D.A.V. PUBLIC SCHOOL

Sector-VI , Dwarka, New Delhi-110075

HOLIDAYS' HOMEWORK
CLASS X

ENGLISH

Q1 Read the chapters 1 to 13 of the novel 'Story of my life' by Helen Keller in detail. Write a brief summary of each chapter. Write character sketches of Helen, Anne Sullivan and Helen's mother. (100 words each)

Q2 Do Integrated Grammar practice 1 to 7 in English Workbook.

Q3 Watch the following movies: (English version only)
   a) Life of Pi
   b) Pride and Prejudice
   c) The Theory of Everything (based on the life of Stephan Hawkings)

Write down a few lines (50 words)about your favourite character in each movie. Change the ending of any one of them in 200 words Use your imagination. Be as creative as you can.

हिंदी

• साहित्यिक रचनाओं पर आधारित फिल्मों कि सूची बनाइए |

क्रम संख्या	फिल्म का नाम	साहित्यिक रचना	भाषा	रचनाकार

• मीडिया का जन-जीवन पर सकारात्मक या नकारात्मक प्रभाव – प्रस्तुत विषय को वाद-विवाद प्रतियोगिता के लिए तैयार कीजिए |

• स्वतंत्रता संग्राम में महिलाओं की भूमिका का संक्षिप्त विवरण देते हुए उनके चित्र लगाइए |

• कवि सुमित्रानंदन पंत का जीवन परिचय (चित्र सहित) देते हुए प्रकृति से संबंधित उनकी पाँच कविताओं (पाठ्यपुस्तक के अतिरिक्त) का संकलन कीजिए |
 (यह कार्य स्क्रैप बुक में कीजिए |)

संस्कृतम्

१. विभिन्नसंस्थानां ध्येयवाक्यानि प्रतीकचिह्नानि च सुन्दरैः अक्षरैः सुसज्जिते पत्रे (A4) सञ्चिकारूपेण (File) आनयन्तु ।

२. पाठित-पाठ्यक्रमस्य लिखित्वा अभ्यासं कुर्वन्तु , तदाधारेण कक्षा परीक्षा भविष्यति ।

३. व्याकरणकार्यम् अभ्यासपुस्तिकायां कुर्वन्तु ।

MATHEMATICS

Activity 1

CALCULATING CALORIES

The energy potential of food and the energy expended by a person is measured in calories. Using the following information or similar information, find out the estimate of daily energy expenditure of the members of your family.

ACTIVITY	Calories used per minute
Sleeping	1.1
Washing/ dressing	2.8
Walking(slowly- quickly)	2.9-5.2
Sitting	1.2-1.5
Standing	1.6-1.9
Light domestic work	3.0
Heavy domestic /field work	4.8
Cycling (Slowly- Fast)	4.5-11.0
Playing outdoor games	7-9
Reading/ Mental work	3-4

The average recommended daily intake for most healthy adult and teenager is about 2000 calories, 1700 for a female and 2700 calories for a male but this will vary considerably with a person's occupation.

Link for calories count of different food items :http://www.invive.com/Calorie.html

Using the above link and other suitable resources form internet

(a) Find out the calorific value of the food you eat and drink in a day and see how much your daily input match your requirement
(b) Produce a weekly menu to match your requirement

Note: Make the project on A4 size ruled sheets

Activity 2

Make a Power point presentation (approx. 15 slides) on any of the given topics:-
   a. Real Numbers
   b. Congruent and similar shapes
   c. Trigonometry and its applications
   d. Mensuration in daily life
   e. Commercial mathematics in daily life

Assignment

Q1. The smallest composite number is:-

    (a) 1   (b) 2   (c) 3   (d) 4

Q2. 1.2348 is

    (a) an integer (b) an irrational number (c) a rational number (d) None of there,

Q3. π is (a) rational (b) irrational (c) both (a) & (b) (d) neither rational nor irrational

Q4. $(2+\sqrt{5})$ is (a) rational (b) irrational (c) An integer (d) Not real

Q5 Solve for x and y: x – y= 0 ; 2x – y = 3

Q6. If α and β are the zeroes of the quadratic polynomial $4x^2 - 1 = 0$ and find $\alpha^2 + \beta^2$.

Q7. Find the quadratic polynomial, the sum and product of whose zeros are -3 and 2 respectively.

Q. 8. Find the sum and product of zeroes of the polynomial $x^2 + 7x + 10$

Q. 9. Solve for x:

$$4x + \frac{6}{y} = 15 \qquad\qquad 6x - \frac{8}{y} = 14$$

Q. 10. For what value of k will the following system of linear equations have no solution
$$3x + y = 1, \quad (2k-1)x + (k-1)y = 2k+1$$

Q. 11. Solve for x and y:
$$x + y = a - b, \quad ax - by = a^2 + b^2$$

Q. 12. Find the values of p and q for which the following system of equations has infinite number of solution; 2x +3y = 7, (p + q)x + (2p –q) y =21

Q13. Verify that 3 ,-1 -1/3 are the zeroes of the cubic polynomial
$p(x)= 3x^3$--- $5x^2 - 11x - 3$

Q. 14. Solve 2x + 3y =11 and 2x—4y =--24 and hence find the value of m for which
Y = mx + c

Q. 15. Divide the polynomial p(x) by the polynomial q(x) and find the quotient and
remainder. $p(x) = x^3 - 3x^2 + 5x - 3, \; q(x) = x^2 - 2$

Q. 16. Solve the following equations graphically $2x + 3y = 12, \; x - y = 1$ Shade the
region between the two lines and x-axis.

