SUMMER VACATION

HOLIDAY HOMEWORK

SESSION 2023-24

CLASS X

MRGS, ROHTAK

PREFACE

Dear Parents and Students,

Summer vacation is around the corner, bringing with itself a much-needed respite from hectic school days. We hope that you will thoroughly enjoy the vacations and make the most of this summer. While it is indeed important that you relax and refresh yourselves, it is also important that you exercise your minds.

Keeping this in mind, we have designed various exciting activities to keep the students engaged and active during the summer vacation. These fun projects/ assignments would enhance learning skills, help understand concepts better, and make for a great crash course aimed at improving academic output.

These activities will not only help you to revise what was taught, but will also enrich your knowledge. These projects will be assessed as Subject Enrichment Activity, Portfolio or Art Integrated activity.

We encourage parents to motivate and support the students to ensure the given work is completed in time, to the best of their ability. Your support and encouragement both have a huge impact on your child's learning ability.

The Holiday Home Work is to be done neatly with relevance to the questions asked and to be submitted to the subject teachers . School reopening i.e. 1th July 2023.

Wishing you a fun filled, safe summer vacation.

PRINCIPAL
MR. DHARMVEER

1. .Choose any two comprehensive passage(**Discursive & Case based**)from e-book or any source and write the answers of the questions.Find 10 difficult words from the passage.

2. Write 10 objective questions of the chapter " A Letter To God " Which has not been written in your Fair Notebook .

3.write 10 objective questions of the chapter "The Triumph of Surgery" which has not been written in your Fair Notebook .

4.Write 10 objective questions of the chapter "Nelson Mandela Long Walk to freedom"

5.Write 5 objective question of each poem "Dust and Snow" and "Fire and Ice" which has not been written in your Fair Notebook.

6..Write two conceptual and internal questions of each chapter "A Letter To God", "The Triumph Of Surgery",and " Nelson Mandela…Long Walk To Freedom" .

7.Write summary of the poem "Dust of Snow"and "Fire and Ice" in your own language.

8.Write 50 sentences of correct Tense of the Verb(Mention all Tenses).

9. Write 50 sentences of Determination .

10.Make chart of Tense(All 72 structures)**.**

11. Write definition of all kinds of Determiners in chart sheet.

हिंदी

*सभी छात्र दिए गए कार्य को अपनी परियोजनात्मक फाइल में करेंगे ।

* दिए गए कार्य को समय अनुसार चैक कराने वाले विद्यार्थी को परीक्षा में पांच अंक अतिरिक्त दिए जाएंगे।

* प्रत्येक छात्र का गृहकार्य विद्यालय प्रारंभ के पहले दिन ही चैक किया जाएगा । इसके बाद किसी भी छात्र का काम चैक नहीं किया जाएगा । इसके लिए छात्र स्वयं जिम्मेदार होगा ।

अतः विद्यालय आते समय अपना अवकाश गृहकार्य अवश्य साथ लेकर आएं ।

* दिए गए प्रश्नों में आवश्यकतानुसार चित्र/ फोटो अवश्य लगाएं । *सर्जनात्मक कार्य   :-

1• आप अपने घर के आस-पास देखिए और पता लगाइए कि नगरपालिका ने क्या-क्या काम करवाए हैं? नगर पालिका द्वारा करवाए गए कार्यों की सूची तैयार करें और उसमें हमारी क्या भूमिका हो सकती है?

2• 'बालगोबिन भगत' पाठ में ऋतुओं का बहुत सुंदर चित्र उकेरा गया है, बदलते हुए समय को दर्शाति हुए चित्रों का संग्रह करके एक एल्बम तैयार कीजिए तथा प्रत्येक ऋतु के मौसम के बारे में लिखिए ।

* **पाठ्यक्रम से संबंधित कार्य:-**

3• प्रेमचंद ने सामंती वर्ग का चित्रण अपनी प्रसिद्ध कहानी 'शतरंज के खिलाड़ी' में किया है, सत्यजीत राय के द्वारा बनाई गई फिल्म 'शतरंज के खिलाड़ी 'फिल्म को देखकर उसकी कहानी को लिखिए ।

4• खाद्य पदार्थों के संबंध में बहुत- सी मान्यताएं बताई गई हैं ,आपके क्षेत्र में जो भी मान्यता प्रचलित हों, उनके बारे में चर्चा करके 'लखनवी अंदाज ' पाठ के आधार पर लिखिए।

* **काल्पनिक निबंध:-**

5• आप किसी पर्वतीय स्थल पर घूमने गए थे,वहाँ की व्यावसायिक गतिविधियों से प्रभावित क्षेत्र के दर्द को एक जीवन मूल्य वाले लेख के रूप में चित्र सहित लिखिए।

6• 'साना साना हाथ जोड़ि' पाठ में लेखिका ने प्रदूषण का उल्लेख किया है , प्रदूषण बढ़ने के कारणों का वर्णन करते हुए बताइए और इसे रोकने में आप अपना योगदान किस तरह दे सकते हैं?

