



K.C. INTERNATIONAL SCHOOL

JALPURA, SECTOR-01, GREATER NOIDA WEST, G.B. NAGAR, 201306

SUMMER HOLIDAY ASSIGNMENT

CLASS: - 10TH

1	ENGLISH	<p>1) Divide your class into 3 groups & prepare.... 3 PPTs Topic⊗ any one by each group)</p> <ol style="list-style-type: none"> 1. Women Empowerment 2. Child Labour 3. Cyber bullying <p>2) Movie Review:- (To be done in A4sheet)</p> <ol style="list-style-type: none"> a) Watch the movie “12Years A Slave” b) Find the similarities with the lesson ‘Nelson Mandela: Long Walk to Freedom ‘and write it down. c) Write the synopsis of the movie. d) Describe all the emotions shown in the movie- as sadness, anger, fear, disgust etc <ul style="list-style-type: none"> * Name of the character * Role played by the character in the movie. * Which is your favourite character and why? <p>3) PORTFOLIO:</p> <p>PREPARE A PORTFOLIO WITH THE FOLLOWING</p> <p>(Prepare a file with A4 size sheets)</p> <ul style="list-style-type: none"> * Introduction * My strengths * I need to improve on * My achievements * I have participated in * The books I have read * The books I wish to read.
2	HINDI	<p>1- उत्तर प्रदेश के किन्हीं दस स्वतंत्रता संग्राम सेनानियों की परियोजना फ़ाइल बनाएँ, जिसमें इन सेनानियों की फ़ोटो, नाम, जन्म-मृत्यु तिथि, महत्त्वपूर्ण कार्य/ स्वतंत्रता प्राप्ति हेतु सहयोग आदि का वर्णन हो। (A4 साइज़ पेपर में)</p> <p>2- अभी तक जो भी पढ़ाया गया है, उसको कम-से कम पाँच बार दोहराएँ। आते ही उसी से प्रश्न पूछे जाएँगे।</p> <p>3. चमोली ज़िले के दर्शनीय स्थलों की जानकारी देते हुए मुम्बई -स्थित अपने मित्र को पत्र लिखिए । (100 शब्दों में)</p> <p>4. आपको किसी विद्यालय में हिंदी-अध्यापक की नौकरी पानी है। अतः विद्यालय के निदेशक को नौकरी हेतु आवेदन-पत्र लिखें। इसमें आपका स्ववृत्त (biodata) होना अति आवश्यक है। (80 शब्द)</p> <p>5. किसी भी कम्पनी के सीईओ को औपचारिक ई-मेल भेजें, इसका विषय आप कुछ भी ले सकते हैं। (80 शब्द)</p>

Q1. Solve the following pair of linear equations:

A) $Ax + by = a - b$, $bx - ay = a + b$

b) $(a + 2b)x + (2a - b)y = 2$ $(a - 2b)x + (2a + b)y = 3$

c) $(a - b)x + (a + b)y = a^2 - 2ab - b^2$ $(a + b)(x+y) = a^2 + b^2$

d) $ax/b - by/a = a + b$ $ax - by = 2ab$

e) $x/a - y/b = (a - b)$ $x/a^2 - y/b^2 = 0$

f) $b^2x/a - a^2y/b = ab(a + b)$ $b^2x - a^2y = 2a^2b^2$

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

$(k^2 + 1)x + (k - 2)y - 5 = 0$

Q4. By comparing the ratios a_1/a_2 , b_1/b_2 and c_1/c_2 , find out for what value (s) of α , the lines representing the following equations have a unique solution, no solution or infinitely many solution:

$Ax + 3y = \alpha - 3$ $12x + \alpha y = \alpha$

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. 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.

Q7. 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.

Q8. A piece of work is done by 6 men and 5 women in 6 days or 3 men and 4 women in 10 days. How many days will it take for 9 men and 15 women to finish that work?

Q9. A father's age is three times the sum of the ages of his two children. After 5 years, his age will be two times the sum of their ages. Find the present age of the father.

