DELHI INTERNATIONAL SCHOOL, DWARKA

SUMMER HOLIDAY ASSIGNMENT
(SESSION-2017-18)
CLASS-X

Dear Children,
Vacation has just one letter difference with vocation. Summer vacation is the time when you can be more candid and creative. This is the time when skills, other than intellectual skills can be nurtured and developed in your soft and evolving brains. Holiday assignments are focused to let the creative and latent talents, skills and desires of the children come to the surface so that they may be identified and satisfied.

Let's get rid of our pre-conceived dogmas! We want you to enter in to the new world of assessment which is totally based upon the new CBSE rules. It is the time to understand the importance of projects, assignments and the holiday homework. Therefore, this year the homework has been designed keeping in view the renewed CBSE patterns.
So dear children, Get...... Set..... Go.... Enjoy doing the activities and ensure timely completion of the given assignments. Remember a well presented Holiday Homework fetches you a commendable remark.

ENGLISH

READING

I. Read "The Diary of a young girl" by Anne Frank and **review** it on the basis of the following points :
a)Biography of the author.
 b)The plot.
c) The Characters
d)The chapter of her life that inspired you the most.

*W*RITING

II. Find **information about the following poets with** reference to the poems in the Literature Reader & Submit it on a nice chart.
1. Sylvia Plath
2. Samuel Taylor Coleridge
3. P. B. Shelley
Visit the sites mentioned below:
•http.//www.poets.org/poets/poets.cfm?prm10=1961
•http.//www.geocities.com/ Athens/ Olympus/ 1487/index.html.
•www.Encarta.com

III. Write a story in about 150-200 words based on the input given below:
Uday's dream – do something brave – win recognition far and wide – be famous in the world – one fine day, he saw this opportunity when…………..

GRAMMAR
IV. *Look at the words and phrases below. Rearrange them to form meaningful sentences:*
(a) Officials/a hand-held/bacteria/the method/device/allows/to detect/with.
(b) Bacteria killers/naturally/the technique/bacteriophages/is based on/ occurring/known as.

(c) To antibiotics/have been shown/of an/by bacteriophages/to destroy anthrax/ that has become resistant/to extract/enzyme product.
(d) This technique/infections/in a/help/few years/may fight/difficult to treat.

LITERATURE

V. Revise the lessons taught & learnt in Fiction and Poetry sections.
Rubrics for the above mentioned activities are as follows:

Presentation	Content	Originality	Accuracy of details	Total
3	3	2	2	10

HINDI

<div align="center">ग्रीष्मावकाशकालीन गृह कार्य</div>

नोट [1] दिए गए 1 से 3 प्रश्न हिंदी की उत्तर पुस्तिका में लिखिए।

प्रश्न 1 दो सूफी कवियों की जीवनी चित्र सहित अपने शब्दों में लिखिए ।

प्रश्न 2 'शिक्षा केवल रटंत विद्या नहीं ' विषय पर एक अनुच्छेद लिखिए ।

प्रश्न 3 किसी वृद्धाश्रम में जाकर निरीक्षण कीजिए । वहाँसे प्राप्त अनुभव अपने शब्दों में लिखिए ।

प्रश्न 4   'ऊर्जा बचाओ ,ऊर्जा बढ़ाओ ' विषय पर कोलाज चार्ट पर बनाइए ।

SANSKRIT

चार्ट कार्य Ä पाठ्यपुस्तकमणिका 1–5पाठ मेंसेकोई एकचित्र कोबनाओ।

सृजनात्मकलेखनÄ नारीमहत्व ,संस्कृतमहत्व ,समयस्यसदुप्रयोग ,कालिदासकिसीएकविषयमेंसंस्कृत पुर तिकामेंलिखिए।

कियाक्लाप Ä केलेकेपत्तेपरसंस्कृतश्लोकलिख्बोवप्रतिदिनदोश्लोकस्कैबफाईल मेंलिखे।

FRENCH

I Lisez le poème la grasse matinée

(a) Écrit la biographie du poète en mots **(50-60) (A3 size sheet)**
(b) Écrit le plot du poème **(A3 size sheet)**

WRITING

II Écrivez une lettre d'environ 80 mots à votre ami qui est au chômage. Donnez-lui des conseils.

Donne la recette d'un plat français. **(A3 size sheet)**

Donne la recette d'un plat indien. **(A3 size sheet)**

GRAMMER

III Faire de la pratique d'exercices de passé composé et futur antérieur

ICT

MAKE A WEBSITE FOR ANY EDUCATIONAL INSTITUTE INCLUDING ALL THEIR STUDY MATERIALS AND USING THE FOLLOWING TAGS:

TEXT FORMATTING TAGS

- LIST TAG
- TABLE TAG
- FRAMES & FORMS

SAVE THE WEBSITE IN A CD.

