



**SUMMER HOLIDAY ASSIGNMENT-2019
CLASS X**

ENGLISH

- Answer the following questions in about 20-30 words:**
 - Why does Lencho write a letter to God?
 - What do 'Fire' and 'Ice' symbolise in the poem 'Fire and Ice'?
 - How does poet's mood in the poem 'Dust of Snow' change from sadness to joyfulness?
 - Why is the tiger's 'strength behind the bars' in the poem 'A Tiger in the Zoo'?
 - Why is Tricky's transformation called 'Triumph of Surgery'?
- You are Anish /Anita Singh, the Sports In charge of Riverdale Public School, Kolkata. As the Annual Sports Day of your school is going to be conducted next month, you need certain sports goods. Write a letter to the Sales Manager, Olympic Sports Equipment, Thane, Maharashtra, placing order for the required sports goods.
- Rearrange the following words or phrases to form meaningful sentences:**
 - written/the Indian Constitution/is/comprehensive/a/document/and
 - it/longest/in fact/world/in/constitution/is/the/the
 - 397 articles/12 schedules/it/ and/contains
 - provides for/whole India/a single citizenship/for/the/for/it

MATHEMATICS

- Draw the graph of the following polynomials in Cartesian coordinate plane: (a) constant polynomial (b) zero polynomial (c) a linear polynomial.
- Represent the following cubic polynomials graphically. Also find the zeros of each of the following polynomials (if any) from the graph.: (a) $x^3 + 4x^2 + 11x + 8$ (b) $x^3 - x^2 - x + 1$
(c) $-x^3 - 8x^2 - 19x - 12$.
- Show that any odd positive integer comes in the form of $8q + 1$, $8q + 3$, $8q + 5$ or $8q + 7$ for some q .
- Find a polynomial which when divided by a cubic polynomial gives a quotient which is a biquadratic polynomial and remainder is a linear polynomial.
- Show that 14^n never ends with 0 for some natural number n .
- Divide the polynomial $x^4 - 17x^2 + 34x - 12$ by $x - 2$ and find the quotient and the remainder. Also verify the division algorithm.
- Find the greatest number that will divide 445, 572 and 699 leaving remainders 4, 5 and 6 respectively.
- If α , β are the zeroes of a polynomial, such that $\alpha + \beta = 6$ and $\alpha\beta = 4$, then write the polynomial.
- Given that $x - \sqrt{5}$ is factor of the polynomial $x^3 - 3\sqrt{5}x^2 - 5x + 15\sqrt{5}$, find all the zeroes of the polynomial.
- If the polynomial $x^4 - 6x^3 + 16x^2 - 25x + 10$ is divided by $(x^2 - 2x + k)$ the remainder comes out to be $x + a$, find k and a .

SCIENCE

PHYSICS

- If you want to see an enlarged image of your face, which type of mirror will you use? Where will you place your face?
- Find the position of the object which when placed in front of a convex mirror of focal length 20cm, produce a virtual image of half the size of the object.

- A student has focused the image of a candle flame on a white screen using a concave mirror .The situation is as given below :
- Length of the flame = 1.5cm,focal length of the mirror = 12cm,distance of flame from the mirror =18cm.
- If the flame is perpendicular to the principal axis of the mirror, then calculate the following
- (a)Distance of the image from the mirror
- (b)Length of the image
- If the distance between the mirror and the flame is reduced to 10cm,then what would be observed on the screen? Draw ray diagram to justify your answer for this situation.
- What is the minimum distance between the object and its image of same size when placed in front of a concave mirror? Draw ray diagram for it.
- How will you identify a concave mirror, plane mirror and convex mirror without touching them?

CHEMISTRY

- Identify the type of chemical reaction taking place in each of the following: Write appropriate chemical equation.
 - On heating copper powder in air in a china dish, the surface of copper turns black.
 - Quick lime reacts vigorously with water releasing large amount of heat.
- On heating green coloured crystals, a gas with a characteristic odour of burning sulphur evolves and the colour of the crystal changes.
 - Identify the green crystals.
 - Name the gas evolved with its chemical formula.
 - Write the chemical equations involved. Name the type of chemical reaction taking place.
- Mohan took a magnesium ribbon (cleaned) and burnt it on a flame. The white powder formed was taken in a test tube and water was added to it. He then tested the solution formed with red and blue litmus. What changes were seen? why? Write the chemical equations involved.
- Based on the reactions given below, arrange the metals involved in these reactions in decreasing order of reactivity. Give suitable explanations.

