Lady Florence
C O N V E N T   S C H O O L

(Affiliated to **CBSE**)

GRADE X

ACADEMIC SESSION 2024-25

Summer Enrichment Journey 2024

"Cultivating Holistic Growth with NEP 2020: Explore, Learn, Grow"

Dear Grade X Students,

As we step into the vibrant and exciting months of summer, we present to you the Summer Enrichment Journey 2024. This holiday homework is not just a set of assignments, but a thoughtfully designed program aimed at fostering holistic growth, in alignment with the visionary principles of the National Education Policy 2020.

The NEP 2020 emphasizes a comprehensive approach to education, focusing on the intellectual, emotional, social, and physical development of students. In line with this philosophy, your holiday homework is crafted to inspire curiosity, encourage creativity, and promote critical thinking. It encompasses a variety of activities that go beyond traditional learning, integrating arts, physical activities, and real-world applications to make your learning experience enriching and enjoyable.

Through this program, you will explore new subjects, engage in hands-on projects, and reflect on your learning journey. These activities are designed to help you develop essential skills such as problem-solving, effective communication, and teamwork, which are crucial for your overall development and future success.

We believe that education is not confined to the classroom, and the summer break is a perfect time to expand your horizons and discover the joy of learning in diverse and innovative ways. Embrace this opportunity to explore your interests, challenge yourself, and grow into well-rounded individuals.

We are excited to see the amazing projects and insights you will bring back after the holidays. Remember, this is your journey towards becoming not just academically proficient, but also emotionally intelligent, socially responsible, and physically healthy individuals.

Wishing you a productive and joyful summer!

Instructions

Dear Students,

Please take note of the following instructions to ensure that your Summer Enrichment Assignment is completed in an organized and efficient manner:

1. **Assignments in Notebooks:**

   - **All written assignments should be neatly done in your respective subject notebooks.**

   - **Ensure that each assignment is clearly labeled with the subject name, assignment title, and date of completion.**

   - **Follow the guidelines provided by your subject teachers regarding the format and length of your assignments.**

2. **Projects in Project Files:**

   - **All project work should be compiled in designated project files.**

   - **Each project file should have a cover page with your name, class, section, subject, and project title.**

   - **Include a table of contents at the beginning of your project file to organize your work effectively.**

   - **Ensure that all project work is well-researched, creatively presented, and includes visuals where applicable.**

   - **Projects and activities to be submitted by 25th July 2024.**

3. **Presentation and Neatness:**

   - **Maintain a high standard of neatness and presentation in both your notebooks and project files.**

   - **Use appropriate headings, subheadings, and bullet points to organize your work clearly.**

   - **Draw diagrams, charts, and graphs where necessary to illustrate your points effectively.**

4. **Time Management:**

- Plan your schedule to allocate sufficient time for each assignment and project.

- Avoid last-minute rushes by setting weekly goals to complete parts of your homework.

5. **Originality and Creativity:**

   - Ensure that all work submitted is your original effort. Plagiarism will not be tolerated.

   - Be creative in your presentations and think outside the box to make your projects interesting and engaging.

6. **Parental Guidance:**

   - Ensure that your parents are aware of your progress and can assist you if needed.

7. **Submission Deadlines:**

   - All holiday homework must be submitted on the third day of school after the summer break.

   - Ensure that your work is complete and reviewed for any errors before submission.

8. **Review and Revise:**

   - Use this time to review the entire syllabus covered so far and prepare for the upcoming assessments.

   - Revise important concepts and practice questions to strengthen your understanding.

ENGLISH

ASSIGNMENT

Q1.. (MCQs) based on different types of tenses

Which sentence uses the present perfect tense?

A) She will finish her homework.

B) They have gone to the market.

C) He is playing football.

D) We are going to the party.

Identify the sentence in the past continuous tense:

A) I have completed my work.

B) She will arrive soon.

C) They were singing a song.

D) He has bought a new car.

Which option contains a sentence in the present perfect continuous tense?

A) They have finished their project.

B) She is studying for her exams.

C) He has been waiting for hours.

D) We will meet them tomorrow.

Choose the sentence in the past perfect tense:

A) I have seen that movie.

B) She will have finished her work by then.

C) They are going to the concert.

D) He has visited his grandparents.

Identify the sentence in the future perfect tense:

A) They have already left for the airport.

B) She will have completed her assignment by then.

C) He was sleeping when I called.

D) We have finished our dinner.

Which sentence is in the present continuous tense?

A) They have completed the project.

B) She will finish her work soon.

C) He is playing football.

D) We went to the beach yesterday.

Choose the sentence in the past perfect continuous tense:

A) I have been waiting for you.

B) She will have cooked dinner by then.

C) They had been playing for hours.

D) He has visited the museum.

Identify the sentence in the future continuous tense:

A) They will have reached their destination.

B) She has been working hard.

C) He is reading a book.

D) We are leaving for the trip tomorrow.

Which option contains a sentence in the past continuous tense?

A) I have finished my work.

B) She will be studying for her exams.

C) They were playing football.

D) He has bought a new car.

Choose the sentence in the present perfect continuous tense:

A) They have left for the airport.

B) She will finish her work soon.

C) He has been waiting for hours.

D) We met them yesterday.

3. Read the passage carefully and answer the following questions:

Lencho was an honest, hard-working farmer who had experienced the wrath of nature in the form of a hailstorm. The hailstorm had destroyed his crops, which were his only source of livelihood. Despite this misfortune, Lencho remained faithful and believed in the goodness of God.

