

PAGE NO.	Question No.
4	Example 4,5
8	Example 7,8
13	4,7,8
20	5.6
25	Example 33,34
26	4,5,6
27	10,16

CHAPTER-3- TRIGONOMETRIC FUNCTIONS

PAGE NO.	Question No.
62	Example 7,8
74	22,25
79.	Example 26,27
81	Example 29
82	7,8,9

CHAPTER-5 - COMPLEX NUMBER AND QUADRATIC EQUATIONS

PAGE NO.	Question No.
107	Example 7,8
110.	Examples 13,14
111.	Examples 15,16

Make any working model of Maths

BIOLOGY:

1:-Write two question and answer daily chapter wise (1to5) and learn by heart.

(2x27=54)

2:-Learn by heart and write-

Topics-

A:-Classification of animals write all 11 classes and draw their diagrams and learn.

B:-Five kingdom of classification.

C:-Binomial nomenclature

D:-Plant life cycles and alternation of generations.

3:- Make an investigatory project from any topic in your NCERT Biology book.

INSTRUCTIONS :-(a)-Write the project report on A4 size plain paper in your own hand writing.

(b)-Draw concerned colorful pictures.

(c)-The project should contain certificate, acknowledgement, index concerned information and bibliography.

PHE :

1. What is the meaning of physical education? Explain its Importance also.

(10 marks)

2. Briefly explain the Khelo India Program and IOA?

(10 marks)

3. Explain briefly about sports Awards. Arjuna awards, Dronacharya Awards, Rajiv Gandhi Awards and Chacha Nehru Awards? (10 marks)
4. Explain the old Olympics and new Olympics , its motto , aims and objectives? (10 marks)
5. Aims and objectives of Adaptive physical education? (10 marks)
6. Make a Project Report on your favorite game as per syllabus? (50 marks)

Mention the points given below also:

- Ø History
- Ø Measurement
- Ø Diagram
- Ø Arjuna Awardee Players Name with year
- Ø National & International Tournaments

IP :

Q1. Write the python code using Pandas library for followings:

- a. Find the min, max, sum and average of marks in the students marks table. 10
- b. Consider a Dataframe, where each row contains the item category, item name and expenditure. Group the rows by category and print the total expenditure per category. 10
- c. Given a series, print all the elements that are above the 75th percentile. 10
- d. Write SQL queries for all aggregate methods, groupby and having clauses on a table STUDENT. 20
Make the table STUDENT with following fields; Rollno, Name, Address,

Q2. Make a Pandas Project with following features (This project will be used as your board examination project work, So Make your project carefully): 50

- a. Make a spreadsheet in Microsoft Excel and save it as a csv file.
- b. CSV file should be relevant to employee data.
- c. Import csv file to Python platform by using Pandas and make it as a dataframe.
- d. Apply all the aggregate functions, group by function, transform function, sorting, binary function, apply, applymap, pipe function on dataframe
- e. Copy and paste all the code to the word file. Take a screenshot of the CSV file.
- f. If you are not having a laptop/desktop at home. Do write all code and functions in the assignment notebook.

**** Note: Nobody will take the printout of coding without teacher verification.**