



DELHI PUBLIC SCHOOL, ALIGARH

SUMMER HOLIDAY HOMEWORK

CLASS XII

S.NO	SUBJECT	HOMEWORK
1	ENGLISH	<p>PROJECT PLANNING & IMPLEMENTATION</p> <p>*Interview- Based Research (Survey)*</p> <p>STEP-1: Choosing*INTERVIEW TOPICS</p> <p>A: Corona Pandemic and the fall out on families B: India's Relations with neighbouring countries C: Impact of Online Studies on Senior Students</p> <p>STEP-2:*TAKING INTERVIEW</p> <p>(at least 5-6 people(adults) will be interviewed) on one of the topics. Prepare the questionnaires well This interview should be recorded and maintained.</p> <p>STEP-3:*After conducting Interviews, the students will write an-Essay/ Write-up or a Report up to 900-1000 words on his/ her research (whatever they learnt or experienced, others views and their own views)</p> <p>This project work can be done individually or in pairs/ groups(in one group not more than 4 students).</p> <p>*If working in a group, choose a team leader to delegate the work to team members.</p> <p>The final draft of the project will be prepared and submitted latest by *July 4, 2022.</p>
2	PHYSICS	<p>Students are instructed to prepare a investigatory project report on below mentioned topics and submit the same in first week of July positively.</p> <p>TOPICS FOR PROJECT REPORTS:-</p> <ol style="list-style-type: none"> 1. RAIN ALARM 2. INDUCTOR ; FACTORS AFFECTING INDUCTANCE 3. AC GENERATOR 4. TRANSFORMER 5. MOVING COIL GALVANOMETER AND CONVERSION OF GALVANOMETER IN TO AMMETER & VOLTMETER 6. RECTIFIER 10. CAPACITOR AND FACTOR AFFECTING CAPACITANCE OF A CAPACITOR 7. PHOTOELECTRIC EFFECT 8. REFLECTING TYPE TELESCOPE 9. VERIFICATION OF OHMS LAW BY TAKING DIFFERENT WIRE OF DIFFENT MATERIAL,CROSSECTION OF WIRE , AND LENGTH 10. INTERFERENCE OF LIGHT

		<p>11. DIFFRACTION OF LIGHT</p> <p>12. FACTORS AFFECTING INTERNAL RESISTANCE OF CELL</p> <p>*Students having Class roll. no's from 1 to12,from 13 to24, from 25 to 36 and from 37 to 45 will follow the above sequence of topics.</p> <p>*For eg. Roll no. 1,13 ,25 and 37 will prepare their project on Rain alarm, Roll no. 2,14,26 and 38 will prepare their project on inductor so on..</p>
3	CHEMISTRY	<p>1.Prepare an investigatory project assigned to you involving laboratory testing and collecting information from other sources.</p> <p>2. Revise the following chapters:</p> <p>a) Solutions</p> <p>b) Electrochemistry</p>
4	MATHS	<p>1. Do all solved examples of chapters 1, 2, 3 ,4 and 5 from NCERT EXEMPLAR (based on the syllabus given by CBSE for session 2022 - 23).</p> <p>2. Prepare your Mathematics activities file .(MATHEMATICS LABORATORY ACTIVITY BOOK)Prachi publication.</p> <p>3. Write down five activities from chapter 1,2,3,4 and 5. Five activities are as follows ,</p> <p>Activity1: To verify that the relation R in the set L of all lines in a plane, defined by $R = \{ (l,m): l \parallel m \}$ is an equivalence relation</p> <p>Activity2: To identify whether the given function is many one or one one, into or onto by considering domains and codomains.</p> <p>Activity 3: To draw the graph of inverse of sin, using the graph of sin x and demonstrate the concept of mirror reflection (about the line $y=x$)</p> <p>Activity 4: Based on Matrices, to relate the matrices with real life.</p> <p>Activity5: To find analytically the limit of a function $f(x)$ at $x=c$ and also to check the continuity of the function at that point.</p>
5	BIOLOGY	<p>Prepare an investigatory project of biology on the following topics. Students can choose their own topic also but before choosing any topic share it with me.</p> <p>Topics are :</p> <p>(a)Mitosis in onion root tip,</p> <p>(b)Spermatogenesis,</p> <p>(c)Drug addiction,</p> <p>(d) study of drug resistance in bacteria using antibiotics,</p> <p>(e) study on gene therapy,</p> <p>(f) study of effects of antibiotics on micro organisms,</p> <p>(g) coffee addiction,</p> <p>(h) microbes in human welfare,</p> <p>(i) detailed study of infertility its causes and treatment,</p> <p>(j) DNA fingerprinting,</p> <p>(k) recombinant DNA technology in today's medicine,</p> <p>(l) human genome project,</p> <p>(m) effects of cannabis on the human body.</p>
6	BUSINESS	<p>One topic each had been assigned to every student pursuing Business Studies from the following chapters: Principles of Management, Business</p>

