

ARMY PUBLIC SCHOOL, BINNAGURI CANTT

Holiday homework

Class- X

Holiday homework Science

Chemistry:

1. write down the answers of all the questions given in text, examples as well as in exercises for chapters 1,2 (up to the topic covered in the class).
3. Learn all types of chemical reactions with examples . Follow your reference book for extra equations and study material.
4. Practice at least five balancing of chemical equations every day.
- 5 Go through all the notes and diagrams , important questions provided during the class .
6. Learn answers of all exercise questions and previous year's questions related to the chapters covered.
7. Go through all the activities given in the chapter.
8. Learn and prepare your own notes on the topic indicators.
9. Read write each expression/ equation 15 times from chapter 1 and 2

PHYSICS:

1. Solve the problem of exercises of chapter 10 and 11.
2. Go through the theory and prepare notes.
3. Learn answers of previous year's questions from these chapters.
4. Go through all the activities given in the chapters.
5. Practice the ray diagrams daily.
6. Holiday homework

BIOLOGY

Draw the following diagrams-

- Human digestive system
- Human respiratory system
- 3. Stomata
- 4. Cross section of leaf
- 5. Nephron
- 6. Kidney
- 7. Heart
- 8. Neuron
- 9. Reflex arc

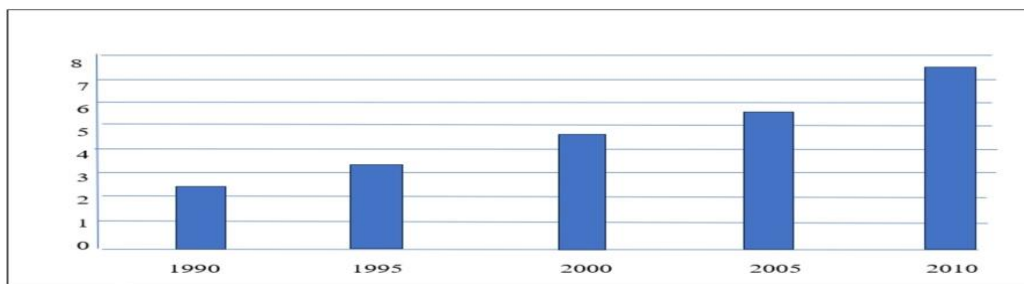
- Write down the name of the valves of heart and their position.
- By flow chart explain the process of blood circulation through heart.
- By flow chart show the processes by which glucose is broken down.
- Go through each and every topics. Practice NCERT questions .
- Question bank will be shared.

English holiday homework:

- 1) A new volume of J K Rowling’s HARRY POTTER Series has just been released. Order one set. Write a letter to the publisher, Mind frame Private Limited, 1623 Asaf Ali Road, New Delhi, requesting that a set be sent to you by Value Payable Post (VPP), and giving your address. Your letter will have the following parts.
 - Address of the sender and receiver
 - Date
 - Salutation
 - The main body
 - The closing phrases
 - Complimentary closing
- 2) A. Make a presentation of the chapter “Nelson Mandela” in English. Focusing on the points below;
 - Nelson Mandela short Introduction
 - The term Apartheid
 - Social and economic condition of the people of South Africa
 - The struggle of Nelson Mandela
 - Final Outcome
 - No. of slides 7-8, make use of pictures and be creative

OR

B. The following data in the form of histogram shows that death due to violence has increased considerably during recent years. Write an analytical paragraph on the same in about 120 words.



3. Love, human sympathy and education can transform even a thief. How could Anil bring such a change in Hari Singh? Comment. (100-120 words)

Note:

A) Once the presentation is completed, you need to email to the mentioned e-address below. A proper email has to be written with the details and the PPT needs to be attached in the same email.

Email ID: Anu.tirwa64@gmail.com

B) Exercises number 1, 2B and 3 to be done in your English note book.

C) Handwriting must be legible.

D) No excuses will be entertained, if holiday homework is not taken seriously.

