CLASS: X
HOLIDAYS HOMEWORK 2024-25

BIOLOGY

Revise Ch-5 from the textbook and the notebook and do the Assignment Questions (posted in Google Classroom) on A4 sized sheets as instructed in the class.

- **Complete the practical written part in your bio file.**

1. Preparing a Temporary Mount of a Leaf Peel to show Stomata.

https://www.youtube.com/watch?v=ViBJMfBmSXo&feature=youtu.be

2. Experimentally Show that Carbon Dioxide Is given out during Respiration.

https://www.youtube.com/watch?v=34ESzqzf_Uo&feature=youtu.be

https://docs.google.com/document/d/1bvWY7BV9QI3LmGAbGTpx9Q2CwDG_7OVX2Oul7vaXORE/edit?usp=sharing

You can use the given links to write and understand these practicals.

- **Survey and Research on - The Global Impact of Respiratory Diseases**

This is to raise awareness among the people to protect their lungs by being physically active, stop smoking, reducing air pollution and getting vaccinated. **Express your views on the topic** on an A4 sized coloured sheet in about 250 words**. Paste relevant pictures** as well.

Task-1

'Respiratory diseases impose an immense worldwide health burden'. Find out the five most common respiratory diseases which are the causes of severe illness and death worldwide. Paste pictures and fill the necessary information in the following format shown:

Format is given below:

S.No	Respiratory disease (Name)	Scope of the disease	Prevention	Treatment	Control and Elimination
1					
2					
3					
4					
5					

Note: Source of Information for the Assignment-

It can be a Newspaper clipping, an article from a magazine or the Internet. You have to write the reference of the source of information you will use for your assignment.

Task-2

Draw and design a catchy caption for World Lung Day- 2024 on A4 sized coloured sheet.

Art Integration Project (10 marks Activity)

- Andaman & Nicobar Islands are home to a tenth of India's fauna species even though comprising only 0.25% of the country's geographical area. Research on the statement and do a comparative analysis with the fauna found in Delhi by creating a **photo story** with minimum 25-30 photos.

- Research on the Biodiversity of Lakshadweep Islands/Andaman and Nicobar Islands and do a comparative study with the Biodiversity of Delhi. Make a **foldable scrap file/e-magazine** with a creative cover, index, articles, pictures, bibliography and conclusion. A link to create a foldable scrap file is provided as a reference. You can design in your own creative manner.
                    https://youtu.be/gVcJFiaJIkY

Rubrics:
- Content-   3 marks
- Presentation and Creativity-   3 marks
- Organisation of the content-   2 marks
- Timely Submission-   2 marks

Note: The groups for Art Integration will be made and the topics will be allotted. The list will be posted in GC.

PHYSICS

Activity
1.Connect three LEDs in series and three LEDs in parallel and determine in which connection they glow brighter.
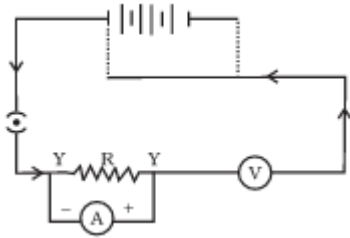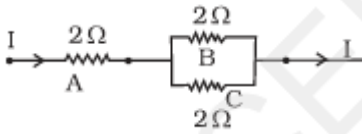
Rubrics
Accuracy- 2
Presentation-2
Timely submission -1

Assignment

2. A child has drawn the electric circuit to study Ohm's law as shown in Fig. His teacher told him that the circuit diagram needs correction. Study the circuit diagram and redraw it after making all corrections.

3. In Fig. Each of them dissipates energy and can withstand a maximum power of 18W without melting. Find the maximum current that can flow through the three resistors?

4. Two wires, one thick and another thin are connected to the same source. Which one of them will allow the current to flow more easily?
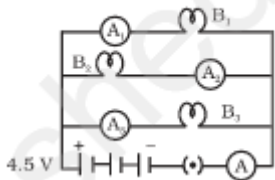
5. If the potential difference between the ends of a conductor is halved, keeping its resistance constant, what change will take place in the current flowing through it? What happens to the current in a circuit if its resistance is doubled? What happens to the resistance of a circuit if the current through it is doubled?

6. A conductor of length 'l' has a resistance of 20 Ω. What will be the new resistance if the length is increased by 4 times? Assume all other parameters remain constant.
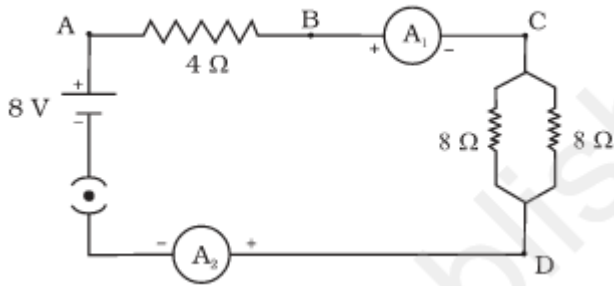
7.What is the effective resistance of the combination of two resistances 25 ohms and 15 ohms are joined together in series and then placed in parallel with a 40 ohms resistor?

8 .B1,B2, and B3 are three identical bulbs connected as shown in Fig
When all three bulbs glow, a current of 3A is recorded by the ammeter A.
(i) What happens to the glow of the other two bulbs when bulb B1 gets fused?
(ii)What happens to the reading of A1, A2, A3and A when the bulb B2 gets fused?
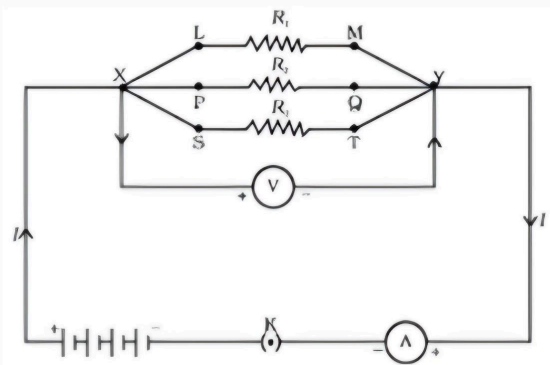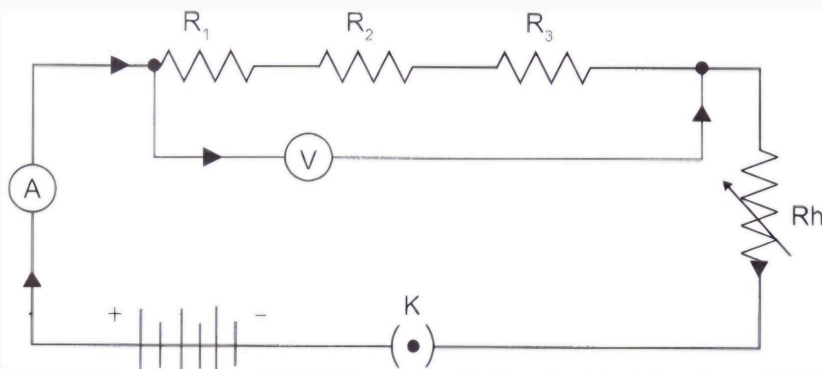(iii) How much power is dissipated in the circuit when all three bulbs glow together?