He decided to write a letter to God, requesting help. In the letter, he expressed his need for money to survive the upcoming months and asked God to send him a hundred pesos. Lencho was confident that God would not let him down.

Lencho's letter reached the postmaster, who was touched by his faith and innocence. The postmaster, along with his colleagues, decided to collect money for Lencho. They managed to gather a significant amount and sent it to him anonymously.

When Lencho received the money, he was overjoyed and thanked God for his kindness. He believed that his prayers had been answered and that God had sent him the money he needed.

However, Lencho's faith was not shared by the postmaster, who questioned the existence of God. He wondered how Lencho could be so sure that God had sent him the money. This incident made him skeptical about the power of faith and the existence of a higher being.

Anser the questions based on the passage:

1. How does Lencho's attitude towards God contrast with the postmaster's attitude?

2. Do you think the postmaster's skepticism is justified? Why or why not?

3. What role does faith play in Lencho's life, and how does it influence his actions?

4. How does the story of Lencho's letter challenge traditional beliefs about the relationship between faith and divine intervention?

5. What might the story suggest about the nature of belief and the human need for reassurance or divine help in times of crisis?

PROJECTS (Do any one)

Fire and Ice: Create a multimedia presentation (video, PowerPoint, etc.) exploring the theme of the poem "Fire and Ice" by Robert Frost. Include visuals, quotations, and explanations to support your analysis.

Instructions: Research and collect examples from real-life events, literature, or movies that reflect the themes of desire, hatred, and destruction as discussed in the poem.

Prepare a short report or presentation highlighting these examples and how they relate to the poem. Present your findings in the form of a video, PowerPoint, or essay.

Footprints without Feet: Design a storyboard or comic strip illustrating the story "Footprints without Feet" by H.G. Wells. Focus on key scenes, characters, and the central theme of curiosity and its consequences.

Instructions : Imagine you are the protagonist in the story "Footprints without Feet." Write a diary entry reflecting on your experiences and emotions before, during, and after the events of the story. Consider how curiosity influenced your actions and the outcomes. Present your diary entry in a creative format, such as a handwritten journal, blog post, or audio recording.

The Thief's Story: Write a short story inspired by the narrative style and themes of "The Thief's Story" by Ruskin Bond. Create a new character and setting but maintain the theme of redemption and transformation.

Instructions : Reflect on a personal experience or observation where you or someone else underwent a significant change or transformation. Write a reflective essay discussing the factors that led to this change, the challenges faced, and the outcome. Relate your reflection to the central theme of transformation in "The Thief's Story." Present your essay in a well-organized format, focusing on clarity and coherence.

HINDI

ASSIGNMENT

1. नेताजी के चश्मे की कहानी किस लेखक ने लिखी है?

a) हरिवंश राय बच्चन

b) नरेंद्र सिंह

c) मन्नू भंडारी

d) प्रेमचंद

2. नेताजी के चश्मे को किस प्रकार की वस्तु बताया गया है?

a) साधारण

b) विशेष

c) अनमोल

d) बेकार

3. नेताजी का चश्मा किस सामग्री का बना हुआ था?

a) प्लास्टिक

b) सोना

c) लोहे

d) चाँदी

4. चश्मे के खोने पर नेताजी का क्या हाल हुआ?

a) खुश हुए

b) दुखी हुए

c) गुस्सा हुए

d) कोई प्रतिक्रिया नहीं दी

5. नेताजी के चश्मे के साथ कौन सी घटना घटित हुई?

a) चोरी हो गया

b) टूट गया

c) पानी में गिर गया

d) किसी ने ले लिया

6. नेताजी के चश्मे के मिलने पर उनकी प्रतिक्रिया कैसी थी?

a) खुशी से झूम उठे

b) निराश हो गए

c) शांत हो गए

d) गुस्से में आ गए

7. नेताजी का चश्मा किसके द्वारा मिला?

a) एक बच्चा

b) एक दोस्त

c) एक पुलिसकर्मी

d) खुद नेताजी ने पाया

8. नेताजी का चश्मा किस स्थान पर खोया था?

a) रेलवे स्टेशन

b) घर में

c) बाजार में

d) पार्क में

9. नेताजी का चश्मा कौन-सी धरोहर का प्रतीक है?

a) पारिवारिक

b) ऐतिहासिक

c) सांस्कृतिक

d) धार्मिक

10. नेताजी के चश्मे की कीमत कितनी थी?

a) ₹50

b) ₹100

c) ₹200

d) अनमोल

11. 'लखनवी अंदाज' किस लेखक की रचना है?

a) यशपाल

b) भगवती चरण वर्मा

c) अमृतलाल नागर

d) रामधारी सिंह दिनकर

12. 'लखनवी अंदाज' का मुख्य पात्र कौन है?

a) रामलाल

b) मुंशीजी

c) लाला जी

d) बेगम साहिबा

13. लखनवी अंदाज में कौन-सी चीज़ विशेष रूप से उल्लेखित है?

a) लखनवी पहनावा

b) लखनवी बोली

c) लखनवी खान-पान

d) लखनवी शिष्टाचार

14. लखनवी अंदाज में मुख्य पात्र का पेशा क्या था?

a) शिक्षक

b) वकील

c) दुकानदार

d) सरकारी अधिकारी

15. लखनवी अंदाज में किस स्थान का वर्णन है?

a) लखनऊ का बाज़ार

b) लखनऊ का स्कूल

c) लखनऊ का थाना

d) लखनऊ का चौराहा

16. लखनवी अंदाज में किस प्रकार की भाषा का प्रयोग किया गया है?