Q10. The students of a class are made to stand in rows. If 3 students are extra in a row, there would be 1 row less. If 3 students are less in a row, there would be 2 rows more. Find the number of students in the class.

Q11. Find c if the system of equations $cx + 3y + (3 - c) = 0$ and $12x + cy - c = 0$ has infinitely many solutions.

Q12. Solve the following system of linear equations graphically

**A) $2x + 3y = 12$ b) $2x + 4y - 10 = 0$
c) $2y - 1 = x$ d) $3x + 6y - 12 = 0$**

Q13. Draw the graph of the system of equations $x + y = 5$ and $2x - y + 2 = 0$. Shade the region bounded by these lines and the x-axis. Find the area of the shaded region.

Q14. Ankita travels 14 km to her home partly by rickshaw and partly by bus. She takes half an hour if she Travels 2 km by rickshaw and the remaining distance by bus. On the other hand, if she travels 4 km by rickshaw and the remaining distance by bus, she takes 9 minutes longer. Find the speed of the rickshaw and of the bus.

MATHS CBSE ACTIVITY :-

Activity 1

OBJECTIVE

To find the HCF of two numbers experimentally based on Euclid Division Lemma.

MATERIAL REQUIRED

Cardboard sheets, glazed papers of different colours, scissors, ruler, sketch pen, glue etc.

METHOD OF CONSTRUCTION

1. Cut out one strip of length a units, one strip of length b units ($b < a$), two strips each of length c units ($c < b$), one strip of length d units ($d < c$) and two strips each of length e units ($e < d$) from the cardboard.
2. Cover these strips in different colours using glazed papers as shown in Fig. 1 to Fig. 5:



