

SCIENCE HOLIDAY HOMEWORK

CLASS X



SHARDA INTERNATIONAL SCHOOL



“ The time for break, the time to rest and the time to
rejuvenate SELF ”

Enjoy your summer vacation

Dear Parents & students

Vacation is an excellent time to learn new skills. It is a welcome break for the children to enjoy and explore things in their own way. Here are some interesting and fun-filled activities for the children to learn and keep them occupied during the holidays

1. Revise the explained chapters with all extra questions-answers.
2. Read and prepare a science dictionary from the following chapters including 10 words from each chapter:
 - i Chemical, Reactions and Equations
 - ii Life Processes
 - iii Light- Reflection and Refraction
 - iv Acids, Bases and Salts
 - v Control and Coordination
3. **Answer the following questions on loose sheets.**
 - I. Discuss the process of inhalation during breathing II. Draw diagram and write a short note of human.
 - a) Respiratory System
 - b) Digestive System. Write stepwise mechanism of digestion through the gut (tabular form).
 - c) Excretory system
 - III. Write the chemical formula of the following compounds.

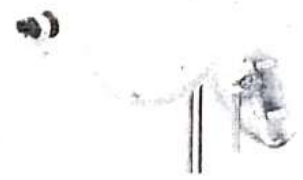
(i) Lime (ii) Nitric Acid (iii) Plaster of Paris (iv) Sodium acetate (v) Baking soda (vi) Washing soda (vii) Bleaching powder (viii) King of chemical (ix) Lime stone (x) Common Salt
 - IV. Write the formula of acid and base used to form the given salts.

(i) Potassium Sulphate (ii) Zinc Chloride (iii) Ammonium Chloride (iv) Barium Sulphate.
 - V. Write the name of acid present in the following.

(i) Apple (ii) Curd (iii) Vinegar (iv) Lemon (v) Orange (vi) Bee sting (vii) Tamarind
 - VI. Write the name of some (at least 10) chemical compounds that you use in your day to day life. Classify them as acids, bases and salts.
 - VII. Write formula of 5 chemical substances which contain:

a) Sulphate b) Acetate c) Hydroxide d) Bicarbonate e) Nitrate VIII.

Draw the following diagrams:

 - a) Cases of image formation through lens.
 - b) Cases of image formation through mirror.
 - c) Detail diagram of Human eye.
 - IX. The diagram shows a dish antenna which is used to receive television signals from a satellite. The antenna (signal detector) is fixed in front of the curved dish.
 
 - (a) What is the purpose of the dish?

To make a project file on the topic "historical background of Telangana"

- (b) Should it be concave or convex?
- (c) Where should the antenna be positioned to receive the strongest possible signals?
- (d) Explain what change you would expect in the signals if a large dish was used?
4. International Yoga Day will be celebrated on 21 June across the world with great enthusiasm. Yoga is helping people to stay energetic and have strong immune system. Find yoga exercises that help you to strengthen your respiratory system and increase the oxygen level in the body. Write about them and paste the related pictures. (To be done on A-4 size sheets)
5. Prepare a question bank from following chapters including 5 MCQ and 5 Assertion Reason Questions with answers from each chapter. Write it on A4 sheets and make a PDF.
- a) Chemical, Reactions and Equations
 - b) Life Processes
 - c) Light- Reflection and Refraction
 - d) Acids, Bases and Salts
 - e) Control and Coordination

Do all the written work on loose sheets and discuss your problems with teachers during the submission of work.

6. Indulge yourself in some physical activity like Yoga and deep breathing exercises in the morning.
7. **Add protein rich food in your meal to boost your immunity.**
8. Make a chart on do's and don'ts of COVID-19 virus.