a) खड़ी बोली

b) उर्दू मिश्रित हिंदी

c) अवधी

d) भोजपुरी

17. लखनवी अंदाज का कौन-सा गुण मुख्य पात्र को विशेष बनाता है?

a) ईमानदारी

b) व्यंग्यात्मकता

c) विनम्रता

d) कठोरता

18. लखनवी अंदाज में मुख्य पात्र का स्वभाव कैसा है?

a) गम्भीर

b) खुशमिजाज

c) क्रोधी

d) शांत

19. लखनवी अंदाज में किस प्रकार की संस्कृति का चित्रण है?

a) ग्रामीण

b) शहरी

c) सामं

Assignment 2

1. लेखक ने आत्मकथा में अपने जीवन के किस महत्वपूर्ण घटना का वर्णन किया है? इस घटना का उनके जीवन पर क्या प्रभाव पड़ा?

लेखक ने आत्मकथा में अपने जीवन की एक महत्वपूर्ण घटना का विस्तृत वर्णन किया है। इस घटना का उनके जीवन पर गहरा प्रभाव पड़ा, जिसने उनके जीवन की दिशा और दृष्टिकोण को बदल दिया। इस घटना के बारे में विस्तार से लिखें और उसके प्रभावों पर चर्चा करें।

2. आत्मकथा में वर्णित लेखक के संघर्षों और चुनौतियों को समझाइए। उन्होंने इन चुनौतियों का सामना कैसे किया?

आत्मकथा में लेखक ने अपने जीवन के संघर्षों और चुनौतियों का वर्णन किया है। इन संघर्षों का सामना करने के लिए उन्होंने किस प्रकार के उपाय और रणनीतियाँ अपनाई, इस पर चर्चा करें।

3. लेखक ने आत्मकथा के माध्यम से कौन-कौन से जीवन मूल्य और सिद्धांत पाठकों को सिखाए हैं? उदाहरण सहित समझाएँ।

लेखक ने आत्मकथा में अपने अनुभवों और घटनाओं के माध्यम से कई महत्वपूर्ण जीवन मूल्य और सिद्धांत सिखाए हैं। इन जीवन मूल्यों और सिद्धांतों को उदाहरण सहित विस्तार से समझाएँ।

4.आत्मकथा में वर्णित लेखक के सामाजिक और पारिवारिक जीवन का विश्लेषण कीजिए। उनके परिवार और समाज का उनके जीवन पर क्या प्रभाव पड़ा?

आत्मकथा में लेखक ने अपने सामाजिक और पारिवारिक जीवन का वर्णन किया है। उनके परिवार और समाज का उनके जीवन पर क्या प्रभाव पड़ा, इस पर विश्लेषण करें।

5.लेखक के जीवन के किस पहलू ने आपको सबसे अधिक प्रभावित किया और क्यों? इस पर विस्तार से अपने विचार प्रस्तुत करें।

आत्मकथा पढ़ने के बाद लेखक के जीवन का कौन सा पहलू आपको सबसे अधिक प्रभावित करता है और क्यों? इस पर विस्तार से अपने विचार प्रस्तुत करें और उदाहरण दें।

PROJECTS (Do any one)

1. महाकवि सूरदास के व्यक्तित्व एवं कृतित्व पर प्रकाश डालते हुए एक प्रोजेक्ट तैयार करें:

- ❖ महाकवि सूरदास का जीवन परिचय, उनके प्रमुख काव्य और रचनाओं का संकलन करें।

- ❖ सूरदास के प्रमुख काव्यों में से एक का चयन कर, उसका संक्षेप में वर्णन करें।

- ❖ सूरदास के काव्य शैली और भाषा की विशेषताओं का विश्लेषण करें।

- ❖ सूरदास के व्यक्तित्व पर अन्य कवियों और साहित्यकारों की राय का उल्लेख करें।

- ❖ इस प्रोजेक्ट को A4 शीट पर करें और आवश्यक चित्रों का प्रयोग करें।

2. मतदान अधिकार पर निर्वाचन आयोग के कार्यालय की ओर से लगभग २५-३० शब्दों में विज्ञापन तैयार करें:

- ❖ मतदान का महत्व बताने वाला एक संक्षिप्त और प्रभावशाली विज्ञापन तैयार करें।

- ❖ विज्ञापन में नागरिकों को मतदान करने के लिए प्रेरित करने वाले संदेश शामिल करें।

- ❖ विज्ञापन को रंगीन पोस्टर के रूप में A4 शीट पर तैयार करें।

3. **'World Milk Day' पर रचनात्मक लेख लिखें:**

❖ 'World Milk Day' का महत्व और इतिहास बताएं।

❖ दूध के पोषक तत्वों और स्वास्थ्य लाभों का वर्णन करें।

❖ 'World Milk Day' के अवसर पर आयोजित होने वाली विभिन्न गतिविधियों और कार्यक्रमों का विवरण दें।

❖ लेख को A4 शीट पर तैयार करें और उसमें आवश्यक चित्रों का प्रयोग करें।

NOTE: कक्षा में कराए गए कार्य की दोहराई करेंगे। वाक्य, वाच्य और पद परिचय का A3 शीट पर चार्ट बनाकर उनके १०-१० उदाहरण लिखेंगे:

MATHS

Worksheet - 1

Answer these questions:-

1. Find the perpendicular distance of A(5,12) from the y-axis.

2. Find the distance of the point (- 4, - 7) from the y-axis.

3. Find the coordinates of the centroid of a triangle whose vertices are (0,6), (8,12) and (8,0).

4. Find the distance between the points: A(-6, -4) and B(9, -12).

5. Find the condition that the point (x, y) may lie on the line joining (3, 4) and (-5, - 6).

6. The sum of numerator and denominator of a fraction is 3 less than twice the denominator. If each of the

numerator and denominator is decreased by 1, the fraction becomes 1 /2 . Find the fraction.