*पत्र लेखन :-

7• प्रकृति भी जल संचय की अद्भुत व्यवस्था करती है, आप अपने मित्र को पत्र के माध्यम से बताइए कि आप जल

बचाने के लिए किस प्रकार से योगदान दे सकते हैं?

***विज्ञापन लेखन:-**

8• आपके शहर में बहुत गंदगी फैली हुई है आप अपने शहर को स्वच्छ और सुंदर बनाने के लिए लोगों को किस प्रकार से जागरूक कर सकते हैं 'स्वच्छ भारत स्वस्थ भारत' पर विज्ञापन बनाइए ।

***संदेश लेखन:-**

आपके भैया - भाभी की शादी की पहली वर्षगांठ है उनकी लंबी उम्र की कामना करते हुए अपने शब्दों में सुंदर सा

बधाई संदेश लिखिए।
आपका दिन मंगलमय हो।

Maths

1. Make charts of mathematics of the following topics:-

1) To find zeroes of a polynomial graphically

No. of zeroes 0,1,2,3

2) to varify the conditions for consistency/inconsistency of a pair of linear equations in two variables by graphical method

Make the project one of the following topics:-

1) Mathematics and Environment

2)Project of history of Mathematicians it may include history of Indian mathematicians such as Aryabhata, Brahmgupta, Varahamihir, Bhaskaracharya, Ramanujan etc .

ASSIGNMENT

POLYNOMIAL QUESTIONS

Q1. If one zero of the quadratic polynomial x^2-5x-6 is 6, then find the other zero.

Q2. If both the zeroes of the quadratic polynomial $ax2 + bx + c$ are equal and opposite in sign, then find the value of 'b'?

Q3. Can $x2 – 1$ be the quotient on division of $x6 + 2x3 + x – 1$ by a polynomial in x of degree 5?

Q4. If 1 is a zero of the polynomial $p(x) = ax2 - 3(a-1)x - 1$, then find the value of 'a' ?

Q5. If on division of a polynomial $p(x)$ by a polynomial $g(x)$ the quotient is zero, what is the relation between degree of $p(x)$ and $g(x)$?

Q6. If one root of the polynomial $p(y) = 5y2 +13y + m$ is reciprocal of other, then find the value of 'm'?

Q7. What number should be added to the polynomial $x2 -5x+4$, so that 3 is the zero of the polynomial?

Q8. If α and β are zeros of $p(x) = x2 +x-1$, then find $1/α+ 1/β$? Q10. If α and β are the zeros of the quadratic polynomial $f(x) = 2x^2 -5x + 7$, find a polynomial whose zeros are $2α+ 3β$ and $3α+ 2β$?

Q9. If one of the zeros of the cubic polynomial $x3 + ax2 + bx + c$ is -1, then what will be the product of the other two zeros?

Q10. What must be subtracted from $p(x) = 8x^4 + 14x3 - 2x2 +7x -8$,so that the resulting polynomial is exactly divisible by $g(x) = 4x2 + 3x -2$?

Q11. Obtain all other zeros of the polynomial $2x4 - 9x 3 + 5x 2 + 3x - 1$, if two of its zeros are $2-\sqrt3$ and $2 + \sqrt3$?

LINEAR EQUATION IN TWO VARIABLE QUESTIONS

Q1. Solve the following system of linear equations graphically

a) $2x + 3y = 12$ b) $2x + 4y - 10 = 0$

   $2y - 1 = x$ $3x + 6y - 12 = 0$

Q2. Given below are three linear equations. Two of them have infinitely many solutions and two have a unique solution. State the pairs: $4x -5y =3$, $8x - 10y = 6$, $5x - 4y = 5$

Q3. Determine the value of k so that the following pairs of equations are inconsistent

$(3k + 1) x + 3y - 2 = 0$, $(k2 + 1) x + (k - 2) y - 5 = 0$

Q4. By comparing the ratios a1/a2, b1/b2 and c1/c2, find out for what value (s) of α, the lines representing the following equations have a unique solution, no solution or infinitely many solution: $\alpha x + 3y = \alpha - 3$,

$12x + \alpha y = \alpha$

Q5. If 1 is added to each of the given two numbers, then their ratio is 1:2. If 5 is subtracted from each of the numbers, then their ratio is 5:11. Find the numbers.

Q6. The ratio of the incomes of two persons is 9:7 and the ratio of their expenditures is 4:3. If each of them S aves Rs.200 per month, find their monthly incomes.