9. Find out the following in the electric circuit given in Fig
(a) Effective resistance of two 8 resistors in the combination
(b) Current flowing through 4 resistors
(c) Potential difference across 4 resistance
(d) Power dissipated in 4 resistors
(e) Difference in ammeter readings, if any

Case Study

10. In resistance for a system of the resistor, there are two methods of joining the resistors together as shown below

It showed an electric current in which 3 resistors having resistors R1, R2 and R3 respectively are joined end to end i.e series. While the combination of the resistor in which 3 resistors are connected together which points X and Y are said to be parallel.

1.The total potential difference across a combination of a resistor in series is equal to
a.V1 + V2 + V3
b.V1 – V2 +V2
c.V1 + V2
d.None of these

2.In a series combination of resistors, the current is
a.same at every point of the circuit
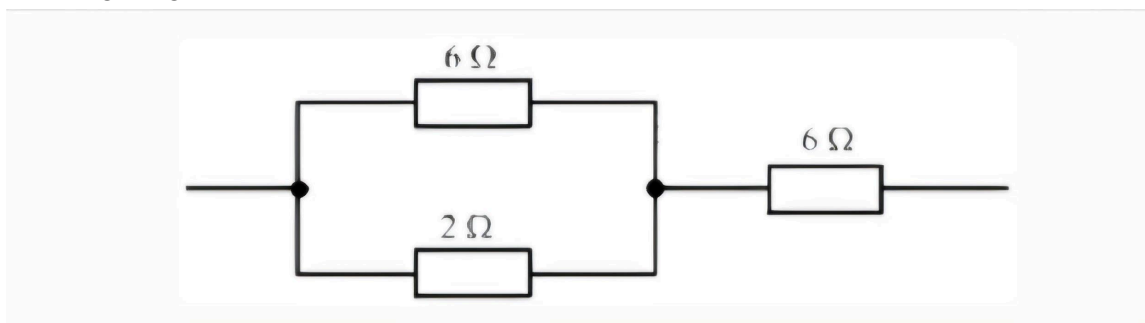b.different at every point of the circuit
zero
c.can not be determined

3.The electrical energy disputed in the resistor is given by
a.W = VIT
b.W = VIR
c.W = RIT
d.W = RT

4.If 5 resistors, each of value 0.2 ohm are connected in series what will be the resultant resistance
a.1 ohm
b.10 ohm
c.6 ohm
d.8 ohm

5.The figure given below shows three resistors.

Their combined resistance is:
a.16 Ω
b.14 Ω
c.203Ω
d.152Ω

ART INTEGRATION (2024-25) - LAKSHADWEEP, ANDAMAN & NICOBAR ISLAND

SCIENCE TOPICS

Group 1 & 7   PHYSICS
Study the musical instruments of Lakshadweep, Andaman & Nicobar. Make a magazine to show the historical importance and physics involved in the working of these instruments.
Rubrics:
Content-   3 marks
Relevance-   3 marks
Creativity-   2 marks
Timely Submission-   2 marks

Group 2.   PHYSICS
Study about the energy resources of Lakshadweep, Andaman & Nicobar. Make a photo story to show the energy resources and projects, the scope of use of renewable sources and the initiatives taken to fulfill the energy requirement of the place.

Rubrics:
Content-   3 marks
Relevance-   3 marks
Creativity-   2 marks
Timely Submission-   2 marks

Group 3 & 8   CHEMISTRY
Lakshadweep/Andaman and Nicobar has witnessed a variety of climate change initiatives to nurture the environment. Make a digital scrapbook or Project file(Introduction,Recent Developments,Innovative techniques to control climate change,preventive measures and Conclusion) observing the climate change initiatives taken in Lakshadweep/Andaman and Nicobar and compare the same with the initiatives taken in Delhi.

Group 4.   CHEMISTRY
The chemical industry in India is highly diversified, covering a lot of commercial products. Draft a case study in the form of Project report (using pictures, data, graphs, pictorial representation) observing how the issue of sustainability is hurting the progress of chemical sectors, taking due note of how Lakshadweep/Andaman & Nicobar islands has prioritized climate change initiatives.

Group 5 & 9   BIOLOGY
Research on the Biodiversity of Lakshadweep Islands/Andaman and Nicobar Islands and do a comparative study with the Biodiversity of Delhi. Make a foldable scrap file/e-magazine with a creative cover, index, articles, pictures, bibliography and conclusion. A link to create a foldable scrap file is provided as a reference. You can design in your own creative manner.
                    https://youtu.be/gVcJFiaJIkY

          Rubrics:
Content-   3 marks
Relevance-   3 marks
Creativity-   2 marks
Timely Submission- 2 marks

Group 6.   BIOLOGY
Andaman & Nicobar Islands are home to a tenth of India's fauna species even though comprising only 0.25% of the country's geographical area. Research on the statement and do a comparative analysis with the fauna found in Delhi by creating a photo story with minimum 25-30 photos.