7. Solve the following pair of linear equations for x and y

$2(a -) + (a + 4b\ b + a) + (b - 4a$

8. A number consists of two digits. When the number is divided by the sum of its digits, the quotient

is 7. If 27 is subtracted from the number, the digits interchange their places. Find the number.

9. If $\alpha\ \beta$ are the zeroes of a polynomial, such that $\alpha + \beta = 6$ and $\alpha = 4$, then write the polynomial.

10. If one zero of the polynomial $x\ 2 - 4x + 1$ is $2 + \sqrt{3}$, write the other zero.

11. For what value of k polynomial $x\ 2 - x - (2k + 2)$?

12. Write the polynomial, the product and sum of whose zeroes are $- 9\ 2$ and $- 3\ 2$ respectively.

13. If 1 is a zero of the polynomial $(x\ a\ 2 - 3(a - 1) - 1$, then find the value of a

14. Show that $x = -3$ is a solution of $x\ 2 + 6x + 9 = 0$.

15. Show that $x = -3$ is a solution of $2x\ x - 3 = 0$

16. If $(x + a\ x\ a + 5x + 10$, find a

17. The sum and product of the zeroes of a quadratic polynomial are $-1/2$ and -3 respectively. What

is the quadratic polynomial?

18. Find the HCF and LCM of 11008 and 7344 using fundamental theorem of arithmetic.

19. Show that any positive integer is of the form 3q or, 3q + 1 or, 3q + 2 for some integer q.

20. Express the given number as the product of its prime factors: 5005.

21. Find HCF and LCM of 625, 1125 and 2125 using fundamental theorem of arithmetic.

22. If - 1 is a zero of the polynomial $f(x) = x^2 - 7x - 8$, then calculate the other zero.
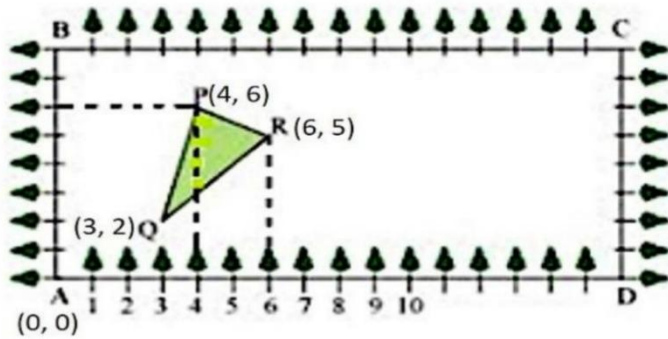
WORKSHEET-2

SECTION - A

1. If one zero of the quadratic polynomial $x^2 + 3x + k$ is 2, then the value of k is

(a) 10 (b) –10 (c) 5 (d) –5

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

(a) 4/3 (b) –4/3 (c) 2/3 (d) –2

3. 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

4. The zeroes of the quadratic polynomial $x^2+ 99x+127$ are

(a) both positive (b) both negative (c)one positive & one negative (d) None

5. A quadratic polynomial ,whose zeroes are–3and 4,is

(a) $x^2 – x + 12$ (b)$x^2 + x + 12$ (c) $2x^2 + 2x – 24$ (d)None

6. The pair of equations $5x – 15y = 8$ and $3x – 9y = 24/5$ has

(a) One solution (b) two solutions (c) infinitely many solutions (d) no solution

7. The pair of equation $x+2y+ 5=0$ and $–3x–6y+1=0$ have

(a) a unique solution (b) exactly two solutions (c)infinitely many solutions (d) no solution

8. If a pair of linear equations is consistent, then the lines will be

(a) parallel (B)always coincident (c)intersecting or coincident (d)always intersecting

Case study based Questions

1. The Class X students in krishna nagar have been allotted actually plot of land for their gardening activity. Saplings of gulmohar are planted on the boundary at a distance of 1 meter from each other. There is a triangular grassy lawn in the plot. The students are to sow seeds of flowering plants on the remaining area of the plot.

(i) Taking a as origin , find the coordinates of P.

(ii) What will be the coordinates of R if C is the origin?

(iii) What will be the coordinates of Q if C is the origin?

SECTION - B

1. Show that $x = -3$ is a solutions of $x\,2 + 6x + 9 = 0$.

2. Show that $x = -3$ is a solution of $2x\,x - 3 = 0$

3. If $(x + a\,x\,a + 5x +10$, find a

4. The sum and product of the zeroes of a quadratic polynomial are $-1/2$ and -3 respectively. What

is the quadratic polynomial?

5. Find the HCF and LCM of 11008 and 7344 using fundamental theorem of arithmetic.

6. Show that any positive integer is of the form 3q or, 3q + 1 or, 3q + 2 for some integer q.

7. Express the given number as the product of its prime factors: 5005.

8. Find HCF and LCM of 625, 1125 and 2125 using fundamental theorem of arithmetic.

9. If - 1 is a zero of the polynomial f(x) = x 2 - 7x - 8, then calculate the other zero.

10. Find the sum and product of zeroes of p(x) =2(x2–3) +x.

11. Find quadratic polynomial, the sum and product of whose zeroes are 5 and 3 respectively.

12. Solve the following system of line are equations graphically:2x-3y-17=0;4x+y-13=0.Shade the region bounded By the above lines and x-axis.Collect the data of languages in bihar and find the Median and Mode of the data.