Holiday Homework (2022-23)

Subject: - English

Class -10



Dear Students

Make a handmade folder and keep your holiday homework in it. (writing work to be done in loose A-4 size sheets along with pictures

- Write a writeup on the formation of Telangana , its historical importance and its geographical boundaries etc.
- To celebrate International Yoga Day, take the pictures of your family doing yoga on that day and write a descriptive paragraph describing the 'asanas' you performed.

class X

SUBJECT-SOCIAL SCIENCE

NOTE- Two activities have been given (One project and one map activity). These activities are compulsory for all. Students should use pictures, diagrams, data, pie charts, and case study etc. Project should be neat and clean and proper. Presentation should be proper. Hand made diagrams and pictures will be given preference. In Project -1 Students will also write -Biodata, introduction, Bibliography, conclusion and remarks. Projects should be handwritten only.

ACTIVITY NO -1

Prepare a project on the topic **CONSUMER RIGHTS**. Students are expected to apply the Social Science concepts in order to prepare the project report.

Students can also take help from News Papers, Magazines , Other resource books and Economics Book of class X. for preparing the project.

Activity -2

Prepare an **Art Integrated Project** on the the following topic-

HISTORICAL BACKGROUND OF TELANGANA

(Students will write about the History of origin and growth of Telangana. Ancient culture ,and expansion of Telangana etc.)

- Learn the chapters taught in class.
- Prepare the charts on the following topics-

a) Major Sea Ports and International Airports

b) Soil Profile

d) RoofTop Harvesting System

c) India-Major Soil Types

e) Map of Software Technology Parks

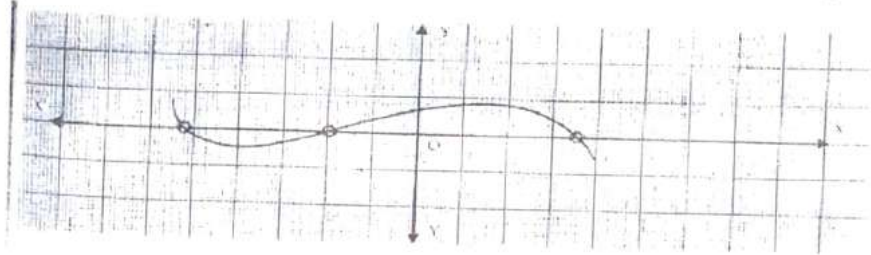
Holiday Homework (2022 – 23)

Class – X

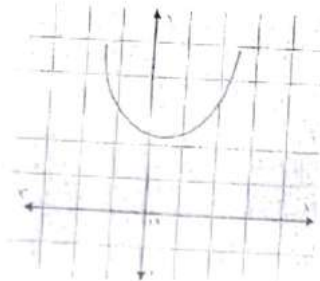
Subject – Maths

- Q1. Has the rational number $\frac{441}{2^2 \cdot 5^7 \cdot 7^2}$ a terminating or a non-terminating decimal representation?
- Q2. Prove that $15 + 17\sqrt{3}$ is an irrational number.
- Q3. (i) Find the LCM and HCF of 120 and 144 by using Fundamental Theorem of Arithmetic.
(ii) $\frac{241}{4000} = \frac{241}{2^m 5^n}$, find the values of m and n where m and n are non-negative integers.
Hence write its decimal expansion without actual division.
- Q4. Prove that $\sqrt{3}$ is irrational.
- Q5. Express the number $0.\overline{3178}$ in the form of rational number $\frac{a}{b}$.
- Q6. The LCM of 2 numbers is 14 times their HCF. The sum of LCM and HCF is 600. If one number is 280, then find the other number.
- Q7. The decimal expansion of π is:
(a) terminating
(b) non-terminating and non-recurring
(c) non-terminating and recurring
(d) doesn't exist
- Q8. Which of the following rational numbers have a terminating decimal expansion?
(a) $\frac{125}{441}$
(b) $\frac{77}{210}$
(c) $\frac{15}{1600}$
(d) $\frac{129}{2^2 \times 5^2 \times 7^2}$
- Q9. If the HCF of 55 and 99 is expressible in the form $55m + 99$, then the value of m is:
(a) 4
(b) 2
(c) 1
(d) 3
- Q10. Given that $\text{LCM}(91, 26) = 182$, then $\text{HCF}(91, 26)$ is:
(a) 13
(b) 26
(c) 7
(d) 9
- Q11. If the sum of zeroes of the quadratic polynomial $3x^2 - kx + 6$ is 3, then find the value of k.
- Q12. If α and β are the zeroes of the polynomial $ax^2 + bx + c$, find the value of $\alpha^2 + \beta^2$.
- Q13. If the sum of the zeroes of the polynomial $p(x) = (k^2 - 14)x^2 - 2x - 12$ is 1, then find the value of k.
- Q14. If α and β are the zeroes of a polynomial such that $\alpha + \beta = -6$ and $\alpha\beta = 5$, then Find the condition that zeroes of polynomial