Rubrics:
Content-   3 marks
Presentation and Creativity-   3 marks
Organisation of the content-   2 marks
Timely Submission-   2 marks

CHEMISTRY

1. A **SURVEY** – Conduct a survey of your home and make a list of various materials which are commonly used in daily life. Classify these materials into acids, bases and salt. Prepare a written report of your findings and submit.
B. **PHOTOSTORY** - To create a pictorial representation of **types of chemical reactions** or photo story of **metals and non metals**. The pictures need not be hand drawn; they can be cut outs and collages and along with the pictures, and write two to three lines which describe the pictures or digital.
                OR
Design a **comic strip** depicting **Importance of acids,bases and salts in our daily life** with colourful illustrations and relevant facts using Ms Word / on an A3 size sheet not more than 6-8 dialogue boxes. Take out the print of the comic strip on an A4 sheet.
SURVEY AND PHOTOSTORY TO BE DONE IN A-4 SIZE COLOURED SHEETS.

2. ART INTEGRATION PROJECT-

CHEMISTRY(only for groups- group 3,4&8)
1. Lakshadweep/Andaman and Nicobar has witnessed a variety of climate change initiatives to nurture the environment. Make a **digital scrapbook or Project file** (Introduction,Recent Developments,Innovative techniques to control climate change,preventive measures and Conclusion) observing the climate change initiatives taken in Lakshadweep/Andaman and Nicobar and compare the same with the initiatives taken in Delhi.

2. The chemical industry in India is highly diversified, covering a lot of commercial products. Draft a **case study in the form of Project report** (using pictures, data, graphs, pictorial representation) observing how the issue of sustainability is hurting the progress of chemical sectors, taking due note of how Lakshadweep/Andaman & Nicobar islands has prioritized climate change initiatives and compare the same with the initiatives taken in Delhi.

Rubrics:
- Content-   3 marks
- Relevance-   3 marks
- Creativity-   2 marks
- Timely Submission-   2 marks

NOTE:
1. The project must be prepared by the student in an innovative way.
2. It should be handwritten or Digital (Take out the print on an A4 sheet)
3. Paste diagrams/ pictures /photos related to the topic.
4. Use an A4 size sheet

3. Revise and prepare 1&2 chapters for UT-II.

4. Do the chemistry **Assignment** based on Chemical equations and reactions.

ASSIGNMENT TO BE DONE IN CHEMISTRY NOTE BOOK
1.Balance the following chemical equation and identify the type of reaction
They represent

$KClO_3$ $KCl + O_2$

$NH_3 + O_2$ $NO + H_2O$

$Na_2O + H_2O$ $NaOH$

$Na + H_2O$ $NaOH + H_2$

$FeCl_3 + NaOH$ $Fe(OH)_3 + NaCl$.

2. Define various types of chemical reactions.write one chemical equation for each type.
3. What happens when silver bromide is exposed to light? Give one practical application of this reaction.write the equation also.
4. Why is the bag used for potato chips flushed with nitrogen gas?
5. a. Why do copper vessels lose their shine when exposed to air?

b. Why should cured and sour substances not be kept in brass and copper vessels?

6. What happens when the milk is left at room temperature during summer?

7. Write a chemical equation when magnesium is burnt in air to give magnesium oxide.

8. A substance undergoes chemical reactions to produce simpler products, What type of reaction is this?

9. Which gas is produced by the action of dilute hydrochloric acid on zinc granules?

10. Why does the colour of copper sulphate solution change when an iron nail is dipped into it?

11. What happens when $CO_2(g)$ is passed through slaked lime? write the balanced chemical equation. write the type of reaction that has occured.

12. $Fe_2O_3 + 2Al \rightarrow Al_2O_3 + 2Fe$

The above reaction is an example of which type of reaction.

13. Give an example of decomposition reaction which proceeds by absorbing electric energy.

14. Transfer the following statements into chemical equations and then balance them.

a) hydrogen gas combines with nitrogen to form ammonia.

b) potassium metal reacts with water to give potassium hydroxide and hydrogen gas.

15. Identify the substances that are oxidised and the substances that are reduced to the following reactions.

1. $Na + O_2 \text{—————}> Na_2O$
   (s)   (g)   (s)

2. $CuO + H_2 \text{————}> Cu + H_2 O$
   (s)   (g)   (s)   (l)

MATHEMATICS

1. **FUN 'N' LEARN ACTIVITY**

ART INTEGRATION ACTIVITY
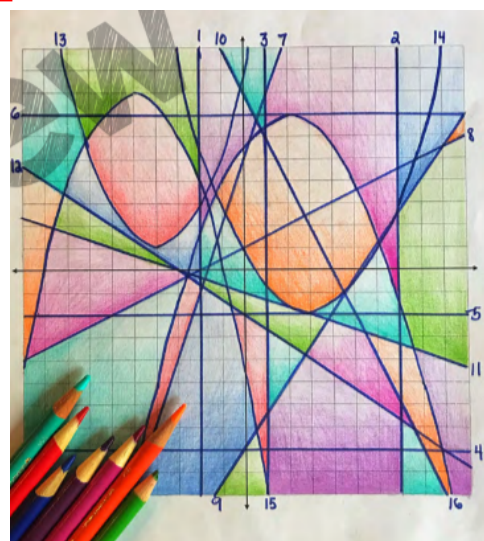
QUADRATIC EQUATION

STAINED GLASS WINDOW PROJECT USING

LINEAR AND QUADRATIC EQUATIONS

DIRECTIONS:

1. Circle 3 equations from groups A, B, C and D (12 equations), then circle 2 equations from groups E and F (4 equations).

2. Record each equation in tabular form and find their solutions. You must record them in order i.e. equation 1-3 from group A and 4-6 from group B etc.

3. Draw the graph of all 16 equations on stained glass window graph paper. Every equation must be labelled with its equation number from your table.
4. Color/design your stained glass window.