PROJECT BASED ACTIVITIES

Portfolio Activity: Exploring Mathematical Concepts

Roll Numbers: 1 - 10 (Polynomials)

Activity: Polynomial Puzzle

Objective: To understand and identify different types of polynomials.

Materials Needed: Paper, pen, algebraic expressions worksheet.

Roll Numbers: 11 - 20 (Trigonometry)

Activity: Trigonometric Treasure Hunt

Objective: To apply trigonometric concepts in real-life scenarios.

Materials Needed: Map of school premises, trigonometry problems, pen, calculator.

Roll Numbers: 21 - 28 (Probability)

Activity: Probability Carnival Games

Objective: To understand the concept of probability through fun carnival games.

Materials Needed: Carnival game materials, probability questions, prizes.

GUIDELINES FOR ACTIVITIES

For the Polynomial Puzzle activity:

1. **Instructions:**

    - **Write down five different algebraic expressions involving polynomials.**

    - **Identify and categorize each expression as a monomial, binomial, trinomial, or polynomial with more than three terms.**

    - **Create a puzzle by mixing up the terms and their categories.**

    - **Rearrange the puzzle to match the correct terms with their categories.**

2. **Example:**

    - **Expressions: $3x^2 + 4$, $2x^3 - 5x^2 + 7x$, $x^4 - 2x^3 + 5x^2 - x + 1$, $4x^3 - 3x$, $2x^2 - x$**

- Categories: Monomial, Trinomial, Polynomial (more than three terms), Binomial, Binomial

For the Trigonometric Treasure Hunt activity:

1. Instructions:

    - Using a map of your school premises, identify at least five locations.

    - For each location, create a trigonometry problem that involves measuring distances or angles using trigonometric functions (sine, cosine, tangent).

    - Solve the problems using a calculator and mark the location on the map where the "treasure" (answer) is located.

2. Example:

    - Location 1: Main Entrance

        - Problem: From a point 20 meters away from the entrance, the angle of elevation to the top of the flagpole is 30°. Find the height of the flagpole.

        - Solution: Using the sine function, height = 20 * sin(30°) = 10 meters

For the Probability Carnival Games activity:

1. Instructions:

    - Create three carnival games with different levels of difficulty.

    - For each game, design a probability-based challenge (e.g., rolling a dice, spinning a wheel, drawing from a deck of cards) and calculate the probability of winning.

    - Play the games and keep track of your wins and losses.

2. Example:

    - Game 1: Dice Roll

        - Challenge: Roll a standard six-sided dice and guess if the number rolled is even or odd.

        - Probability of winning: Even numbers (2, 4, 6) have a probability of 3/6 or 0.5, odd numbers (1, 3, 5) have the same probability.

        -

SCIENCE

ASSIGNMENT

Chapter: Light and Reflection

Which type of mirror is used in vehicles as rear-view mirrors?

a) Plane mirror

b) Convex mirror

c) Concave mirror

d) Cylindrical mirror

What is the focal length of a plane mirror?

a) Infinity

b) Zero

c) Negative

d) Positive

If the magnification produced by a mirror is +1, the image formed is:

a) Virtual and erect

b) Real and inverted

c) Virtual and inverted

d) Real and erect

A concave mirror forms an image that is real, inverted, and of the same size as the object. The object must be placed:

a) At the center of curvature

b) At the focus

c) Between the pole and the focus

d) Beyond the center of curvature

What happens to a ray of light when it passes from a denser to a rarer medium?

a) Bends towards the normal

b) Bends away from the normal

c) Does not bend

d) Becomes parallel to the normal

Chapter: How Do Organisms Reproduce

Which of the following is not a method of asexual reproduction?

a) Binary fission

b) Budding

c) Fragmentation

d) Fertilization

In which type of asexual reproduction do new individuals form from the fragments of the parent body?

a) Binary fission

b) Budding

c) Fragmentation

d) Spore formation

Which part of a flower becomes the fruit?

a) Ovary

b) Ovule

c) Petal

d) Stamen

Which of the following organisms reproduces through spore formation?

a) Hydra

b) Planaria

c) Rhizopus

d) Amoeba

In human females, fertilization takes place in the:

a) Ovary

b) Uterus

c) Fallopian tube

d) Vagina

Chapter: Our Environment

Which of the following is a biotic component of an ecosystem?

a) Water

b) Light

c) Temperature

d) Plants

Which of the following is a primary consumer?

a) Tiger

b) Deer

c) Eagle

d) Snake

Which of the following is not a greenhouse gas?

a) Carbon dioxide

b) Methane

c) Water vapor

d) Nitrogen

In an ecosystem, the 10% energy available for transfer from one trophic level to the next is in the form of:

a) Light energy

b) Chemical energy

c) Heat energy

d) Kinetic energy

Which of the following processes does not contribute to the carbon cycle?

a) Photosynthesis

b) Respiration

c) Decomposition

d) Nitrogen fixation

Chapter: Chemical Reactions and Equations

Which of the following is not a physical change?

a) Melting of ice

b) Dissolving sugar in water

c) Rusting of iron

d) Boiling of water

What type of reaction is represented by the equation: $Zn + 2HCl \rightarrow ZnCl_2 + H_2$?