Fig. 1

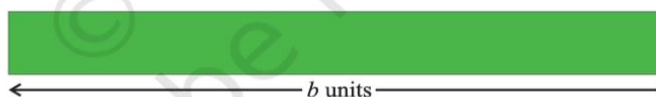


Fig. 2

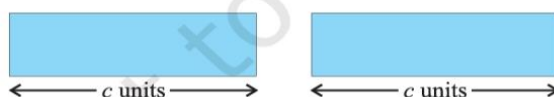


Fig. 3

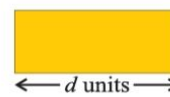


Fig. 4

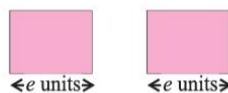


Fig. 5

3. Stick these strips on the other cardboard sheet as shown in Fig. 6 to F:

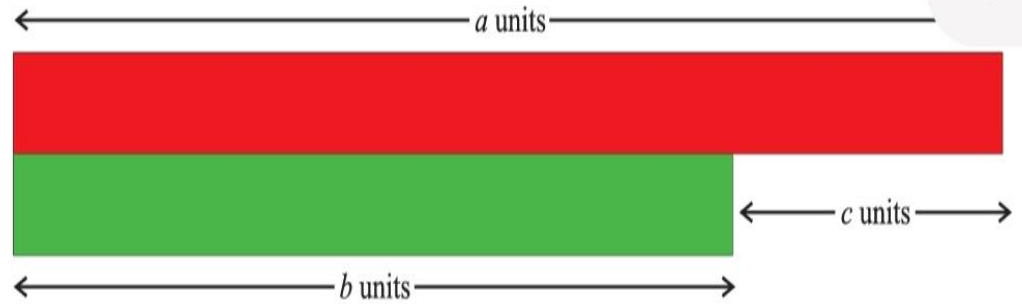


Fig. 6

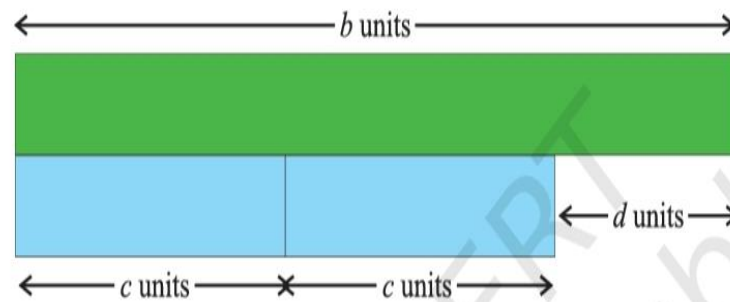


Fig. 7

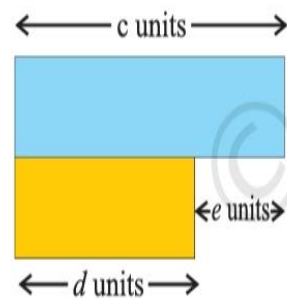


Fig. 8

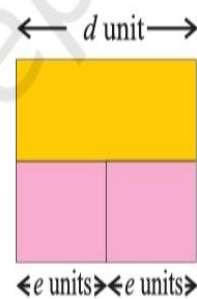


Fig. 9

DEMONSTRATION

As per Euclid Division Lemma,

$$\text{Fig. 6 depicts } a = b \times 1 + c \quad (q = 1, r = c) \quad (1)$$

$$\text{Fig. 7 depicts } b = c \times 2 + d \quad (q = 2, r = d) \quad (2)$$

$$\text{Fig.8 depicts } c = d \times 1 + e \quad (q = 1, r = e) \quad (3)$$

$$\text{and Fig. 9 depicts } d = e \times 2 + 0 \quad (q = 2, r = 0) \quad (4)$$

Activity 2

OBJECTIVE

To draw the graph of a quadratic polynomial and observe:

- (i) The shape of the curve when the coefficient of x^2 is positive.
- (ii) The shape of the curve when the coefficient of x^2 is negative.
- (iii) Its number of zeroes.

MATERIAL REQUIRED

Cardboard, graph paper, ruler, pencil, eraser, pen, adhesive.

METHOD OF CONSTRUCTION

1. Take cardboard of a convenient size and paste a graph paper on it.
2. Consider a quadratic polynomial $f(x) = ax^2 + bx + c$
3. Two cases arise:

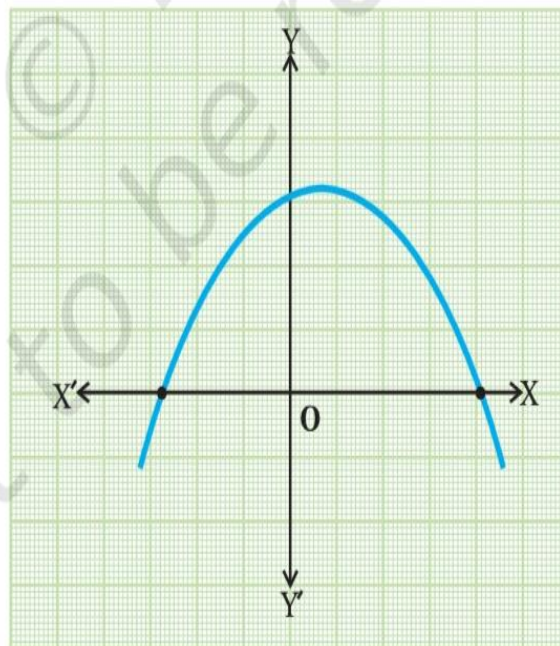


Fig. 1

(i) $a > 0$ (ii) $a < 0$

4. Find the ordered pairs $(x, f(x))$ for different values of x .
5. Plot these ordered pairs in the cartesian plane.

6

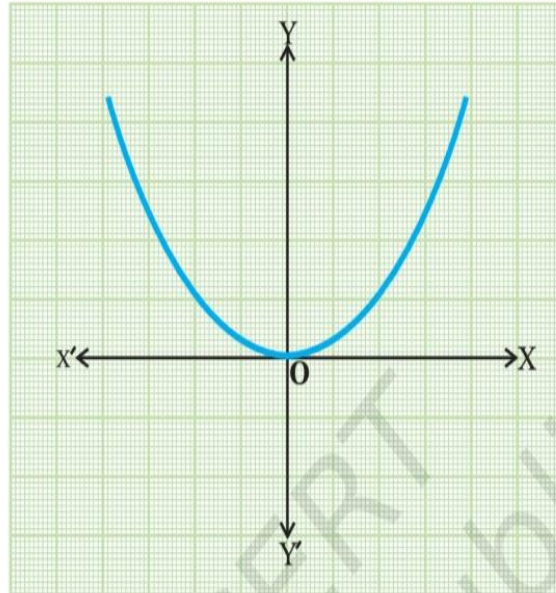


Fig. 2

6. Join the plotted points by a free hand curve [Fig. 1, Fig. 2 and Fig. 3].

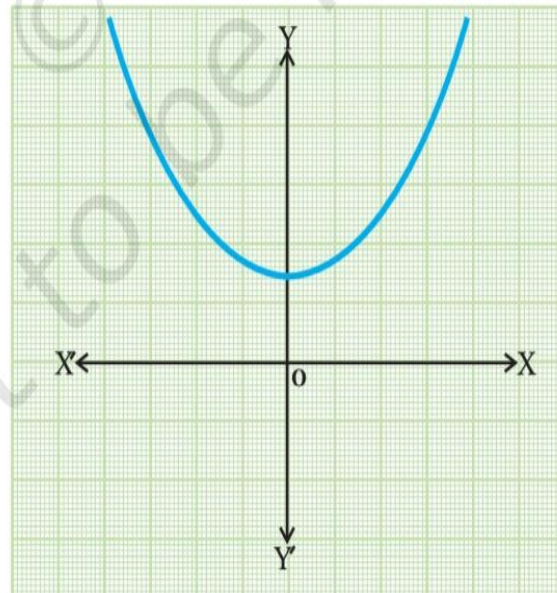


Fig. 3

PHYSICS

Q1-Mention the nature of image produced by a plane mirror.

Q2- The radius of curvature of a spherical mirror is 30 cm find the focal length of this mirror.

Q3- Calculate the focal length of a concave mirror whose radius of curvature 32 cm.

Q4- Find the nature and focal length of a spherical mirror whose radius of curvature is 24 cm.

Q5- Name a mirror that gives an erect and magnified image of an object

Q6- Name the mirror used by dentist to examine the teeth of a patient

Q7- Name the type of mirror used by ladies for the makeup

Q8- If the image formed by a spherical mirror for all positions of the object placed in front of it is always erect and diminished. what type of mirror is it? draw a label ray diagram to support your answer

Q9- An object is placed at the following distance from a concave mirror of focal length 15cm.

(1) 20 cm (2) 30 cm (3) 40 cm

Which position of the object will produce

- (1) virtual image
- (2) A diminished real image
- (3) an enlarged real image and
- (4) an image of same size

Q10- Identify the nature of the mirror and mention two characteristics of the image formed when magnification is equal to 6

Q11- The magnification produced by a mirror is -1.5 what does it signify about the image formed?

B- CHEMISTRY

Define the following terms:

Chemical reaction

- Reactant
- Product
- Chemical equation
- Balanced equation

Question 2: Write the balanced chemical equation for the following reactions:

- a) Hydrogen gas reacts with oxygen gas to form water.
- B) Sodium reacts with chlorine gas to form sodium chloride.
- C) Iron reacts with oxygen to form iron(III) oxide.

Question 3: Identify the type of chemical reaction for each of the following:

- A) $2\text{H}_2\text{O}_2 \rightarrow 2\text{H}_2\text{O} + \text{O}_2$
- b) $2\text{Na} + \text{Cl}_2 \rightarrow 2\text{NaCl}$



Question 4: For the following reaction, indicate the type of reaction and write a balanced chemical equation: When barium chloride reacts with sodium sulfate, barium sulfate and sodium chloride are formed.

Question 5: Define the law of conservation of mass and explain how it applies to chemical reactions.

Question 6: Discuss the importance of balancing chemical equations in chemistry.