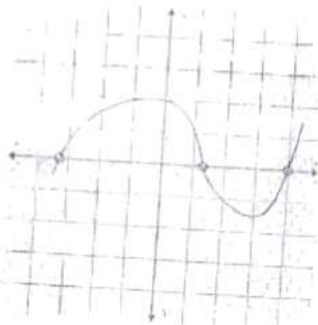
- Q15. For what value of k , (-4) is a zero of the polynomial $x^2 - x - (2k + 2)$?
- Q16. For what value of p , (-4) is a zero of the polynomial $x^2 - 2x - (7p + 3)$?
- Q17. If 1 is a zero of the polynomial $p(x) = ax^2 - 3(a - 1)x - 1$, then find the value of a .
- Q18. If $(x + a)$ is a factor of $2x^2 + 2ax + 5x + 10$ find a .
- Q19. Write the zeroes of the polynomial $x^2 + 2x + 1$.
- Q20. Write the zeroes of the polynomial $x^2 - x - 6$.
- Q21. Write a quadratic polynomial, the sum and product of whose zeroes are 3 and -2 respectively.
- Q22. Write the number of zeroes of the polynomial $y = f(x)$ whose graph is given in the figure.



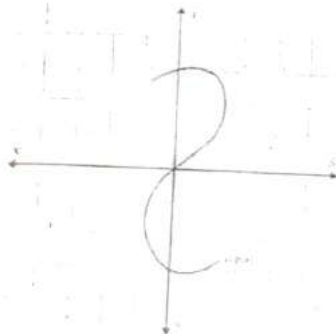
- Q23. The graph of $y = f(x)$ is given in figure. How many zeroes are there of $f(x)$?



- Q24. The graph of $y = f(x)$ is given in the figure. What is the number of zeroes of $f(x)$?



- Q25. What is the number of zeroes of the polynomial $y = p(x)$?



- Q26. Find the zeroes of the quadratic polynomial $6x^2 - 3 - 7x$ and verify the relationship between the zeroes and the coefficient of the polynomial.
- Q27. Find the zeroes of the quadratic polynomial $5x^2 - 4 - 8x$ and verify the relationship between the zeroes and the coefficient of the polynomial.
- Q28. Find the quadratic polynomial, the sum of whose zeroes is 8 and their product is 12. Hence, find the zeroes of the polynomial.
- Q29. If one zero of the polynomial $(a^2 - 9)x^2 + 13x + 6a$ is reciprocal of the other, find the value of 'a'.
- Q30. If the lines given by $3x + 2ky = 2$ and $2x + 5y + 1 = 0$ are parallel, then find value of k.
- Q31. Find the value of c for which the pair of equations $cx - y = 2$ and $6x - 2y = 3$ will have infinitely many solutions.
- Q32. Do the equations $4x + 3y - 1 = 5$ and $12x + 9y = 15$ represent a pair of coincident lines?
- Q33. Find the co-ordinate where the line $x - y = 8$ will intersect y-axis.
- Q34. Write the number of solutions of the following pair of linear equations:
 $x + 2y - 8 = 0$, $2x + 4y = 16$
- Q35. Is the following pair of linear equations consistent? Justify your answer.
 $2ax + by = a$, $4ax + 2by - 2a = 0$; $a, b \neq 0$
- Q36. For all real values of c, the pair of equations
 $x - 2y = 8$, $5x + 10y = c$ have a unique solution. Justify whether it is true or false.
- Q37. Does the following pair of equations represent a pair of coincident lines? Justify your answer.
 $2x + y + 25 = 0$, $4x + 8y + 516 = 0$.
- Q38. If $x = a$, $y = b$ is the solution of the pair of equation $x - y = 2$ and $x + y = 4$, then find the value of a and
- Q39. Solve: $5x - 4y + 8 = 0$
 $7x + 6y - 9 = 0$
- Q40. Solve the equation: $x + y = 14$, $2x + 2y = 28$.