a) Combination reaction

b) Decomposition reaction

c) Displacement reaction

d) Double displacement reaction

Which gas is produced when hydrochloric acid reacts with sodium carbonate?

a) Oxygen

b) Hydrogen

c) Carbon dioxide

d) Nitrogen

In the reaction: $2Mg + O_2 \rightarrow 2MgO$, magnesium acts as a/an:

a) Reducing agent

b) Oxidizing agent

c) Catalyst

d) Inhibitor

Which of the following is a balanced chemical equation?

a) $H_2 + O_2 \rightarrow H_2O$

b) $2H_2 + O_2 \rightarrow 2H_2O$

c) $H_2 + O_2 \rightarrow 2H_2O$

d) $2H_2 + O_2 \rightarrow H_2O$

Additional Questions

The image formed by a concave mirror is real, inverted, and magnified. The object is placed:

a) At the focus

b) Between the focus and center of curvature

c) At the center of curvature

d) Beyond the center of curvature

Which type of asexual reproduction involves the formation of a new organism from a part of the parent organism?

a) Budding

b) Regeneration

c) Binary fission

d) Spore formation

Decomposers in an ecosystem are:

a) Primary producers

b) Primary consumers

c) Secondary consumers

d) Microorganisms

PROJECT

Light – Reflection and Refraction

Objective:

The objective of this holiday homework is to enhance understanding of the concepts of light, reflection, and refraction through practical and project-based learning. This will help students apply theoretical knowledge to real-world scenarios and develop their critical thinking and analytical skills.

Project Title:

"Exploring Light: Reflection and Refraction"

Instructions:

Project Duration: Complete this project over the holiday period. It is expected to take around 10-12 hours in total.

Materials Needed:

Plane mirror

Concave and convex mirrors

Lens (convex and concave)

Light source (flashlight or laser pointer)

Protractor

Ruler

Transparent glass container

Water

White paper

Cardboard

Glue, scissors, and other craft materials

Project Tasks:

Task 1: Understanding Reflection

Experiment 1: Law of Reflection

Use a plane mirror and a light source to demonstrate the law of reflection. Shine the light at different angles and measure the angle of incidence and the angle of reflection using a protractor.

Record your observations and verify if the angle of incidence is equal to the angle of reflection.

Document the experiment with photos and detailed explanations.

 Ensure your work is neatly organized and all sources of information are properly cited.

SOCIAL SCIENCE

ASSIGNMENTS

THE RISE OF NATIONALISM IN EUROPE

Q1. Who followed the policy of Golden mean?

a) Matternich b) Mazzini   c) Louis Philippe   d) Duke of Orleans

Q2. Napoleonic code was introduced in the year of :

a) 1807   b) 1809 c) 1805   d) 1804

Q3. What was Helairia Philike?

a) A Secret society   b) A political party   c) a custom union   d) An alliegori

Q4. Who founded the revolutionary militia 'Red Shirt'?

a) Wilson b) Tsar Alexander II   c) Garibaldi   d) Matternich

Q5. Who was Frederick Sorrieu?

a) A Revolutionary   b) Chancellor of Austria c) King of Frame   d) French Artist

Q6. Vienna congress was convened in 1815 for what purpose?

a)to declare completion of German Unification

b)to restore conservative regime in Europe

c)to declare war against France

d)To start the process of Italian unification

Q7. Which year was known as the year of dear bread?

a) 1830   b) 1848   c) 1789   d) 1815

Q8. Name the state which led the process of Italian unification?

a) Rome   b) Prussia c) Sardinia Piedmont d) Vienna

Q9. Who said Cavour, Mazzini, and Garibaldi: three her brain, her soul, her sword?

a) Victor Emannual b) George Meredith   c) Louis XVIII d) Guizot

Q10. Zollverein was a :

a) Diplomatic institution   b) Custom union c) Administrative union   d)Trade union

Q11. Who followed the policy of Blood and Iron for national unification?

a) Garibaldi   b) otto Von Bismark   c) Mazzini   d) Matternich

Q12. United Kingdom of Great Britain came into existence in the year :

a) 1789   b) 1798   c) 1707   d) 1801

Q13. Who said that, Italy was merely a geographical expression?

a) Cavour   b) Napoleon   c) Matternich d) Guizot

Q14. Which one was not included in the Balkan Region?

a) Croatia   b) Bosnia Harzegovina   c) Serbia   d) Spain

Q15. In which century nationalism emerged in Europe :

a)16th century b) 20th century c) 19th century d) 17th century

Q16. Who was the king of France at the time of French Revolution?

a) Marie Antoniate   b) Lous XVI   c) Czar Nicolas d) Edward II

DIRECTION: Mark the option which is most suitable:

A. **If both assertion (A) and reason (R) are true and reason (R) is the correct explanation of assertion (A).**

B. **If both assertion (A) and reason (R) are true but reason (R) is not the correct explanation of assertion (A).**

C. **Assertion (A) is true but reason (R) is false.**

D. **Both assertion (A) and reason (R) are false.**

1. ASSERTION (A) : Agenda 21 was signed in1992 in Rio de Janeiro

REASON(R): Sustainable development focused on utilization of resources.

2ASSERTION (A) : All the resources belong to the nation.

REASON(R): International institutions regulate the oceanic resources beyond 200 nautical miles of the Exclusive Economic Zone.

3.ASSERTION (A) : Human beings themselves are essential components of resources.

REASON(R): They transform material available in our environment into resources and use them.

4.ASSERTION (A): Biotic Resources are obtained from biosphere and have life such as human beings, flora and fauna.