Q. 17. A man travel 600 km partly by train and partly by car . If he covers 400 km by train and the rest by car , it takes him 6 hours 30 minutes. But if he travels 200 km. by train and the rest by car , he takes half an hour longer. Find the speed of the train and that of the car.

Q18. Use Euclid division lemma to show that cube of any positive integer is either of the form 9m. (9m+1) or 9m+8.

Q19. Use Euclid's division algorithm to find the HCF of 4052 and 12576

Q20. Find the largest number which divides 245 and 1029 leaving remainder 5 in each case.

SCIENCE

Make a short movie using window movie maker on any topic related to science.
Example- Universe,
Drugs and its harmful effects
Global warming
Earth and environment,
Latest discoveries in science,
or any topic of your choice.

Guidelines: The movie should have 20-25 slides on the topic chosen.

SOCIAL SCIENCE

1. Prepare a mitigation plan and suggest preventive measures that can be taken to reduce the effect of the given hazards. Students will prepare the project on the topic allotted to them according to their roll number.

Roll no.	Topics
1-10	Earthquake
11-20	Tsunami
21-30	Fire
31-40	Floods
41 onwards	Cyclone

Sources of material

1. Textbook – Together towards a safer India part III by CBSE

2. Magazines, internet and newspapers

Guidelines

1. Project must include – Page of content consist of definition of disaster, types of disaster, causes of disaster and preventive measures.
2. Acknowledgement and Bibliography
3. Project must be supported by pictures , diagrams , graphs, collage work, maps, newspaper clippings etc.
4. Cover page must show the topic, related pictures and the particulars of the child.
5. Project should be of 6 to 8 page on A4 size sheets filed together and spiraled neatly.

COMPUTER SCIENCE

Prepare a PowerPoint presentation on any one of the following topics:

a. Cloud Computing
b. E-sites (includes e- learning; e-banking; e-shopping; e-reservation; e-groups)
c. Social Networking Sites
   There should be 3-5 slides in the presentation and the printout of the same (handout format preferred) is to be submitted. This activity will be assessed as FA-2 Activity.

Multidisciplinary Project
Topic - Conservation of Energy

Subject	Description	Specific Guidelines
• English	• Make a power point presentation on Renewable sources of Energy • Roll nos. ✓ 1- 6: Solar Energy ✓ 7-12: Tidal Energy ✓ 13-18: Geothermal Energy ✓ 19-24 Wind Energy ✓ 25-30 Nuclear Energy ✓ 31-36 Hydropower Energy ✓ 37-42 Bio-mass Energy ✓ 43-47 Solar Energy	• Prepare 10 – 15 slides. On the first slide write the name of the topic and the names of the students in the group. • Make it attractive with pictorial illustrations/ animations. • The content should be grammatically correct and should not be plagiarized.

• Mathematics	• Metals are non-renewable resources. Identify at least five different metals available in India. Collect the data of amount of Extraction of different metals in India per year. Represent the information using Pi-chart and bar graph	• Use different colours to depict different metals. • Paste the graphs on A4 size sheets.
• Science	• Differentiate between conventional and non-conventional sources of energy giving detailed explanation of any two from each type. • Explain different methods to conserve these energy resources. • Define sustainable management. Mention few steps to achieve sustainable management of energy resources. • Write a slogan on energy conservation.	• Explain any two conventional and any two non-conventional sources of energy. • Slogan to be written on A3 sized coloured pastel sheet.
• Social Science	• Write the significance of Energy Resources in the economic development of our country. • Locate the places on Political map of India • Major iron-ore mine • Coal mines • Oil field • Nuclear Power Plants • Suggest Measures to conserve energy resources	• *The written work should be • done on A4 size sheets. • The maps should be colourful and they should be pasted on A4 size sheets.
• Hindi	*'प्राकृतिक- संसाधनों का संरक्षण' विषय पर एक सारगर्भित लेख (१५०-२०० शब्दों में) लिखिए		• चित्रों का प्रयोग यथासंभव कीजिए
• Sanskrit	प्राकृतिक-संसाधनानां-संरक्षणम् इति विषयम् अधिकृत्य अनुच्छेदं लिखत । (१००-१५० शब्दा:)	• A4 सुसज्जिते पत्रे चित्रलेपनं कुरु ।
• Work Education	The cover folder of each group's project has to be prepared creatively	• Use handmade paper and decorate it imaginatively.

NOTE:

- Each group will consist of 6 students. The leader of each group will take the responsibility of planning, coordination and execution of the project.
- Each member of a group has to perform the assigned tasks of one subject of the project.
- Internet, books, magazines and newspapers can be referred to, for information.
- After compilation, the projects of all subjects should be punched in a folder or a file consisting/containing A-4 sheets. The first sheet of the folder should have the name, class and roll nos. of the students of the group.
- Students who have opted for Hindi should do the Hindi part and students who have opted for Sanskrit should do the Sanskrit part.

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