MATHS

Solve the following questions:

(1) If α and β are the zeros of quadratic polynomial $x^2 + px - 2q$, find the value of $\alpha^2 + \beta^2$.

(2) If α and β are the zeros of quadratic polynomial $x^2 - 3x - 4$, find the value of $\alpha^3 + \beta^3$.

(3) If α and β are the zeros of polynomial $x^2 - 5x + k$, such that $\alpha - \beta = 3$. Find the value of k.

(4) If a and b are the zeros of quadratic polynomial $x^2 - 2px + q$, find the value of $1/a + 1/b$.

(5) If α and β are the zeros of polynomial $x^2 - 5x + k$, such that $\alpha^2 + \beta^2 = 13$. Find the value of k.

Choose correct answer(s) from given choice

(6) Find the zeros of the polynomial f (x) = $x^3 - x^2 - 4x + 4$, if it is given that two of its zeros are equal in magnitude but opposite in sign.
 a. 1, -1 and -2   **b.** 2, -2 and 1
 c. 2, -2 and -1   **d.** 1, -1 and 2

(7) If α and β are the zeros of polynomial $x2 - x - 2$, find a polynomial whose zeros are 3α+2 and 3β+2.
 a. k [$x2 - 7x - 8$] **b.** k [$x2 - 8x + 7$]
 c. k [$x2 + 7x - 10$] **d.** k [$x2 + 8x - 8$]

(8) Find the zeros of the polynomial f (x) = $x^3 - 9x^2 + 26x - 24$, if it is given that sum of its two Zeros is 5.
 a. 3, 2 and -4   **b.** 4, 1 and 2
 c. 4, 1 and 3   **d.** 3, 2 and 4

(9) If α and β are the zeros of quadratic polynomial $x^2 - 2x + 1$, find the value of $1/\alpha^3 + 1/\beta^3$.
 a. 0   **b.** 4 **c.** 3   **d.** 2

(10) Find the zeros of the polynomial f (x) = $x^3 - 18x^2 + 92x - 120$, if it is given that the zeros are in arithmetic progression.
 a. 1, 5 and 9   **b.** 3, 7 and 11
 c. 0, 4 and 8   **d.** 2, 6 and 10

(11) If two zeros of polynomial $x^3 + bx^2 + cx + d$ are 1+$\sqrt{2}$ and 1-$\sqrt{2}$, find its third zero.
 a. -b - 2   **b.** c - 2
 c. - c - 2   **d.** b – 2

(12) Find the quadratic polynomial such that sum of its zeros is 19 and difference between zeros is 5.
 a. k [$x^2 + 19x + 84$] **b.** k [$x^2 - 20x + 84$]
 c. k [$x^2 - 19x - 84$] **d.** k [$x^2 - 19x + 84$]

Rubrics for the above mentioned activities are as follows:

Identification and statement	Procedure/processes adopted	Neatness and organization	Illustration and diagram	Total
01	03	2	4	10

SCIENCE

PHYSICS

Answer the following Questions:

1. Which two circuit components are connected in parallel in the following circuit diagram? - + >>>> . <<< +

2. A metallic conductor has loosely bound electrons called free electrons. The metallic conductor is (a) negatively charged (b) positively charged (c) neutral (d) Either positively charged or negatively charged 3. Which of the following expressions does not represent the electric power in the circuit? (a) VI (b) $I2/R$ (c) $V2/R$ (d) I2 R

4. Resistivity of a metallic wise depends on (a) its length (b) its shape (c) its thickness (d) nature of material

5. If the current I through a resistor is increased by 100% the increased in power dissipation will be (assume temperature remain unchanged) (a) 100% (b) 200% (c) 300% (d) 400%

6. How does use of fuse wire protect electrical appliances?

7. Calculate the resistance of an electric bulb which allows a 10A current when connected to a 220V power source?

8. (i) Identify the V-I graphs for ohmic and non-ohmic materials. (ii) Give one example of each.

9. What do the following symbols represent in a circuit? Write the name and one function of each?

10. Two metallic wires A and B are connected in second wire A has length l and radius r, while wire B has length 2l and radius 2r. Find the ratio of total resistance of series combination and the resistance of wire A, if both the wires are of same material?

11. Should the heating element of an electric iron be made of iron, silver or nichrome wire? Justify giving three reasons?