Question 7: Write balanced chemical equations for the following chemical reactions:

(a) Hydrogen + Chlorine \rightarrow Hydrogen chloride

(b) Lead + Copper chloride \rightarrow Lead chloride + Copper

(c) Zinc oxide + Carbon \rightarrow Zinc + Carbon

Question 8: State the type of chemical reactions, represented by the following equations :

(a) $\text{A} + \text{BC} \rightarrow \text{AC} + \text{B}$

(b) $\text{A} + \text{B} \rightarrow \text{C}$

(c) $\text{PQ} + \text{RS} \rightarrow \text{PS} + \text{RQ}$

(d) $\text{A}_2\text{O}_3 + 2\text{B} \rightarrow \text{B}_2\text{O}_3 + 2\text{A}$

Question 9: Mention with reason the colour changes observe when:

(i) Silver chloride is exposed to sunlight.

(ii) Copper powder is strongly heated in the presence of oxygen.

(iii) A piece of zinc is dropped in copper sulphate solution.

Question 10 (a): Why has this black substance formed?

(b) What is the black substance?

(c) Write the chemical equation of the reaction that takes place.

Question 10: You might have noted that when copper powder is heated in a China dish, the reddish brown surface of copper powder becomes coated with a black substance.

Biology

1. Draw human heart with labelling on A4 sheet.
2. Paste bryophyllum and periwinkle leaf with proper labelling on A4 sheet.
3. Write excretory organs of different organisms in biology notebook.
4. Name the raw materials of photosynthesis.
5. Which cell organelle is the site of photosynthesis?
6. Why does bread taste sweet on mastication?
7. What is emulsification of fat?
8. Name the digestive enzyme present in saliva.

		<p>9. What is anaerobic respiration? 10. Name the common passage for food and air.</p>												
5	SOCIAL SCIENCE	<p>A- History and civics</p> <p>Answer these questions</p> <ol style="list-style-type: none"> 1. Explain the role of Giuseppe mazzini in the Unification of Italy. 2. How did the French revolution play an important role in creating the idea of nation states? 3. Who was Otto Von Bismarck? Describe his role in making of Germany. 4. Explain the failed attempt of educational middle class in 1848 to unify the Germany. <p>B-Geography</p> <p><input type="checkbox"/> Chapter – Resources and Development</p> <p>*Map work* : in a Indian physical map Identify Major soil Types</p> <p><input type="checkbox"/> Every Student must compulsorily undertake any ONE project on the following topics as mandated by CBSE.</p> <p><input type="checkbox"/> Consumer Awareness OR</p> <p><input type="checkbox"/> Social Issues OR</p> <p><input type="checkbox"/> Sustainable Development</p> <p>GUIDELINES FOR THE PROJECT-</p> <ul style="list-style-type: none"> ● Project to be done on A-4 size sheet ● Project should be handwritten for 15 pages ● On the Cover page student Performa to be given- Name, Class, Roll no., Name of the school Year of submission and topic ● Page-1 Acknowledgement ● Page-2 Content ● Page-3 Introduction ● Page-4 TO Pg13-Explanation of the Project ● Page-14 Summery/Conclusion ● Page-15 Bibliograph <p>Guidelines: The distribution of marks over different rubrics relating to Project Work is as follows:</p> <table border="1"> <thead> <tr> <th>S.no</th> <th>Rubrics</th> <th>Marks</th> </tr> </thead> <tbody> <tr> <td>a</td> <td>Content accuracy, originality and collaborative skills</td> <td>2</td> </tr> <tr> <td>b</td> <td>Competencies exhibited and Presentation</td> <td>2</td> </tr> <tr> <td>c</td> <td>viva</td> <td>1</td> </tr> </tbody> </table> <p>C- ECONOMIC</p> <p>Q.1- Explain the concept of sustainable development along with few steps which are taken by our central government to achieve sustainable development. Q.2 make a detailed project on primary, secondary and tertiary activities along with its pictorial representation.</p>	S.no	Rubrics	Marks	a	Content accuracy, originality and collaborative skills	2	b	Competencies exhibited and Presentation	2	c	viva	1
S.no	Rubrics	Marks												
a	Content accuracy, originality and collaborative skills	2												
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c	viva	1												

6 **COMPUTE
R**

**PRACTICAL -1
DESIGNING POSTER**

Students ,you all are supposed to design a poster on the topic given below in open office text