Group A	Group B	Group C	Group D
x=4	y=-8	y-3x=5	3y+3x=9
x=-2	y=-5	2y=4x	-2y-x=10
x=7	y=6	2y-x=2	y+2x=8
x=1	y=2	3y-2x=21	3y+x=-3
x=-6	y=-2	y+3=x	3y+2x=-6
x=3	y=7	2y-3x=-16	-2y=x-12

Group E	Group F
$y = \frac{(x-6)^2}{2} - 7$	$y = \frac{(x+5)^2}{2} - 8$
$y = \frac{(x+4)^2}{2} + 1$	$y = \frac{(x-4)^2}{2} + 2$
$y = \frac{(x-3)^2}{2} - 2$	$y = \frac{(x+3)^2}{2} - 1$
$y = \frac{(x+2)^2}{2} - 5$	$y = \frac{(x-2)^2}{2} + 7$

2. ASSIGNMENT
CHAPTER 1

1. Can the number 4^n, n being a natural number, end with the digit 0? Give reasons.
2. Given that HCF (306, 657) = 9, find LCM (306, 657).
3. If two positive integers a and b are written as $a = x^3 y^2$ and $b = xy^3$; x, y are prime numbers, then find the HCF (a, b).
4. If two positive integers p and q can be expressed as $p = ab^2$ and $q = a^3 b$; a, b being prime numbers, then find the LCM (p, q).
5. Find the largest number which divides 2053 and 967 and leaves a remainder of 5 and 7 respectively.
6. Two tankers contain 850 litres and 680 litres of kerosene oil respectively. Find the maximum capacity of a container which can measure the kerosene oil of both the tankers when used an exact number of times.
7. In a morning walk, three persons step off together. Their steps measure 80 cm, 85 cm and 90 cm respectively. What is the minimum distance each should walk so that all can cover the same distance in complete steps?
8. Find the least number which when divided by 12, 16, 24 and 36 leaves a remainder 7 in each case.
9. The length, breadth and height of a room are 825 cm, 675 cm and 450 cm respectively. Find the longest tape which can measure the three dimensions of the room exactly.
10. Prove that 3 is an irrational number.
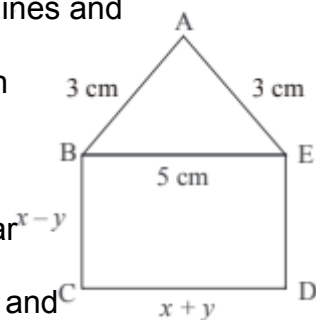11. Prove that $5 - \frac{3}{7}\sqrt{3}$ is an irrational number.

CHAPTER 2

1. Find the quadratic polynomial whose zeros are (5+2√3) and (5–2√3)

2. If one zero of $p(x) = 4x^2 - (8k^2 - 40k)x - 9$ is negative of the other, find values of k.
3. If α and $1/\alpha$ are zeros of $4x^2 - 17x + k - 4$, find the value of k.
4. What will be the number of zeros of the polynomials whose graphs are parallel to (i) y-axis (ii) x-axis?
5. If zeros of $x^2 - kx + 6$ are in the ratio 3 : 2, find the value of k.
6. If α and β are the zeros of the polynomial $x^2 - 5x + m$ such that $\alpha - \beta = 1$, find m.
7. If the sum of squares of zeros of the polynomial $x^2 - 8x + k$ is 40, find the value of k.
8. If α and β are zeros of the polynomial $t^2 - t - 4$, form a quadratic polynomial whose zeros are $1/\alpha$ and $1/\beta$.
9. If m and n are the zeros of the polynomial $3x^2 + 11x - 4$, find the value of m/n+n/m
10. Find a quadratic polynomial whose zeros are $\frac{3+\sqrt{5}}{5}$ and $\frac{3-\sqrt{5}}{5}$
11. If α and β are zeroes of $x^2 + 7x + 12$, then find the value of $1/\alpha + 1/\beta - 2\alpha\beta$
12. Find the zeroes of the following quadratic polynomial and verify the relationship between the zeroes and the coefficients of the polynomial. i) $4\sqrt{3}x^2 + 5x - 2\sqrt{3}$

CHAPTER 3
1. Solve graphically the pair of linear equations $3x - 4y + 3 = 0$ and $3x + 4y - 21 = 0$
   Find the co-ordinates of vertices of triangular region formed by these lines and x-axis. Also calculate the area of this triangle.
2. Given the linear equation $2x + 3y - 12 = 0$, write another linear equation In these variables, such that. geometrical representation of the pair so formed is
   (i) Parallel Lines (ii) Coincident Lines
3. ABCDE is a pentagon with BE || CD and BC || DE, BC is perpendicular to CDIf the perimeter of ABCDE is 17 cm, find x and y.
4. Pinky scored 40 marks in a test getting 3 marks for each right answer and losing 1 mark for each wrong answer. Had 4 marks been awarded for each correct answer and 2 marks were deducted for each wrong answer, then pinky again would have scored 40 marks. How many questions were there in the test?
5. A two digit number is obtained by either multiplying sum of digits by 8 and adding 1 orby multiplying the difference of digits by 13 and adding 2. Find the number
6. Father's age is three times the sum of ages of his two children. After 5 years his Agewill be twice the sum of ages of two children. Find the age of the father.
7. Sunita has some ₹ 50 and ₹ 100 notes amounting to a total of ₹ 15,500. If the total number of notes is 200, then find how many notes of ₹ 50 and ₹100 each, she has.
8. A two-digit number is 4 more than 6 times the sum of its digit. If 18 is subtracted from the number, the digits are reversed. Find the number.
9. A man travels 600 km to his home partly by train and partly by bus. He takes 8 hours,if he travels 120 km by train and rest by bus. Further, it takes 20 minute longer, if he Travels 200 km by train and rest by bus. Find the speeds of the train and the bus.
10. A and B are two points 150 km apart on a highway. Two cars start with different speedsfrom A and B at same time. If they move in same direction, they meet in 15 hours. If they move in opposite direction, they meet in one hour. Find their speeds
11. The sum of the numerator and denominator of a fraction is 4 more than twice the numerator. If the numerator and denominator are increased by 3, they are in the ratio 2: 3. Determine the fraction.
12. 8 Women and 12 men can complete a work in 10 days while 6 women and 8 men cancomplete the same work in 14 days. Find the time taken by one woman alone and that one man alone to finish the work.
13. For what value of k, the following pair of linear equations has infinite number of Solutions: $kx + 3y = (2k + 1); 2(k + 1)x + 9y = (7k +1)$.