REASON(R): Abiotic Resources are those things which are composed of non- living things ,for example, rocks, air and metals.

5 . ASSERTION (A): Individual Resources are owned privately by individuals like cars, houses, lands.

REASON(R) : Community resources are accessible to all the members of the community like burial grounds, village ponds etc.

6.ASSERTION (A): Resources are not vital for any developmental activity.

REASON(R) : Excessive consumption and over utilisation of resources may lead to socio-economic and environmental problems.

Read the passage below and answer the questions that follow-

Power may also be shared among different social groups, such as the religious and linguistic groups. 'Community government' in Belgium is a good example of this arrangement. In some countries there are constitutional and legal arrangements whereby socially weaker sections and women are represented in the legislatures and administration. This type of arrangement is meant to give space in the government and administration to diverse social groups who otherwise would feel alienated from the government. This method is used to give minority communities a fair share in power.

2.1Power sharing means-

A)System of political arrangement in which power is shared between ministers of the government.

B)System of political arrangement in which power is shared between different organs of the government.

C)System of political arrangement in which power is shared between different levels of the government.

D)All of the above

2.2Which one is not a benefit of Power sharing?

A)Reduces the possibilities of conflicts between social groups

B)Ensures political stability in the long run

C)All the political parties get their expected share

D)It upholds the spirit of democracy

2.3Apart from the Central and State Government, there is a third type of government in Belgium called the

A)Regional Government

B)State Government

C)Union Government

D)Community Government

2.4Which is not a feature of Community government?

A)Apart from the Central and the State Government, this is a third type of government

B)It is elected by the people belonging to one community that is Dutch, French, German speaking

C)It is mainly based on cooperation and tolerance

D)It does not have the power regarding cultural, educational and language related issues

Portfolio-Based Projects for Holiday Homework (Do any one)

1. Nationalism in India

Project Title: The Journey of Indian Nationalism

Objective:

To understand the various stages and key events in the Indian freedom struggle.

To analyze the contributions of different leaders and movements.

Instructions:

Introduction:

Provide a brief overview of the concept of nationalism and its significance in India's history.

Historical Timeline:

Create a detailed timeline from the early 1900s to 1947, marking significant events such as the Non-Cooperation Movement, Civil Disobedience Movement, and Quit India Movement.

Use illustrations, newspaper clippings, and photographs to make the timeline visually appealing.

Key Figures:

Write short biographies of key leaders like Mahatma Gandhi, Jawaharlal Nehru, Subhas Chandra Bose, and Sardar Vallabhbhai Patel.

Highlight their contributions and strategies in the struggle for independence.

Major Movements:

Describe at least three major movements (e.g., Non-Cooperation Movement, Salt March, Quit India Movement).

Discuss the causes, methods, and outcomes of these movements.

Role of Women:

Research and present the contributions of women in the freedom struggle, such as Sarojini Naidu, Kamala Nehru, and Aruna Asaf Ali.

Visual Elements:

Include maps showing British India and the princely states.

Create posters, collages, or drawings depicting key events and slogans.

Conclusion:

Reflect on the impact of the freedom struggle on contemporary India.

2. Forest and Wildlife Resources

Project Title: Conservation of Forest and Wildlife Resources

Objective:

To understand the importance of forests and wildlife.

To explore conservation strategies and their impact on biodiversity.

Instructions:

Introduction:

Explain the significance of forests and wildlife in maintaining ecological balance.

Biodiversity Hotspots:

Identify and describe at least three biodiversity hotspots in India.

Include maps and images of these regions.

Conservation Strategies:

Research various conservation strategies such as wildlife sanctuaries, national parks, and biosphere reserves.

Explain their importance and effectiveness.

Endangered Species:

List and describe some endangered species found in India, such as the Bengal Tiger, Asiatic Lion, and Indian Rhinoceros.

Discuss the reasons for their endangerment and conservation efforts.

Human Impact:

Analyze the impact of human activities like deforestation, poaching, and habitat destruction on forests and wildlife.

Suggest measures to mitigate these impacts.

Case Study:

Conduct a case study on a specific conservation project or initiative in India (e.g., Project Tiger, Project Elephant).

Discuss its objectives, implementation, and outcomes.

Visual Elements:

Create charts, graphs, and posters to represent data on forest cover, wildlife populations, and conservation efforts.

Include photographs of wildlife and protected areas.

Conclusion:

Reflect on the importance of individual and community participation in conservation efforts.

3. Federalism

Project Title: Understanding Federalism in India

Objective:

To explore the federal structure of India and its implications on governance.

To analyze the distribution of powers between the central and state governments.

Instructions:

Introduction:

Define federalism and its relevance in a diverse country like India.

Structure of Government:

Describe the three levels of government in India: Central, State, and Local.

Include a diagram to illustrate the distribution of powers.

Division of Powers:

Explain the division of powers as outlined in the Indian Constitution.

Discuss the Union List, State List, and Concurrent List with examples.

Inter-Governmental Relations:

Analyze the relationship between the central and state governments.

Discuss mechanisms for resolving disputes and ensuring cooperation.

Case Study:

Conduct a case study on a specific state (e.g., Tamil Nadu, Maharashtra) to explore its unique challenges and advantages within the federal structure.

Discuss any notable conflicts or cooperative initiatives between the state and central government.

Impact on Policy Making:

Examine how federalism impacts policy making in areas such as education, healthcare, and infrastructure.

Provide examples of successful policies implemented at the state level.

Visual Elements:

Include maps showing the division of states and union territories.

Create charts and tables to represent the distribution of powers and functions.