1. Share with Care(online sharing)[Names Starting from A to G]
2. Back to School [Names Starting from H to L]
3. School 2.0- (virtual school)[Names Starting from M to T]
4. Hyperloop - new mode of transportation.[Names Starting from U to Z]

**PRACTICAL -2
Balanced Diet Chart[Tables]**

Students ,you all are supposed to design a table on the topic given below in open office text

1. Even roll no-Balanced Diet – Giving information about the essential nutrients ,their function and their sources

Eg

Food Type	Function	Sources
Carbohydrates	Provides quick energy	Pasta, cereals and potatoes

- Give details of all seven food groups.
- Use different colours for rows

2. Odd Roll No-Calorie count of India Meals-Design a table to display the calorie count of the items preferred for breakfast,lunch/dinner, snacks and Beverages

Eg

Item	Quantity	Calorie Value
BreakFast		
Bread slice with Butter	1	90

- Use different colours for rows
- At least five items to be covered for each

PRACTICAL -3

Implementing Mail Merge

Design an appreciation letter to be sent to the employees of Company for their outstanding performance. Create a recipient list/data source of 10 employee and merge the fields in the letter

Instructions

- 1. Design the letter and format it.**
- 2. Print out of the data Source**
- 3. Print out of the letter with insert merge field.**

Art and craft

- 1. Search and write about 2 Indian contemporary artist and 2 western modern artist. And also write about the work you liked the most in 100 words.**
- 2. Make a painting on India folk painting, gond painting, madhubani and for those who are good in illustration they can make a story board with the characters as you prefer and background should consist about your space. It should also must have dialogue delivery as you want.**

Dance

Prepare a scrapbook on any 5 Indian Classical dance forms with details and draw or paste pictures.

Music

- 1. Write & learn Top of the world & Meri maa Song in your music notebook.**
- 2. Do more singing practice for above Songs**
- 3. Learn & practice the national anthem properly.**

**Jana-gana-mana-adhinayaka, jaya he
Bharata-bhagya-vidhata
Panjaba-Sindha-Gujrata-Maharata-
Dravida-Utkala-Vanga
Vindhya-Himachala-Yamuna-Ganga
Uchhala-Jaladhi-taranga
Tava shubha name jage**

**Tava shubha ashisha mage
Gave tava jaya-gatha
Jana-gana-mangala-dayaka jaya he
Bharata-bhagya-vidhata.
Jaya he! Jaya he! Jaya he!
Jaya jya jaya, jaya he!**

- 4. Write 5 famous names of indian classical singers and musicians with their famous song /raag in your notebook**

REVISION OF UT-1/PT-1 SYLLABUS (2024-25)

1	ENGLISH	Literature (Prose) Ch-1 A Letter to God Ch -2 Nelson Mandela - Long Walk to Freedom. (Poem) Ch-1 Dust of Snow Ch- 2 Fire and Ice Supplementary Reader (Footprints without Feet) Ch -1 A Triumph of Surgery *Unseen Passage *Grammar:- Tenses Editing *Writing:- 1.Paragraph writing 2.Letter writing
2	HINDI	पाठ -1 पद पाठ -2 राम लक्ष्मण परशुराम संवाद पाठ - 10 नेताजी का चश्मा व्याकरण साहित्य पाठ - 1 वाक्य भेद रचना के आधार पर पाठ -2 पत्र लेखन पाठ -4 औपचारिक ई -मेल लेखन
3	MATHS	1- Real Number 2- 2- Polynomia
4	SOCIAL SCIENCE	History and Civics Chapter 1 (history) Rise of nationalism in Europe Chapter 1 (civics) Power sharing Geography Chapter 1 Resource and Development Economics Economics chapter 1 development Information
5	SCIENCE	Ch-1 Light Ch-2 Chemical reactions and equations Ch- 3- Life processes
6	COMPUTER SCIENCE	Employability Skills: - Unit -1 Communication Skills - II Chapter - 1 Methods of Communication Chapter - 2 Verbal Communication Subject Specific Skills Unit - 1 Digital Documentation (Advanced)



NOTE: - School will re-open on 1st - July- 2024