CHAPTER 4

1. Solve:
   (a) If $px^2 + qx + r = 0$ has equal roots then find the value of r..
   (b) The quadratic equation $x^2 - 5x - 6 = 0$ if expressed as $(x + p)(x + q) = 0$ then find the values of p and q .
   (c) Find the value of k for which the roots of quadratic equations $x^2 + 4x + k = 0$ arereal.
   (d) If roots of equation $4x^2 - 2x + c = 0$ are reciprocal of each other then find the value of c.
   (e) If in a quadratic equation $ax^2 + bx + c = 0$, value of a is zero then it become a _____ equation.
   (f) Find the roots of equation $3x^2 - 27 = 0$.
   (g) Find Discriminant of equation $2x^2 + \frac{5}{3}x - 2 = 0$.
   (h) Find the Sum of roots of equation $8x^2 + 2x - 3 = 0$
   (i) Write a quadratic equation with roots a and b.
   (j) The product of roots of $x^2 + 8x = 0$ is _____
   (k) If the quadratic equation $Px^2 - 2\sqrt{5} Px + 15 = 0$ has two equal roots then find the value of P.
   (l) If x = 2/3 and x = – 3 are roots of the quadratic equation $ax^2 + 7x + b = 0$. Find thevalue of a and b.
   (m) Find value of p for which the product of roots of the quadratic equation $px^2 + 6x + 4p = 0$ is equal to the sum of the roots.
   (n) The sides of two squares are x cm and (x + 4) cm. The sum of their areas is 656cm^2 . Find the length of sides of these two squares.
   (o). Find K if the difference of roots of the quadratic equation $x^2 - 5x + (3k - 3) = 0$ is 11.

2.   A train travels at a certain average speed of 54 km and then travels a distance of 63 km at an average speed of 6 km/hr more than the first speed. If it takes 3 hours to complete the total journey, what is its first speed?

3.   A natural number, when increased by 12, equals 160 times its reciprocal. Find the number.

4.   A thief runs with a uniform speed of 100 m/minutes. After one minute a policeman runs after the thief to catch him. He goes with a speed of 10 m/minute in the first minute and increases his speed by 10 m/minute every succeeding minute. After how many minutes will the policemen catch the thief?

5.   Two water taps together can fill a tank in 6 hours. The tap of larger diameter takes 9 hours less than the smaller one to fill the tank separately. Find the time in which each tap can separately fill the tank.

6.   In the centre of a rectangular lawn of dimensions 50 m × 40 m, a rectangular pond has to be constructed, so that the area of the grass surrounding the pond would be 1184 m^2. Find the length and breadth of the pond.

7.   The speed of a boat in still water is 15 km/hr. It can go 30 km upstream and return downstream to the original point in 4 hrs 30 minutes. Find the speed of the stream.

8.   Sum of areas of two squares is 400 cm^2. If the difference of their perimeter is 16 cm. Find the side of each square.

9.   The area of an isosceles triangle is 60 cm^2. The length of equal sides is 13 cm find the length of its base.

10. The denominator of a fraction is one more than twice the numerator. If the sum of the fraction and its reciprocal is $2\frac{16}{21}$. Find the fraction.

13. A girl is twice as old as her sister. Four years hence, the product of their ages (in years) will be 160. Find their present ages.

3. ART INTEGRATION PROJECT

i) Collect data on the following parameters In summer vacations under the following heads.

PARAMETERS	ANDAMAN ISLANDS	NICOBAR ISLANDS	LAKSHDWEEP ISLANDS	DELHI	
NUMBER OF ISLANDS				-(not to be included)	Find the LCM and HCF of the numbers.
EXTENT AREA					To find the median rainfall in each state once it is done in class
COORDINATES WITH RESPECT TO LONGITUDE AND LATITUDE					Paste the physical map and mark the coordinates.(E/W, N/S)
LOCATION (DISTANCE FROM EQUATOR)					Find distance formula using the coordinates, once the chapter is done in class.
MAXIMUM TEMPERATURE IN 2023					Calculate range of each state using Max and min temperature.
MINIMUM TEMPERATURE IN 2023					
AIR QUALITY INDEX IN MONTH OF MAY 2024 (MIN, MAX)					Calculate range of air quality index of each state .

AVERAGE RAINFALL (MM) IN MONTH OF JUNE 2024 IN 4 WEEKS(4 VALUES EACH)					To find the mean rainfall in each state once it is done in class
NUMBER OF TOURIST FROM OCTOBER 2023 TO MARCH 2024 (6 VALUES)					Find the modal value of each state using the data values once the chapter is done in class.

ARTIFICIAL INTELLIGENCE

NOTE:
- **All the activities are to be placed inside a (punched) file.**
- **Make an attractive first page (with your name, class, section, subject) for your file using suitable pictures related to AI.**
- **Follow the instructions carefully.**

Do the following Portfolio activities on coloured (ruled/plain) A4 size sheets:

1. Use the following gamified tools and paste the screenshots on A4 size sheet. Also, write the AI Domain on which the game is based upon along with your observation about the game in 30-40 words.
   a. https://artsexperiments.withgoogle.com/impactfilter/
   b. https://www.autodraw.com/
   c. https://www.wordtune.com/
2. Design a Poster on the topic: "Applications of AI". Use the software https://www.canva.com/ to design your poster online and paste the printout of your poster.
3. Click on the link https://chat.kuki.ai/createaccount (login using your personal Gmail account) and hold a conversation with the smartbot on your favorite topic. Paste the screenshot of your conversation and write your experience in about 60-80 words (Include information like How was the interaction with the chatbot?

Did the chat feel like talking to a human or a robot? Do you feel that the chatbot has a certain personality?, etc.)

4. Explore the Teachable machine model https://teachablemachine.withgoogle.com/ to demonstrate Supervised Learning. Create a project of your choice using your original images. Some project ideas are: Mask Detection, Leaf Detection (Dried or Fresh), etc.

5. Explore the "AI for Ocean" experiment (Based on SDGs) using the link: https://code.org/oceans. Write a description about the experiment in 70-100 words (Include the aspects like Machine learning-how it works, Importance of data, pattern recognition, etc.) Paste the certificate generated at the end in your file.

COMPUTER APPLICATIONS

Do the following HTML Programs:

1. Create a webpage including an ordered list of five famous monuments of India. Also, insert relevant pictures in your webpage. Apply suitable formatting wherever required.