<ol style="list-style-type: none"> $Zn + CuSO_4 \rightarrow ZnSO_4 + Cu$ $Zn + FeSO_4 \rightarrow ZnSO_4 + Fe$ 	<ol style="list-style-type: none"> $Cu + 2AgNO_3 \rightarrow Cu(NO_3)_2 + 2Ag$ $Fe + CuSO_4 \rightarrow FeSO_4 + Cu$
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- A student mixed solid sodium chloride and solid barium chloride powder. What change will take place on mixing? Justify your answer and explain how can he get desired change?
- Give characteristic tests for the following gases: (i) CO₂ (ii) O₂ (iii) H₂.
- During the reaction of some metals with dilute hydrochloric acid, following observations were made:
 - Silver metal does not show any change.
 - The temperature of reaction mixture rises when aluminium is added to it.
 - The reaction of sodium metal is found to be highly explosive.
 - Some bubbles of gas are seen when lead reacts with acid.
 - Iron reacts to give fewer bubbles compared to potassium.Justify the above observations.

BIOLOGY

- Name the form in which extra food in plants and animals are stored.
- Give the energy transformation that take place in the process of photosynthesis.
- How do the guard cells regulate opening and closing of stomata?
- Why is diffusion insufficient to meet the oxygen requirements of multicellular organisms like humans?
- How is the small intestine designed to absorb digested food?
- List the three important events that take place during photosynthesis.
- What substances are contained in the gastric juice? What are their functions?
- Draw and label: a) T.S of leaf b) Leaf stomata c) Human digestive system

SOCIAL SCIENCE

History

1. How did World War 1 affect the economy of India? (3)
2. What was the Khilafat Movement and why did Mahatma Gandhi support it? (3)
3. The growth of modern nationalism is intimately connected to the anti-colonial movement. Justify. (3)
4. Why did Mahatma Gandhi decide to launch a nationwide Satyagraha against the Rowlatt Act? What were the limitations of the Rowlatt Satyagraha? (5)
5. What was the idea behind the Non-Cooperation Movement of 1919? (1)

Political Science

1. Why was the Belgian constitution changed four times between 1970-1993? (1)
2. Give one example of power sharing among political parties. (1)
3. What is a legitimate government? (1)
4. How do citizens acquire a stake in the democratic system? (1)
5. Differentiate between power sharing arrangements of Belgium and Sri Lanka.(3)
6. Distinguish between vertical and horizontal power sharing.(3)
7. Discuss the moral and prudential reasons for power sharing. (5)

Geography

1. If oil gets exhausted, how is it going to affect our life?
2. On an outline political map of India show different types of soil.

Economics

1. Mention your development goals. (any five)
2. “Money cannot buy everything that makes everyone happy”. Explain the statement.
3. Explain any three dimensions of development.

HINDI(2L)

(१) पहलीबारकक्षामेंअवलआनेपरछोटेभाईमें क्या परिवर्तन आया ?

(२) अहंकारविनाशकाकारणहोताहै—इसबातकोसमझानेकेलिएबड़े भाईनेकिन-किनलोगोंकाउदाहरण

दियाहै ? विस्तारसेलिखें ।

(३) रिक्तस्थानभरें -

(क) शब्द— --होताहै ।

(ख) शब्द— --प्रधानहोताहै ।

(४) निम्नलिखितशब्दोंकाविग्रहबहुव्रीहिऔर कर्मधारय समासकेअनुसारकरें ।

नीलकंठ , पीतांबर , श्वेतांबर , कमलनयन , राजीवलोचन

(५) किसीशैम्पूकीकंपनीकेलिएएकआकर्षकविज्ञापन तैयार करें ।

FRENCH

1.Mettez aux temps conviennent:

i. Samedidernier, nous (aller) au cinéma avec nosamis et nous (voir) un bon film.

ii. Elle (se lever) toujours à 7 heures.

iii. Les deuxamis (aller) au parc, il y a uneheure.

iv. Quandnosgrands-parents (avoir) 20 ans, le monde (être) différent.

v. (Setaire)-vous ! Le Prof estici.

vi. Ecoute-moi, sans (parler) un mot.

vii. Si tuas faim, (manger) quelque chose !

viii. Dèsquel'avion (partir) l'aéroport, nous (être) en ciel.

ix. Ils (venir) chez nous dèsqu'ils (finir) leurtravaux.

x. Quand le Prof. Nous (expliquer), nous (comprendre) toutes les questions.