12. (a) Define electric resistance of a conductor? (b)A wire of length L and resistance R is stretched so that its length is double and the area of cross section is halved. How will its (a) resistance change (b) resistivity change?

13. Two resistor of resistance R and 2R are connected in parallel in an electric circuit. Calculate the ratio of the electric power consumed by R and 2R?

14. Two wires A and B are of equal length, different cross-sectional areas and made of same metal. (a) (i) Name the property which is same for both the wires, (ii) Name the property which is different for both the wires. (b)If the resistance of wire A is four times the resistance of wire B, calculate (i) the ratio of the cross-sectional areas of the wire and (ii) The ratio of the radii of the wire.

CHEMISTRY

Answer the following Questions:

1. What changes do you observe in the iron nails and colour of copper sulphate solution, if iron nails are dipped in $CuSO_4$solution for 15 minutes?

2. Identify the chemical change:

Melting of ice or conversion of milk into curd.

3. Why is respiration considered an exothermic reaction?

4. Why do copper vessels lose shine when exposed to air?

5. Potato chips manufacturers fill the packet of chips with nitrogen gas. Why?

6. Why we store silver chloride in dark coloured bottles?

7. Write a chemical equation of double displacement reaction.

8. $N_2 + 3H_2 \rightarrow 2NH_3$, name the type of reaction.

9. What happens when milk is left open at room temperature during summers?

10. What happens when quick lime is added to water?

SHORT TYPE QUESTIONS (2 Marks)

1. Define combination reaction. Give one example of combination reaction which is exothermic in nature.

2. What is decomposition reaction? Explain with the help of an example.

3. Name and state the law which is kept in mind when we balance a chemical equation.

4. Give one example of each:

(a) Chemical reaction showing evolution of gas.

(b) Change in substance's colour during a chemical reaction.

5. What is rancidity? Write two ways by which it can be prevented.

6. What are two conditions which promotes corrosion?

7. A small amount of ferrous sulphate is heated in hard glass tube.

(a) Write the chemical equation.

(b) What type of reaction is taking place?

8. What happens when Zn strip is dipped in $CuSO_4$ solution?
SHORT TYPE QUESTIONS

1. What is redox reaction? Write down a chemical reaction representing it.
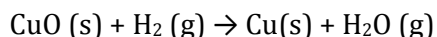
2. In electrolysis of water:

(a) Name the gas collected at cathode and anode.

(b) Why is volume of one gas collected at one electrode is double of another?

(c) Why are few drops of dil. H2SO4 added to water?

3. In the reaction

CuO (s) + H_2 (g) → Cu(s) + H_2O (g)

(a) Name the oxidized substance.

(b) Name the reduced substance.

(c) Name the oxidizing agent.

4. Give reasons:

(a) White silver chloride turns grey in sunlight.

(b) Brown coloured copper powder on heating in air turns into black coloured substance.

5. Compound 'X' decomposes to form compound 'Y' and CO_2 gas. Compound Y is used in manufacturing of cement.

(a) Name the compounds 'X' and 'Y'.

(b) Write the chemical equation for this reaction.

6. A metal salt MX when exposed to light splits upto to form metal M and gas X_2 . Metal M is used to make ornaments whereas gas X_2 is used in making bleaching powder. The salt MX is used in black & white photography.

(a) Identify the metal M and gas X2

(b)Identify MX.

(c) Write down the chemical reaction when salt MX is exposed to sunlight.

7. A metal strip X is dipped in blue coloured salt solution YSO4. After some time a layer of metal 'Y' is formed on metal strip X. Metal X is used in galvanization whereas metal Y is used for making electric wires.Chemical Reactions and Equations 9

(a) What could be metal 'X' and 'Y'?

(b) Name the metal salt YSO4

(c) What type of chemical reaction takes place between X and YSO4? Write the balanced chemical equation.

LONG TYPE QUESTIONS
1. White wash was being done at Mukesh's house. Mukesh saw that the painted added quick lime to drum having water. Mukesh touched outer surface of drum, it is unbelievably hot.

(a) Write the chemical equation for above reaction.

(b) What type of reaction is it?

(c) What is utility of this reaction?

