

DELHI PUBLIC SCHOOL ALIGARH

Summer Holiday HW (2016-17)

CLASS – X

CLASS	SUBJECT	DESCRIPTION OF SYLLABUS
X	ENGLISH	<p>The parents of girl child should not think having a girl child is a curse, but they should take all pains to educate their daughters to equip them with power and ways to fight for themselves . Write an article on ‘ Girl Child is not a curse but a gift of God’ in about 150 words in language notebook.</p> <p>Read the novel ,“The Story of My Life” from ch.1 to 10 and write notes on theme , main characters and main incidents of the novel in Language notebook.</p>
X	HIINDI	<p>1- ‘भारत स्वच्छता अभियान’ विषय से संबंधित फोटो खींचकर प्रोजेक्ट पेपर पर चिपकाएँ तथा 80-100 शब्दों का अनुच्छेद लिखिए।</p> <p>2- फॉरमेटिव परीक्षा-1 हिन्दी का निर्धारित पाठ्यक्रम तैयार करें।</p>
X	MATHS	<ol style="list-style-type: none"> If $(x-2)$ is a factor of $x^3 + ax^2 + bx + 16$ and $a-b = 6$, find the values of a and b. Four ribbons measuring 14m, 18m, 22m, 26m respectively are to be cut into least number of pieces of equal length. What is the length of each piece. If α and β are the zeroes of polynomial $p(x) = ax^2 + bx + c$ then find the value of (i) $\alpha^2 + \beta^2$ (ii) $\alpha^2 - \beta^2$ (iii) $\alpha^3 - \beta^3$ Find the value of k for which the given system of equations has infinitely many solutions $(k-3)x + 3y - k = 0$; $kx + ky - 12 = 0$ What must be added to the polynomial $f(x) = 2x^4 + 4x^3 - 2x + 5$ so that the resulting polynomial is exactly divisible by $x^2 - 4x + 7$ Find the quadratic polynomial whose zeroes are 2 and -3. Verify the relation between the coefficients and zeroes of the polynomial. Draw the graph of the equations $x - y + 1 = 0$ and $3x + 2y - 12 = 0$. Determine the coordinates of the vertices of the triangle formed by these lines and the x axis and shade the triangular region. Find the largest positive integer that will divide 398, 436 and 542 leaving the remainder 7, 11 and 15. Solve the following pair of equation $1/(3x+y) + 1/(3x-y) = 3/4$, $1/2(3x+y) - 1/2(3x-y) = -1/8$ Prove the Show that there is no positive n for which $\sqrt{n-1} + \sqrt{n+1}$ is rational. <p style="text-align: center;">Solve the sums in maths notebook.</p>
X	PHYSICS	<p>Part – A WRITTEN WORK (FOR ALL)</p> <ol style="list-style-type: none"> Define resistance. Write the factors affecting resistance. State Ohm’s law. Write its mathematical form. Define potential difference and write its SI unit. What is resistivity and on what factors it depends? Prepare resistivity table of at least five elements and explain how they can be used for making different appliances. <p>Note: Do in class work notebook.</p> <p>Part-B : Project Work (FOR ROLL NO. 26 ONWARDS)</p> <ol style="list-style-type: none"> PREPARE VARIOUS GRAPHS CHARTS FOR DIFFERENT SOURCES OF ELECTRICITY AND ITS CONSUMPTION IN DIFFERENT SECTORS. ALSO SUGGEST FEW METHODS TO MINIMIZE CONSUMPTION OF ELECTRICITY. <p>Note : Do in class work notebook.</p>

X	CHEMISTRY	<p style="text-align: center;"><u>PART A</u></p> <ol style="list-style-type: none"> What do you mean by precipitation reaction? Give examples. While diluting an acid, why is it recommended that the acid should be added to water and not water to acid? Write word equations and then balanced equations for the reaction taking place when : <ol style="list-style-type: none"> Dilute sulphuric acid reacts with aluminium powder. Barium chloride reacts with sodium sulphate. Identify the substances that are oxidized and the substances that are reduced in the following reaction: <ol style="list-style-type: none"> $MnO_2 + 4HCl \rightarrow MnCl_2 + Cl_2 + 2H_2O$ $SO_2 + 2H_2S \rightarrow 2H_2O + 3S$ Explain Chlor-alkali process used for the preparation of Sodium Hydroxide. <p style="text-align: center;"><u>PART B(for Roll no. 14 to 26)</u></p> <p>Draw a chart on the topic (anyone):</p> <ol style="list-style-type: none"> Electrolysis of water Experiment to show the reaction of dilute sulphuric acid with Zinc.
X	BIOLOGY	<p>Part – A Instructions: All the questions should be done in fair copy, except model.</p> <ol style="list-style-type: none"> Explain the process of nutrition in plants in detail. “Living organisms cannot survive without nutrition”. Justify the statement. “Respiration is a vital process”. Explain in detail. Draw a well labeled diagram of Human Heart. Draw a well labeled diagram of Human Excretory System & Nephron. <p>Part – B MODEL: (For roll no. 1 to 13) Make a well labeled and colorful chart/model on any topic of biology. (working /non working)</p>
X	SANSKRIT	<ol style="list-style-type: none"> मंजूषा की सहायता से एक पत्र पूर्ण करके लिखिए। प्रातःकालीन उद्यान अथवा विद्यालय में से किसी एक विषय पर चित्र बनाकर पाँच वाक्य संस्कृत में लिखिए।
X	SOCIAL SCI.	<p><u>NOTE – (For class IX and X) PROJECT ON DISASTER MANAGEMENT</u></p> <ol style="list-style-type: none"> The total length of the project report will not more than 15 hand written pages of(A-4 size) .The project report will be presented in a neatly BIODEGRADABLE FILE The project report will be hand written and credit will be awarded to original drawings, illustrations and creative use of materials. The project report will be developed & present in this Format. <p>*COVER PAGE –Showing project title, student information, school and year</p> <p>*LIST OF CONTENTS –With page numbers.</p> <p>*ACKNOWLEDGEMENTS – (Acknowledging the institution, offices and libraries visited and the person who have helped).</p> <p>*PROJECT OVERVIEW –Purpose, aim, methodology and experiences while doing the project.</p> <p>*CHAPTERS –With relevant headings.</p> <p>*SUMMARY AND CONCLUSIONS –Based on findings.</p> <p>*PLANNING –The activities to be done during the project, by giving a calendar of activities.</p> <p>*BIBLIOGRAPHY –Should have the title, pages referred, author, publisher, year of publication and if a website, the name of the website with the specific website link which has been used .All the photographs and sketches should be labeled and acknowledged.</p> <p>TOPIC –SAFE CONSTRUCTION PRACTICES:- Some structural safety measures for constructing disaster resistant buildings for four kinds of disasters. (Select any two)</p> <p>1: Earthquakes. 2: Landslides. 3: Floods. 4: Cyclones.</p>