2.Mettezuneliste des proverbesfrançais (au minimum 10) avec leursens en anglais.

3. Donnez la formenominale des verbes:

i. Arriver ii. Connaître iii.Vendreiv. Produire v. Ecrire

4.Ecrivezunelettred'environ 80 mots à votreami(e) luiracontant un voyage quevousavez fait pendant les vacances.

ODIA

୧. ନିମ୍ନ ଲିଖିତ କବିମାନଙ୍କ ବିଷୟରେ ଅତିକମ୍ରେ ୧୦୦ ଶବ୍ଦରେ ଲେଖ । ଜନ୍ମ, ବଂଶ ପରିଚୟ , କୃତିତ୍ୱପାଦି

I.ଆଦିକବିସାରଳା ଦାସ,

II.କବିସମ୍ରାଟପଦ୍ମ ଭଞ୍ଜ ,

III. କବିବରରାଧାନାଥ ରାୟ ,

IV.ସ୍ୱଭାବକବିଗଙ୍ଗାଧର ମେହେର ।

୨. ପ୍ରାଚୀନ କାବିରାଜିର ସ୍ମରଣା ସଂପର୍କରେ ତୁମର ଏକ ଲେଖା ପ୍ରକାଶନ ନିମନ୍ତେ କୌଣସି ଏକ ସମ୍ବାଦ ପତ୍ରର

ସମ୍ପାଦକଙ୍କୁ ପତ୍ରଲେଖ ।

SANSKRIT

१. स्वविद्यालयस्य वार्षिकोत्सवं वर्णयन्तं मित्रंप्रतिलिखिते पत्रे उचितपदैः रिक्तस्थानानि पूरयित्वा पुनः लिखत ।

(Complete the following letters and address it to your friend describing your school's annual day with the word given in the box.

परीक्षाभवनम्,

(i) —————

तिथिः- .१२.१७

प्रिय (ii) ——— विवेकः,

(iii) —————

अत्र सर्वम् (iv) ————— तत्रास्तु । भवतः पत्रम् प्राप्तम् । अहं स्वविद्यालयस्य (v) ————— वर्णयामि ।
एकमासपूर्वमेव अस्माकम् विद्यालयस्य सर्वे (vi) ————— छात्राः च (vii) ————— व्यस्ताः आसन् । शिक्षानिर्देशकः कार्यक्रमस्य
(viii) ————— आसीत् । सः विद्यालयम् अतीव प्रशंसत् योग्येभ्यः (ix) ————— पुरस्कारान् अयच्छत् ।

पितृभ्याम् नमः

भवतः सुहृदः

(X) —————

मञ्जूषा - कुशलम्, अध्यापकाः, मुख्यातिथिः, नवदिल्लीतः, अमृतांशुः, छात्रेभ्यः, वार्षिकोत्सवम्, मित्र, कार्येषु, सप्रेमनमः

(२) अधोलिखितवाक्येषु रेखाङ्कितपदेषु सन्धिसन्धिच्छेदं वा कृत्वान् लिखत । (केवलं प्रश्नचतुष्टयम्) write any four

Write the underlined words of the following sentences after joining or dis- joining Sandhi.

(i) तस्य एक+छत्रं राज्यम् अस्ति ?

(ii) मृण्मयम् पात्रम् ।

(iii) लोके चक्षुः + दानम् दुष्करमेव ।

(iv) सर्वस्तरतुदुर्गाणि ।

(v) प्रत्यकम् अयनस्य अवधिः षण्मासाः ।

(३) अधोलिखितदिनचर्यायां रिक्तस्थानानि कालबोधकशब्दैः पूर्यन्ताम् । (केवलं प्रश्नचतुष्टयम्)

Rewrite the time table using Sanskrit work in place of figures. write any four

(क) अहं (5:15) ——— वादने उत्तिष्ठामि ।

(ख) अहं (6:30) ——— वादने व्यायामं करोमि ।

(ग) अहं (7:45) ——— वादने पाठं पठामि ।

(घ) अहं (9:00) ——— वादने विद्यालयं गच्छामि ।

(ङ) रात्रौ (11:15) ——— वादने अहं शयनं करोमि ।