2. Design the homepage of your school's website. Include relevant links, pictures, text, etc.

3. Watch the video https://youtu.be/BRBckLRy4Ko?feature=shared and Create the following List in HTML:

Common Ingredients of Breakfast:

Bread
    A baked food made of flour.
Coffee
    A drink made from roasted coffee beans.
Tea
    Tea is an aromatic beverage prepared by pouring hot or boiling water over cured or fresh tea leaves

SOCIAL SCIENCE

I) PROJECT WORK: Carry out Research and prepare a **'Project file' on ANY ONE of the topics mentioned below:**

1) Consumer awareness(Economics)
2) A Social issue(Political Science)(Ref lesson: Gender, Religion and Caste)
3) Sustainable development / Land and water resources   (Geography)

Keep the following points in mind:

1. Write the name of the project (project title), your name and class clearly on the first page of the project;
2. The learning outcomes must be clearly defined in the beginning of the file;
3. Try to integrate art(through cartoons, maps pictures, tables, concept maps etc.) to make the project interesting and engaging;
4. Clearly mention the innovative ideas generated in the process of project making, life skills and values you imbibe through the project in a paragraph towards the end;
5. The bibliography (all references) must be clearly stated at the end;
6. Leave the last page for viva questions.
7. 15 to 20 pages is the ideal length of the file.

II) Social Science Portfolio:
Create a portfolio file and add the following to it:
1) HISTORY:
Create a picture presentation (maximum five sides) on any one of the following:
1) The concept of Satyagraha
2) Non Cooperation movement
3) Salt Satyagraha and Civil Disobedience Movement
4) The contribution of Alluri Sitaram Raju
5) The Jallianwala Bagh incident and its impact

2) **Political Science**
On a coloured sheet of paper, create a mind map on **'Forms of power sharing in modern democracies'**

3) **Geography**
1. Show the distribution of major soils found in India, in a political map of India. Use different colours to show different soils.
2. What are the reasons for forest depletion in india, elaborate these points with pictures from various sources   (magazines, newspaper, internet etc)

4) ECONOMICS
(To be done in portfolio file)
A) Make a poster on unequal distribution of income.
B) Do the following questions:
- National development of a country depends on availability of public facilities". How?
- "Money cannot buy all the goods and services that one needs to live well" Do you agree with this statement? Justify your answer

with any three suitable arguments.
- Sunita, a 25 years old woman lived in a village. Her height is
1.45 m and weight is 36 kg. While Nisha of the same age and height
weighs 48 kg. What can be said about their nutritional condition.

ART INTEGRATION
HISTORY
Group 1- Make a brochure of places of tourist and historical interest (esp. places like Cellular Jail) found in Andaman Nicobar Islands, Lakshadweep Islands and Delhi .
Group 2- Prepare two posters on A3 size sheet on the festivals of Andaman Nicobar Islands, Lakshadweep Islands and Delhi
Group 3- Prepare map of the outline of Delhi (with its neighboring States) and Andaman Nicobar Islands and Lakshadweep Islands (naming the different island groups) in 'Mosaic' along with a brief write up of its history and struggle (15 to 20 lines) on A3 size sheet (two students prepare maps of Delhi can the rest prepare maps of Andaman Nicobar Islands, Lakshadweep Islands and Delhi (use beads, colourful stones, colourful shells and other material)
Group 4- Watch the video and prepare a PPT/Picture presentation comparing the history and culture of Andaman Nicobar Islands, Lakshadweep Islands and Delhi of 15-20 slides covering aspects like history,food, language, rituals of marriage, birth etc (the entire group prepares the PPT and share it with each other)

GEOGRAPHY
Group 5/6 - Prepare a digital scrap file where you can show your comparative study, of Andaman Nicobar Islands, Lakshadweep Islands
and New Delhi, on the following basis:
1. Modes of transport used, their frequency of operations, and population pressure on them, how do they impact the immediate environment.
2. Industries, agrobased or mineral based, large or small, private, or public, out put, their market.
3. Agriculture practices, use of fertilizer, irrigation technology, types of crops, mechanised or subsistence.
Support your work with maps, graphs, pictures.
It should be attractive and original. Serving the purpose of understanding these regions.

ECONOMICS
Group 7- Prepare a magazine comparing the rate of development in
Andaman Nicobar Islands, Lakshadweep Islands and Delhi focusing on important parameters of development.
- Per- capita income
- Life expectancy of people
- Infant mortality rate
-Education level
- No. of ration shops (Public Distribution System)

-Infrastructural development
-Any other aspect

Use graphs, pie diagrams, write ups in between to prove your points.
Refer to Chapter 1 DEVELOPMENT of your NCERT book.
Any creative idea can also be used.

RUBRICS:
CREATIVITY: 1 mark
PRESENTATION: 2 marks
CONTENT:1 mark
TIMELY SUBMISSION: 1 mark

Group 8- Prepare a scrapbook on Delhi, Andaman Nicobar Islands and Lakshadweep
Islands based on the following
information
-Type of sector dominating- primary, secondary or tertiary sector
-Contribution of each sector to GDP
-Major industries running
-Any other topics

Refer to Chapter 2 SECTORS OF INDIAN ECONOMY of your NCERT book
Use infographic data, bar diagrams, write ups, collage etc.
Any creative idea can also be used.

RUBRICS:
CREATIVITY: 1 mark
PRESENTATION: 2 marks
CONTENT:1 mark
TIMELY SUBMISSION: 1 mark

हिंदी

१.देश की आज़ादी के आंदोलन में भाग लेने वाले दो स्वतंत्रता सेनानियों के नाम , घटना का वर्णन एवं उनकी भूमिका की जानकारी देते परियोजना कार्य (File में) आकर्षक तरीके से चित्र सहित कीजिए।   (१० अंक)

२. विज्ञापन निर्माण -'शिक्षा' विषय से सम्बंधित विज्ञापन बनाइए ।

३.'तीसरी कसम के शिल्पकार''शेलेन्द्र' पाठ को पढ़कर मुख्य पात्रों की विशेषताएँ लिखिए |(रंगीन A4 पृष्ठ का
   प्रयोग कीजिए |)

४.'तोप ' (कविता) से संबंधित जानकारी एकत्रित कीजिए और चित्र सहित कविता का केन्द्रीय भाव अपने शब्दों
   में प्रस्तुत कीजिए |

५. द्वितीय इकाई परीक्षा के पाठ्यक्रम को दोहराइए।

<u>ENGLISH</u>

 I) Let's embark on a creative odyssey.