****Activity 1:** To find HCF of two nos. experimentally.

****Activity 2:** To find zeros of a Polynomial by the graphical method.

****Activity 3:** Working model of types of polynomials.

Computer Holiday Homework (2022-23)

Class – 10

1. Create an invitation letter for teachers to a Play students going to present on teachers day. Use various shapes in decorating the card.
2. Your school is going to organize annual sports meet. Create an invitation letter (in Ms- word) to invite all the schools of your zone/district to participate in this event.

Apply a style set from Document Formatting group on the Design tab to the letters.

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HOLIDAYS HOME WORK

2022 - 23

ART & CRAFT

CLASS : - 10 TH .

- 1 . **DRAW & COLOUR** IN THE SKETCH BOOK– LAND SCAPE , , STILL LIFE,
2. **SKETCHES:-** ANIMALS- 5 ,WITH DIFFERENT ACTION, POSITION .
- 3 . **COMPOSITION** : - POSTER PAINTING ON 'VIRUS ' FREE ENVIRONMENT FROM THE WORLD .
- 4 . **CRAFT MAKING:** - LAND SCAPE MAKING WITH USE OF WASTE MATERIALS.

ग्रीष्मावकाश हेतु गृह कार्य - (2022-23)

वर्षा - दसवीं

विषय - हिन्दी

निर्देश :- लेख की स्वच्छता पर विशेष ध्यान दें।

1. संत कवि सुरदास व तुलसीदास द्वारा रचित चौपाइयों पर (किन्हीं चार) का संकलन करके सचित्र एक परियोजना कार्य तैयार कीजिए।
अथवा
प्रस्तुत पद्यों की सबसे बड़ी विशेषता हैं गोपियों की वाक्पटुता। गोपियों ने अपनी वाक्पटुता से ज्ञानी उद्धव को भी निस्तर अर्थात् पुरास्त कर दिया। सुरदास की गोपियों की विशेषताओं का सचित्र वर्णन कीजिए।
2. 'नेताजी का चश्मा' पाठ के आचार पर सुभाषचंद्र बोस के व्यक्तित्व पर प्रवृत्ति डालिए। देश हेतु उनके द्वारा किए गए कार्यों का वर्णन कीजिए। (14 साइज) पर करें।
3. भारत में ऐसे व्यंजन से महापुरुष हुए जिन्होंने सामाजिक बुराइयों का डटकर विरोध किया व उन्हें सफलता भी मिली मिली (किसी एक का वर्णन लेख के रूप में करें)।
4. 'तैलांगना का इतिहास' पर सचित्र एक परियोजना कार्य तैयार कीजिए (लगभग 2-3 पृष्ठ में)।
5. करवाए गए पाठ्यक्रम की पुनरावृत्ति करें।
6. ग्रीष्मावकाश में आपकी 'दिनचर्या' विषय पर लगभग 120 शब्दों में अनुर्देय लिखें।