Conclusion:

Reflect on the benefits and challenges of federalism in India.

4. Development (Economics)

Project Title: Sustainable Development: Balancing Growth and Environment

Objective:

To understand the concept of development and its various dimensions.

To explore sustainable development practices and their importance.

Instructions:

Introduction:

Define development and differentiate between economic development and sustainable development.

Indicators of Development:

Explain various indicators of development such as GDP, HDI, and GINI Index.

Use charts and graphs to represent these indicators for different countries.

Sustainable Development Goals (SDGs):

Introduce the UN's Sustainable Development Goals.

Discuss how these goals aim to achieve balanced and inclusive development.

Case Study:

Conduct a case study on a country or region that has implemented successful sustainable development practices.

Analyze the strategies used and their impact on the economy and environment.

Role of Government and NGOs:

Discuss the role of government policies and non-governmental organizations in promoting sustainable development.

Provide examples of specific policies and initiatives.

Impact of Development on Environment:

Analyze the impact of industrialization, urbanization, and other development activities on the environment.

Suggest measures to mitigate these impacts while promoting development.

Visual Elements:

Include maps, charts, and graphs to represent development indicators and sustainable practices.

Create posters or infographics to highlight key points.

Conclusion:

Reflect on the importance of balancing economic growth with environmental sustainability.

IT

Assignment 1: ICT Skills

Q1. Fill in the blanks with appropriate ICT-related terms.

a) The process of encoding data into a format that prevents unauthorized access is called _____.

b) A device that connects multiple computers together in a network is called a _____.

c) The main circuit board in a computer that connects all its components is known as the _____.

d) A software program designed to protect a computer system from unauthorized access or malicious software is called _____.

Q2. Choose the correct option from the given choices.

a) Which of the following is NOT an input device?

i) Printer

ii) Keyboard

iii) Mouse

iv) Scanner

b) What does CPU stand for?

i) Central Processing Unit

ii) Computer Processing Unit

iii) Central Power Unit

iv) Computer Power Unit

Q3. Determine whether the statements are true or false.

a) RAM stands for Read-Only Memory.

b) HTML is a programming language used to create web pages.

c) Microsoft Excel is a word processing software.

Q4. Answer briefly the following questions.

a) What is the purpose of an operating system?

b) Explain the difference between hardware and software.

c) What is a computer virus and how does it spread?

Q5. Provide detailed answers to the following questions.

a) Discuss the impact of ICT on education, highlighting its benefits and challenges.

b) Explain the steps involved in troubleshooting common computer problems.

c) Describe the importance of data security in ICT, and discuss ways to protect personal information online.

Assignment 2: Entrepreneurial Skills

Q1. Fill in the blanks with appropriate entrepreneurial terms.

a) An individual who organizes and operates a business, taking on financial risk to do so, is called an _____.

b) The process of generating new ideas and turning them into successful business ventures is known as _____.

c) The amount of money left over after all expenses have been deducted from revenue is called _____.

d) A plan that outlines the goals, strategies, and financial projections of a business is called a _____.

Q2. Choose the correct option from the given choices.

a) Which of the following is NOT a characteristic of successful entrepreneurs?

i) Risk-averse

ii) Creativity

iii) Persistence

iv) Resilience

b) What is the first step in starting a business?

i) Developing a business plan

ii) Securing funding

iii) Identifying a market need

iv) Hiring employees

Q3. Determine whether the statements are true or false.

a) Entrepreneurs are only motivated by financial gain.

b) Creativity is not necessary for entrepreneurial success.

c) Entrepreneurs do not need to take risks to succeed.

Q4. Answer briefly the following questions.

a) What is the importance of market research for entrepreneurs?

b) Explain the difference between a product-based and a service-based business.

c) What are some common challenges faced by entrepreneurs?

Q5. Provide detailed answers to the following questions.

a) Discuss the role of innovation in entrepreneurship, citing examples of innovative businesses.

b) Explain the steps involved in creating a business plan, and discuss its significance for entrepreneurs.

c) How can entrepreneurs identify and evaluate business opportunities effectively?

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PROJECT

ART INTEGRATED ACTIVITY:

Re- Create this document using MS Word and paste it in your notebook.

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HEALTH CARE

ASSIGNMENT:

Worksheet-1

1.What is Hospital ?

2.Explain Type of Hospital ?

3.What is a nursing home?

4.Diffrence between Govt. and Non Govt. Hospital ?

5.Define the role of kitchen department in the hospital?

Worksheet-2

1.Explain the Role of GDA ?

2.Write in detail all departments in Hospital?

3.Explain in detail the classification of beds in hospitals?

4.Describe the Role of house keeping staff in Hospital ?

Worksheet-3

PROJECT

1.Write at glance about the healthcare system   which you learn from session's in the book..

1.Practical Demonstration-Prepare a chart of all the department in hospital with their function

2.Activity-2. Prepare a chart of all blood laboratories with their and function

3.Activity-3.Make a list of 15 Specialized Doctors and their role .Ex-Dermatologist–skin related treatment

Dear Students,

 As you embark on your summer vacation, we encourage you to explore, learn, and enjoy each moment. The holiday homework provided is designed to keep you engaged, help you revisit concepts learned during the year, and prepare you for the upcoming academic challenges. Remember to balance your studies with fun activities, spend quality time with your family, and take care of your health.

Submit your completed homework by 3rd July 2024. We look forward to seeing your hard work and creativity. Have a wonderful and productive holiday!

Warm regards,

Lady Florence Convent School

I love to do my homework