ART INTEGRATED PROJECT IN ENGLISH LANGUAGE - GROUP ACTIVITY

As per CBSE guidelines, you all must participate in art integrated projects to hone your creative, imaginative and aesthetic skills and promote open-mindedness, self-expression and logical reasoning. So, gear up and explore your amazing creative selves.

It's time to familiarize ourselves with the culture and traditions of the paired states i.e. Lakshadweep and Andaman and Nicobar Islands.

Groupwise activities have been listed below. The group leaders would divide the work amongst the group members to ensure fair work distribution and smooth execution.

Group 1

Task 1- Explore the pristine beauty of Lakshadweep and other bewitching features by reading blogs, watching documentaries and **design a creative wish list with pictures and descriptions** of the places you would like to visit. Also, **write a letter to your pen pal/or an e-mail** staying in Lakshadweep apprising him/her about the places of tourist attraction and heritage sites worth visiting in Delhi.

Task 2- While travelling to Lakshadweep on a vacation, you happened to meet a co-passenger who was a native to Lakshadweep. You were pained to know that the islands are under the threat of beach pollution mainly from plastic. **Develop a conversation** highlighting how you both can control plastic pollution in your respective states. Display your work in the form of a comic strip.

Group 2

Task 1- Ecotourism is eco-friendly tourism responsible for travel to green areas without impacting the local community and environment. Submit **a pictorial presentation** (with captions and description) on ecotourism in Andaman and Nicobar islands and Delhi. Also, **design a logo with tagline** (manual/using digital tools) to promote tourism in both the places.

Task 2- While travelling to Lakshadweep on a vacation, you happened to meet a co-passenger who was a native to Lakshadweep. You were pained to know that the islands are under the threat of beach pollution mainly from plastic. **Develop a conversation** highlighting how you both can control plastic pollution in your respective states. Display your work in the form of a comic strip.

Group 3

Task 1- Research on the indigenous tribes/ aborginies of Andaman and Nicobar islands and Delhi. **Create an enlightening blog** sharing your findings and emphasising on the importance of preserving such tribes for a truly inclusive India.

Task 2- Imagine you are a folklorist visiting the Andaman Nicobar Islands/Lakshadweep to collect stories and legends. Choose any one unique folk story or legend from the places that has been passed down through generations and present in the form of **a fascinating comic strip.** Use vivid and descriptive language/eye catching pictures to transport your readers to this destination.

Group 4

Task 1-

"Clothes make a statement. Costumes tell a story."

Explore the costumes worn by people residing in Delhi and Lakshadweep and make a comparative analysis. **Design a clothing catalogue** incorporating your findings with appropriate pictures and descriptions. **Design any costume of your choice**(using fabric,newspapers etc.) worn by the people of Lakshadweep innovatively(to be included on the front/first page of the clothing catalogue)

Task 2-Andaman and Nicobar islands is a fusion of Indian culture. This is reflected in the food and cuisine of the local people too. Being a renowned food blogger based in Delhi, **create a tantalizing blog** describing the different dishes you would like to try during your stay in Andaman.

Group 5

Task 1- Andaman and Nicobar islands have become 'India's first Swachh Sujal Pradesh' but there is a long way to go for Delhi to achieve this milestone. Imagine yourself to be a Delhi based environmentalist. You and your team got this opportunity to interview Ms Dulari Kujur from North and Middle Andaman who was conferred with Swachh Sujal Shakti Samman 2023. **Draft a questionnaire and record the interview** asking her about the strategies she followed to make her mission a success. (Submit the script too)

Task 2- Write a letter to your pen pal/or an e-mail staying in Andaman and Nicobar islands apprising him/her about the places of tourist attraction and heritage sites worth visiting in Delhi.

Group 6

Task 1- Cellular jail in Andaman and Nicobar Islands and National War memorial in Delhi represent the gratitude of a nation to its bravehearts who sacrificed their lives for their country's glorious future. **Compose a poem/ rap song or prepare a skit** stressing upon their importance in our country's set up.

Task 2- Explore the mesmerising beauty of Andaman and Nicobar islands and other bewitching features by reading blogs, watching documentaries and **design a creative wish list** with pictures and descriptions of the places(historical/of national importance/heritage sites/ other sight-seeing places/ water sports) you would like to visit.

Group 7

Task 1- Cellular jail in Andaman and Nicobar Islands and National War memorial in Delhi represent the gratitude of a nation to its bravehearts who sacrificed their lives for their country's glorious future. **Compose a poem/ rap song or prepare a skit** stressing upon their importance in our country's set up.

Task 2- You are planning to visit the Andaman and Nicobar Islands during your vacation. Your best friend's birthday falls in the next month and you want to buy her a unique present. She seems to have a taste for beads and shells. Explore the arts and crafts of the islands and **write a diary entry describing the aesthetic present you have picked for your friend** and why you think she will like it. Paste pictures too.

II) Revision Worksheet on Reading, Grammar and Literature (to be done in Grammar register)

READING COMPREHENSION

Passage 1

Read the passage given below :

(1) If you're like most kids, you may love snow. Not only can it get you out of school, but it's also fun to play with. Who doesn't love to sled and build snowmen ? Snow can also be dangerous, too. You may have heard your parents talk about how difficult it can be to drive in snow. Car accidents aren't the only dangers created by snow. If you're ever skiing in the mountains, you'll want to be aware of avalanches. An avalanche is a sudden flow of snow down a slope, such as a mountain. The amount of snow in an avalanche will vary based on many things, but it can be such a huge pile that it can bury the bottom of a slope in dozens of feet of snow.

(2) Avalanches can be caused by many things. Some of them are natural. For example, new snow or rain can cause built up snow to loosen and fall down the side of a mountain. Earthquakes and the movement of animals have also been known to cause avalanches. Artificial triggers can also cause avalanches. For example, snowmobiles, skiers, gunshots and explosives have all been known to cause avalanches. Avalanches usually occur during the winter and spring, when snowfall is greatest. As they are dangerous to any living beings in their path, avalanches have destroyed forests, roads, railroads and even entire towns.