Computer project :

Topic:

AI VISION

The topic must contain the following points:

a) Introduction

b)The uses

c) Advantage and disadvantage

Make your project on A4 sheet paper. Write informations, add pictures to make it attractive or you can also draw pictures. On the first page write topic name , your name, class and section. From second page write information about the topic. Use at least 4 pages to complete the project. Don't write informations on both side of the page.

Sanskrit-

- 1-शुचि पर्यावरणम् पाठ को सस्वर याद करें।
- 2-चार पृष्ठ सुलेख लिखें।
- 3-टाप्, डीप् और ल्यप् प्रत्यय युक्त पांच-पांच शब्द लिखें।

SOCIAL SCIENCE

1. Project

Every student has to compulsorily undertake one project on

Consumer Awareness

OR

Social Issues

OR

Sustainable Development

General Instructions:

- i) The project should be hand written OR Digital.
- ii) It should be well presented and pictorial.
- iii) Cover page, table of contents, acknowledgements, headings and sub-headings are must.
- iv) The project should be done on white A4 size sheets.
- v) The project should be presented in a file.
- vi) Project work must be neat and clean.
- vii) The project should not exceed MORE THAN 20 pages (Including point no. iii and 700 words.)
- viii) **Submission date: 8 July, 2024**

Hindi:

स्पर्श - 2

क). कविता - मनुष्यता कविता व उसके कवि परिचय और पाठ प्रवेश से कविता में दिए गए संदेश को लिखें ।

कविता को कंठस्त करें ।

ख). पर्वत प्रदेश में पावस, तोप, कर चले हम फिदा और आत्मत्राण कविता को ध्यान से पढ़ें और याद करने का प्रयास करें ।

1. संचयन - 2

क). हरिहर काका, ख). सपनों के से दिन - इन दोनों पाठों को पढ़ें और पाठ में आए प्रमुख पत्रों के ऊपर लगभग 50 शब्दों का लेख लिखें । पाठ का उद्देश्य और जीवन मूल्यों का सार लिखें ।

2. व्याकरण

क). व्याकरण की पुस्तक से - 'रचना के आधार पर वाक्य', और 'समास' की परिभाषा, भेद, और उदाहरण लिखें ।

3. रचनात्मक लेखन

क). अपनी व्याकरण की पुस्तक से किसी भी विषय पर लगभग 120 शब्दों में 4 अनुच्छेद लिखें ।

ख). अपनी व्याकरण की पुस्तक से किसी भी विषय पर लगभग 40 शब्दों 5 विज्ञापन तैयार करें ।

ग). अखबार, पत्रिका आदि से विभिन्न विषयों के विज्ञापनों की 5-6 कटिंग को अपनी व्याकरण की पुस्तिका में चिपकाएँ ।