	STUDIES	Environment, Financial Markets and Marketing Management. The student has to collect the data as per the need of the topic, interpret the data and submit a comprehensive report in 10 to 15 pages.
7	ACCOUNTANCY	As per the CBSE guideline every students of class XII are required to draft one comprehensive project. A comprehensive project file included all the basic journal entries, Ledger, P&L accounts, balance sheet, of a particular company. A PDF consist details regarding project is already been shared on school app. You are supposed to go through with the pdf for further details.
8	ECONOMICS	<p>1-There will be a group project of maximum 5 students, each group has to select the topic from the following and it should not repeat in a section.</p> <p>2-To check the progress of each member of the group, you are advised to connect through "Google docs" among yourself and with teacher using your email address.</p> <p>3-Finally, the project will be compiled by the team leader and PPT has to be presented in II week of July. Topics for projects are as follows: DEMONETISATION, GST, ROLE OF RBI IN CREDIT CONTROL , CREDIT CREATION BY BANKS, GDP AS AN INDEX OF WELFARE, STATE OF AGRICULTURE DURING BRITISH REGIME, STATE OF INDUSTRIES DURING BRITISH RULE DEMOGRAPHIC PROFILE BEFORE INDEPENDENCE, STATE OF INFRASTRUCTURE, STATE OF FOREIGN TRADE, LAND REFORMS AFTER INDEPENDENCE, GREEN REVOLUTION</p>
9	HISTORY	<p>1. Learn and revise the chapter covered so far:- (A) The Harappan Civilisation (B) Kings, farmers and towns (C) Kingship, caste and class</p> <p>2. Locate and label the places as mentioned in the above - mentioned chapters and paste them in the school note book.</p> <p>3. Analyse and interpret the meaning of any three unseen passages from each of the above chapters. Also write the question answer related with the passage in your school note book.</p>
10	POLITICAL SCIENCE	<p>1. Make a table on international summits from January 2022 to June 2022 in detail. (Date, place, member countries, objective, agenda and outcomes).</p> <p>2. Learn and revise the chapter covered so far:- (A) Challenges of nation building (B) The end of bipolarity (C) Alternative centres of power (D) Contemporary south Asia</p> <p>3. Analyse and interpret the meaning of cartoon/ picture displayed in the Political Science text book for above - mentioned lessons and write in your school note book.</p> <p>4. Practice the map work of the above mentioned chapters.</p>
11	GEOGRAPHY	<p>Prepare cartographic maps for the following: The largest country in each continent in terms of area. Areas of subsistence gathering. Areas of nomadic herding. Areas of commercial livestock rearing. Areas of extensive commercial grain faming. Areas of mixed farming. Areas of Mediterranean agriculture. Note: Use political outline map of the world and pencil colours and black pen. Complete the class work note copy for chapters 1 to 6 including all maps and</p>

		figures as per the CBSE Curriculum 2022-23.
12	COMPUTER SCIENCE	<p>Suggested Practical List Read a text file line by line and display each word separated by a #.</p> <ol style="list-style-type: none"> 1 Read a text file and display the number of vowels/consonants/uppercase/lowercase characters in the file. 2 Remove all the lines that contain the character 'a' in a file and write it to another file. 3 Create a binary file with name and roll number. Search for a given roll number and display the name, if not found display appropriate message. 4 Create a binary file with roll number, name and marks. Input a roll number and update the marks. 5 Create a CSV file by entering user-id and password, read and search the password for given user id.
13	IP	<p>Practical file (minimum of 15 programs based on Pandas, 4 based on Matplotlib and 15 SQL queries must be included) Suggested Practical List</p> <p>Data Handling</p> <ol style="list-style-type: none"> 1. Create a panda's series from a dictionary of values and and array 2. Given a Series, print all the elements that are above the 75th percentile. 3. Create 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 for examination result and display row labels, column labels data types of each column and the dimensions 5. Filter out rows based on different criteria such as duplicate rows. 6. Importing and exporting data between pandas and CSV file <p>Visualization</p> <ol style="list-style-type: none"> 1. Given the school result data, analyses the performance of the students on different parameters, e.g subject wise or class wise. 2. For the Data frames created above, analyze, and plot appropriate charts with title and legend. 3. 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. <p>Data Management</p> <ol style="list-style-type: none"> 1. Create a student table with the student id, name, and marks as attributes where the student id is the primary key. 2. Insert the details of a new student in the above table. 3. Delete the details of a student in the above table. 4. Use the select command to get the details of the students with marks more than 80. 5. Find the min, max, sum, and average of the marks in a student marks table. 6. Find the total number of customers from each country in the table (customer ID, customer Name, country) using group by. 7. Write a SQL query to order the (student ID, marks) table in descending order of the marks.
14	PHYSICAL EDUCATION	<p>Record File shall include:</p> <ul style="list-style-type: none"> ➤ Practical-1: Fitness tests administration. ➤ Practical-2: Procedure for Asanas, Benefits & Contraindication for

		<p>any two Asanas for each lifestyle disease.</p> <p>➤ Practical-4: Anyone game of your choice out of the list above. Labelled diagram of field & equipment (Rules, Terminologies & Skills).</p>
15	PAINTING	<p>Prepare at least 3 imaginative paintings based on subjects from life in water and poster colours.</p> <ol style="list-style-type: none"> 1. Affair of family, friends and daily life. 2. Games and Sports Activities. 3. National/ Religious/ Cultural/ Historical/ Social events and celebration.