2. What types of reactions are represented by following:

(a) $CaCO_3 \rightarrow CaO + CO_2$

(b) $2Ca + O_2 \rightarrow 2CaO$

(c) $Pb + CuCl_2 \rightarrow PbCl_2 + Cu$

(d) $2FeSO_4 \rightarrow Fe2O_3 + SO_2 + SO_3$

(e) $Na_2SO_4 + BaCl_2 \rightarrow BaCl_2 + 2NaCl$

3. Balance the following equations:

(a) $H_2 + O_2 \rightarrow H_2O$

(b) $MnO_2 + HCl \rightarrow MnCl_2 + H_2O + Cl_2$

(c) $Pb(NO_3) \rightarrow PbO + NO_2 + O_2$

(d) $AgNO_3 + NaCl \rightarrow AgCl + NaNO_3$

(e) $Ca(OH)_2 + HNO_3 \rightarrow Ca(NO_3)_2 + H_2O$

4. Write down the balanced chemical equation for the following :

(a) Silver chloride is decomposed in presence of sunlight to give silver and chlorine gas.

(b) Calcium oxide reacts with water to give lime water.

(c) Sodium hydroxide reacts with hydrochloric acid to give sodium chloride and water.

(d) Die hydrochloric acid is added to copper oxide to give green coloured copper chloride and water.

(e) Solution of barium chloride and sodium sulphate in water reacts to give insoluble barium sulphate and solution of sodium chloride

Biology

Answer the following Questions:

1. Amoeba captures food with the help of – a) teeth b) cilia c) pseudopodia d) tentacles.
2. Name the part of alimentary canal receiving bile from the liver. a) Oesophagus b) Stomach c) Small intestine d) Large intestine.
3. What is glycolysis?
4. . Name the largest artery of body.
5. Why the walls of trachea are supported by cartilaginous rings?
6. . What are the raw materials for photosynthesis?
7. . What is the role of diaphragm during inhalation and exhalation?
8. What is the advantage of four chambered of heart?

9. What is role of skin, lungs and intestine in the process of excretion in man?

10. Explain the structure of chloroplast.

11. Why and how does water enter continuously into the root xylem of plants?

12. What is the role of following in human digestive system – a) mucous b) Bicarbonate c) Trypsin

13. Describe an experiment to prove that carbon – dioxide is essential for the process of photosynthesis.

SCIENCE PROJECTS(On Separate project files)

Physics 1. What is carbon footprint? By observing Earth Hour, how can you reduce your carbon footprint? Also suggest two alternative sources of energy. 2. Do an online survey using the link http://www.carbonfootprint.com/calculator.aspx to calculate your carbon footprint for the month of May 2017. Also take the print out of your RESULTS page (Last tab of carbon footprint calculator) as evidence.

Chemistry: 1. What is biodiesel? What are its uses? 2. How can biodiesel be a solution to the problems of climate change?

Biology 1. How has Global Warming affected the Fauna in the following regions? a) Tundra Region. b) Temperate Region c) Grasslands 2. Make a collage of ten endangered plant species with their names and pictures.

Rubrics for the above mentioned activities are as follows:

Presentation	Content	Originality	Accuracy of details	Total
3	3	2	2	10

SOCIAL SCIENCE

<u>History</u>

1. Write a note on:

(A) What was meant by civilising mission of the colonizers   (B) Huynh Phu So.

2. What was Phan Chu Trihn's objective for Vietnam? How were his ideas different from those of PhanBoi Chau?

3. What protect erupted in the Saigon Native Girls School?

OR

Describe the major protest erupted in Saigon Native Girls School in 1926,in Vietnam.

4. Specify the role of women in the anti-imperialist movement in Vietnam.

5. How did French rule come to end?

6. Why is growth of nationalism in the colonies linked to anti-colonial movement?

7. Discuss the salt march to make clear why it was an effective symbol of resistance againts colonialism.

8. What were the effects of Jallianwala Bagh Massacre?

9. Why was Poona Pact signed?

10. Who was Simon? Why was Simon Commission sent to India? Why did it fail?

Political Science

11. Write a short note on the ethnic composition of Belgium.

12. Write a short note o the ethnic compostition of Sri Lanka.

13. What lessons do you learn from the two different developments in Belgium and Sri Lanka.

14. How did Belgium resolve the problem of ethnic diversity?

15. Explain how power is shared in a democratic country.

Geography

16. How are renewable resources different fron the non-renewable resources?

17. What is Agenda 21

18. State the features of red, yellow and black soil.

19. Write three stages involved in resource planning.

20. What is the need for conservation of resources? Elucitiatein light of Gandhiji's view.

Project*(On Separate project files)*

How "resource and development are related to each other" based upon this concept male a project focusing on land resource and sustainable development. (15 pages including picture, diagram and map)

Rubrics for the above mentioned activities are as follows:

Presentation	Content	Originality	Accuracy of details	Total
3	3	2	2	10