घ). अपनी व्याकरण की पुस्तक से विभिन्न विषयों पर 5 पत्र लिखें ।

नोट- सभी लेखन कार्य को सुंदर व साफ लिखावट में लिखने का प्रयास करें ।

MATHEMATICS

- For which values of p and q , will the following pair of linear equations have infinitely many solutions?
 $4x + 5y = 2$
 $(2p + 7q)x + (p + 8q)y = 2q - p + 1.$
 - Solve the following pair of linear equations:
 $21x + 47y = 110$
 $47x + 21y = 162$
 - There are some students in the two examination halls A and B. To make the number of students equal in each hall, 10 students are sent from A to B. But if 20 students are sent from B to A, the number of students in each becomes double the number of students in B. Find the number of students in the two halls.
 - A motor boat can travel 30 km upstream and 28 km downstream in 7 hours. It can travel 21 km upstream and return in 5 hours. Find the speed of the boat in still water and the speed of the stream.
 - Two years ago, Salim was thrice as old as his daughter and six years later, he will be four years older than twice her age. How old are they now?
 - Draw the graph of the pair of equations $2x + y = 4$ and $2x - y = 4$. Write the vertices of the triangle formed by these lines and the y -axis. Also find the area of this triangle.
 - Find whether the following equations have real roots. If real roots exist, find them.
 $\frac{1}{2x-3} + \frac{1}{x-5} = 1.$
 - A train, travelling at a uniform speed for 360 km, would have taken 48 minutes less to travel the same distance if its speed were 5 km/h more. Find the original speed of the train.
 - At t minutes past 2 pm, the time needed by the minutes hand of a clock to show 3 pm was found to be 3 minutes less than $\frac{t^2}{4}$ minutes. Find t .
 - Solve for x : $\frac{a}{x-b} + \frac{b}{x-a} = 2$ by quadratic formula.
 - If -4 is a root of the equation $x^2 + px - 4 = 0$ and the quadratic equation $x^2 + px + k = 0$ has equal roots, then find the value of k .
 - If the roots of the equation $(c^2 - ab)x^2 - 2(a^2 - bc)x + b^2 - ac = 0$ are equal, then prove that either $a = 0$ or $a^3 + b^3 + c^3 = 3abc$.
-
- Two pipes can together fill a cistern in $2\frac{8}{11}$ minutes. If one pipe takes 1 minute less than the other to fill the cistern, find the time in which each tap would fill the cistern.
 - The n^{th} term of an AP cannot be $n^2 + 1$. Justify your answer.
 - If the numbers $n - 2$, $4n - 1$ and $5n + 2$ are in AP, find the value of n .
 - Which term of the AP: 53, 48, 43, ... is the first negative term?
 - If S_n denotes the sum of first n terms of an AP, prove that $S_{12} = 3(S_8 - S_4)$.
 - The sum of four consecutive numbers in an AP is 32 and the ratio of the product of the first and the last terms to the product of the two middle terms is 7: 15. Find the numbers.
 - Choose the correct answer from the given four options in the following questions:
 - For some integer m , every even integer is of the form
(a) m (b) $m + 1$ (c) $2m$ (d) $2m + 1$
 - For some integer q , every odd integer is of the form
(a) q (b) $q + 1$ (c) $2q$ (d) $2q + 1$
 - $n^2 - 1$ is divisible by 8, if n is
(a) an integer (b) a natural number (c) an odd integer (d) an even integer
 - If the HCF of 65 and 117 is expressible in the form $65m - 117$, then the value of m is
(a) 4 (b) 2 (c) 1 (d) 3
 - The least number that is divisible by all the numbers from 1 to 10 (both inclusive) is
(a) 10 (b) 100 (c) 504 (d) 2520

20. Choose the correct answer from the given four options in the following questions:

(i) If one of the zeroes of the quadratic polynomial $(k-1)x^2 + kx + 1$ is -3 , then the value of k is

- (a) $4/3$ (b) $-4/3$ (c) $2/3$ (d) $-2/3$

(ii) If the zeroes of the quadratic polynomial $x^2 + (a+1)x + b$ are 2 and -3 , then

- (a) $a = -7, b = -1$ (b) $a = 5, b = -1$ (c) $a = 2, b = -6$ (d) $a = 0, b = -6$

(iii) If one of the zeroes of the cubic polynomial $x^3 + ax^2 + bx + c$ is -1 , then the product of the other two zeroes is

- (a) $b - a + 1$ (b) $b - a - 1$ (c) $a - b + 1$ (d) $a - b - 1$

(iv) The zeroes of the quadratic polynomial $x^2 + 99x + 127$ are

- (a) both positive (b) both negative (c) both equal (d) one positive and one negative

21. Find the zeroes of the following polynomials by factorisation method and verify the relations between the zeroes and the coefficients of the polynomials:

- (i) $4x^2 - 3x - 1$ (ii) $3x^2 + 4x - 4$ (iii) $7y^2 - \frac{11}{3}y - \frac{2}{3}$ (iv) $v^2 + 4\sqrt{3}v - 15$

22. Find a quadratic polynomial, the sum and product of whose zeroes are $\sqrt{2}$ and $-\frac{3}{2}$ respectively. Also find its zeroes.

23. If α and β are the zeroes of the polynomial $f(x) = x^2 + 5x + 6$, then evaluate :

- (i) $\alpha - \beta$ (ii) $1/\alpha - 1/\beta$ (iii) $1/\alpha + 1/\beta - 2\alpha\beta$ (iv) $\alpha^2\beta + \alpha\beta^2$ (v) $\alpha^4 + \beta^4$ (vi) $\alpha/\beta + \beta/\alpha$.

