**KASAULI INTERNATIONAL PUBLIC SCHOOL, SANWARA**

**Holidays Home-Work 2021**

**CLASS – XII SCIENCE**

|  |  |  |
| --- | --- | --- |
| **SUBJECTS** | **HOMEWORK ASSIGNMENTS** | **SUBJECT**  **INCHARGE** |
| **ENGLISH** | **Watch the videos of the chapters and poetries of your text book**.  Daily write (mentioning the date) the summary of any one, along with ten difficult words, with its pronunciation and meaning. Write in neat hand, with proper columns and understanding. | Kalpana Sharma |
| **BIOLOGY** | **Watch 3D animated videos, get the information from videos and write it on your notebook every day (with date).**Basics of Biology, Father of Biology, Reproduction types, Sexual reproduction in Flowering Plants , reproductive Health, Genetics , ecology Basics | Vanie Singh |
| **PHYSICS** | * Solve 10 numerical daily * One marks 10 questions daily * Basic concepts of unit -1 Electrostatic and unit -2 Electricity | Sudershan  Sharma |
| **CHEMISTRY** | * **Watch 3D animated videos of given topics, get the information and write main points on your notebook (with date).** * To calculate Concentration of solute (molarity, normality, mole fraction, ppm, molality), solids (crystalline and amorphous), Defects in crystals, magnetic property of atom, semiconductors. * IUPAC Naming of organic compounds and name reactions. * Practice for numerical. | Pooja Thakur |
| **IP** | Write the following Python programs  1. Create a pandas series from a dictionary of values and an ndarray  2. Given a Series, print all the elements that are above the 75th percentile.  3. Create a Data Frame quarterly sales where each row contains the item category, item name, and expenditure. Group the rows by the category, and print the total expenditure per category.  4. Create a data frame based on ecommerce data and generate descriptive statistics (mean, median, mode, quartile, and variance)  5. Create a data frame for examination result and display row labels, column labels data types of each column and the dimensions  6. Filter out rows based on different criteria such as duplicate rows.  7. Find the sum of each column, or find the column with the lowest mean.  8. Locate the 3 largest values in a data frame.  9. Subtract the mean of a row from each element of the row in a Data Frame.  10. Replace all negative values in a data frame with a 0. 11. Replace all missing values in a data frame with a 999. 12. Importing and exporting data between pandas and CSV file  13. Importing and exporting data between pandas and MySQL database  14. Given the school result data, analyse the performance of the students on different parameters, e.g subject wise or class wise.  15. For the Data frames created above, analyze and plot appropriate charts with title and legend.  16. Take data of your interest from an open source (e.g. data.gov.in), aggregate and summarize it. Then plot it using different plotting functions of the Matplotlib library.  17. Create a student table with the student id, name, and marks as attributes where the student id is the primary key.  18. Insert the details of a new student in the above table.  19. Delete the details of a particular student in the above table.  20. Use the select command to get the details of the students with marks more than 80.  21. Create a new table (order ID, customer Name, and order Date) by joining two tables (order ID, customer ID, and order Date) and (customer ID, customer Name, contact Name, country).  22. Create a foreign key in one of the two tables mentioned above  23. Find the min, max, sum, and average of the marks in a student marks table.  24. Find the total number of customers from each country in the table (customer ID, customer Name, country) using group by.  25. Create a new table (name, date of birth) by joining two tables (student id, name) and (student id, date of birth).  26. Write a SQL query to order the (student ID, marks) table in descending order of the marks | Rakesh Kumar |
| **PHYSICAL EDUCATION** | Collect the pictures related to volleyball game and yoga asana for practical file. Calculate the B.M.I. of ten persons and make a record. Do regular Yoga and exercises daily and make videos for record. | Ravinder  Kashyap |