Q7. A person starts his job with a certain monthly salary and earns a fixed increment every year . If his salary was Rs.4500 after 4 years of service and Rs.5700 after 12 years of service, find his initial salary and the annual increment .

Q8. Seven times a 2- digit number is equal to four times the number obtained by reversing the order of the digits. If the sum of both the digits is 9, find the number.

QUADRATIC EQUATIONS QUESTIONS

Q1. Show that x = -3 is the solution of the equation $x2 + 6x + 9 = 0$.

Q2. For what value of k are the roots of quadratic equation $3x2 + 2kx + 27 = 0$ real and equal?

Q3. Write the nature of roots of quadratic equation $4x2 + 4\sqrt{3}x + 3 = 0$. Q4. If a and b are the roots of the equation $x2 + ax - b = 0$, then find a and b.

Q5. If x = 3 is one root of the quadratic equation $x2 - 2kx - 6 = 0$, then find the value of k.

Q6. Which of the following are quadratic equations a) $x 3 - x = x2 + 2$ b) $\sqrt{x} + 4 = x + 1$ c) $(x + 1)(x2 - 2) = (x + 3)3$

Q7. Solve for x:

a) $x 2 - 2(a2 + b2)x + (a2 - b 2) 2 = 0$

b) $2x2 + ax - a 2 = 0$

c) $p 2 x 2 + (p2 - q 2)x - q 2 = 0$

d) $\sqrt{2}x2 + 7x + 5\sqrt{2} = 0$

e) $(a + b)2 x 2 + 8(a2 - b 2)x + 16(a - b)2 = 0$

Q8. If one root of the equation $3x2 - kx - 2 = 0$ is 2, find the value of k. Also find the other root.

A.P'S QUESTIONS

1. Write the first three terms of the A.P's when a and d are given. a= 2 , d= 1 2

2. Solve the equation -4+(-1)+2+………….+x=437

3. Find the 12th term from the end of the AP. -2,-4,-6,…………..-100

4. Is 0 is a term of AP : 31,28,25,…………….. Justify your answer.

5. Find the values a,b and c such that the numbers 9,7,b,23 and c are in AP. Ans(a=-1, b=15,c=31)

6. Find x so that 2x+1, x2 +x+1 and 3x2 -3x+3 are consecutive terms of an AP. Ans(x=2 or x=1)

7. Which term of the sequence 1 2 3 1 7 ,1 6 ,1 5 ,1 4 ,................ 5 5 5 is the first negative term? Ans(23rd

term)

8. The sum of first six terms of an AP is 42. The ratio of its 10th term to its 30th term is 1:3 calculate the first and thirteenth term of the AP. Ans(a1=2,a13=26)

9. If m times the mth term of an AP is equal to n times its nth term find (m+n) th term of AP. Ans(0)

2. Practice chapter 2,3,4 with element book marked questions and assignment all in rough notebook

Science (Chemistry)
Revise ch_1,ch-2 (acid).
Prepare a assignment on any topic of ch_1 or ch-2.
Solve all the NTSE question OF CH-1 .(ASSIGNMENT)
PREPARE A CHART ON TYPES OF CHEMICAL REACTION

Physics
Revise chapter - light
.Make a chart on lens or mirror.
. Find out internal questions - answer of chapter - light. Write down all these in your fair note book.
. Do given assignment in your fair note book.

Biology
1: Revise Digestive system and Respiratory system.from S Chand book.
2: Prepare two chart on Digestive system
and Respiratory system.
3: solve Assignment of Life processes in
Fair note book.
4: Revise intext and exercise questions of
Life processes chapterHoliday homework

Social Science
Find out the 15 Mcqs., 10 Shorts and 5 long questions from following chapters.
Chapter: - 3 Gender,religion and caste
Chapter - 6 political parties
Chapter -1 History (the rise of nationalism in europe)
Chapter - 2 Geography (forest and wildlife resources)
Chapter: - 2 Sectors of the Indian Economy.
Learning work:- Ch – 1 (Geo), ch – 1 and ch – 2 (Economic) Ch – 1 & 2 Political science.
Map work:- Locate in political map of india important places from the chapter 2 history Nationalism in india
Fill the indian political map with all states and capital and learn also.
Do practice of Europe map ,fill all the countries with their capital.
Activity based work:-
1. Prepare a file on the consumer rights.
2. Prepare a soil chart of different soils of India.

Computer Application
(a) Learn ch-1 & 2
(b) Create a webpage by using HTML. Choose any one topic.
 • E-Learning website
 • E-Commerce website

(c) Read chapter-1, 2 and Introduction to Internet and make 30 Multiple choice questions from the chapter.
Note down all the questions in computer notebook.