(3) Warning signs exist that allow experts to predict – and often prevent – avalanches from occurring. When over a foot of fresh snow falls, experts know to be on the lookout for avalanches. Explosives can be used in places with massive snow build-ups to trigger smaller avalanches that don't pose a danger to persons or property. When deadly avalanches do occur, the moving snow can quickly reach over 80 miles per hour. Skiers caught in such avalanches can be buried under dozens of feet of snow. While it's possible to dig out of such avalanches, not all are able to escape.

(4) If you get tossed about by an avalanche and find yourself buried under many feet of snow, you might not have a true sense of which way is up and which way is down. Some avalanche victims have tried to dig their way out, only to find that they were upside down and digging themselves farther under the snow rather than to the top ! Experts suggest that people caught in an avalanche try to "swim" to the top of the moving snow to stay close to the surface. Once the avalanche stops, do your best to dig around you to create a space for air, so you can breathe easier. Then, do your best to figure out which way is up and dig in that direction to reach the surface and signal rescuers.

i)Complete the sentence by choosing an appropriate option :
Avalanche can be caused by _____.
(a) new snow or rain (b) heavy winds (c) high altitude (d) global warming

(ii) Comment on warning signs exist which allows experts to predict avalanches in two sentences.

(iii) Mention two reasons which destroyed the natural scenery.

(iv) Select the option that conveys opposite of 'trigger' :

(a) provoke (b) spark (c) cause (d) prevent

(v) The writer will agree with the given statement based on last paragraph –
(a) People caught in the Avalanche can try to swim to the top.
(b) Put on an oxygen mask.
(c) Digging is not possible.
(d) Should not come close to the surface.

(vi) Select the option that corresponds to the following relation below :
You may not have an idea of which way is up and which way is down.
(a) The crowd will gather at Gate No. 1 and disperse from Gate No. 2.
(b) Due to the torrential rain, there was heavy flooding.
(c) The guest felt uneasy and uncomfortable watching the child's performance.
(d) The more the effort, the bigger the gain.

(vii) The major causes which do not trigger avalanche :
 (a) Earthquakes (b) Snow fall (c) Heavy Rain (d) Plastic waste

(viii) Explosives can be used in places _____. (complete the sentence)

(ix) Select the most suitable title for the above passage : (a) Avalanches (b) Adventure with Snow (c) Ice Games (d) Calamity

 Passage 2
Read the passage given below :
 (1)Increasing traffic congestion every year is causing increasing air pollution, wasting time and productivity and diverse respiratory diseases. Moreover, the cost of solving or reducing traffic congestion is enormous. However, neglecting the traffic jam problem would increase the social problems among citizens.
(2) The number of vehicles has increased considerably in the city in the past five years. Due to this increase, the city roads witness frequent traffic congestions, but above all, the vehicles emitting pollutants are affecting the environment adversely.
 (3) The Capital's vehicular population saw an addition of more than five lakh vehicles last year, registering an increase of over 4%, according to the Delhi Economic Survey 2020-21.
 (4) In spite of the largest road network, through metro and bus services in major cities the transport system is not being able to keep pace with the growing demand, consequently, more and more people use their private vehicles, leading to increased congestion on the roads. In spite of these challenges, people in India prefer road travel over air and other means of travel.
(5) Citizens of Delhi/NCR have, time and again, pondered over the possibilities of how to reduce the traffic congestion in the city, especially during the peak hours. People should use public transport, the government must increase the facilities of public transport, people should avoid the unnecessary collection of vehicles and should use carpool and vehicle sharing.
(6) What is required is proper implementation of corrective measures by citizens to get an organized traffic management system.

i) Infer one reason for the following based on information in paragraph 1.
Reducing traffic congestion is not easy.

(ii) Select the appropriate option to complete the following sentence. The reasons for increased traffic congestion are _____.
1. use of private vehicles
2. increase in demand for cars
3. inability to keep pace with population control
4. travelling by public transport
5. emission by pollutants
(a) 4, 5
 (b) 1, 5
(c) 1, 2
(d) 2, 3

(iii) Complete the following analogy correctly with a word / phrase from the paragraph 5. organized : chaotic : : lowest : _____ Clue : Just as organized is an antonym of chaotic, lowest is an antonym of _____.

 (iv) The vehicles emit pollutants which affect _____ badly.

(v) Complete the following sentence. Use of public transport will reduce _____.
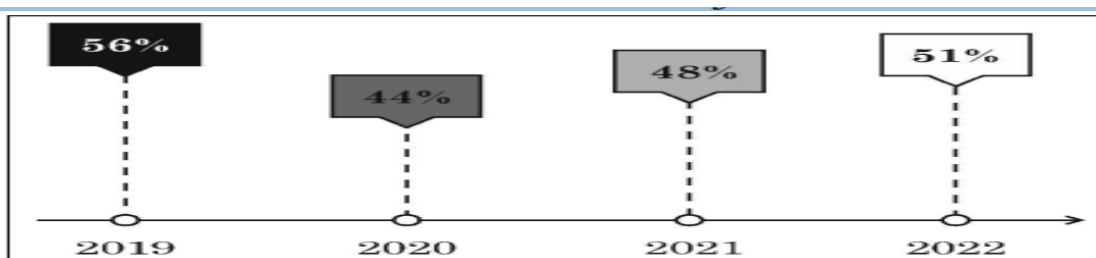
(vi) Select the correct option which states the methods of reducing traffic congestion.
1. start car pooling
2. add electric buses
 3. increase in public modes of transport
4. increase car collection points
5. Increase taxation
(a) 1, 4, 5   (b) 3, 5   (c) 2, 3 ,4   (d) 1, 3

(vii) Give the reasons for increase in vehicular congestion.

viii) Analyse the status of traffic between the years 2019-2022.

ix) Fill in the blank by selecting the correct option. There are _____ consequences of increasing vehicular congestion. (a) beneficial (b) adverse (c) implicit (d) explicit

(x) Substitute the underlined word with ONE WORD similar in meaning in the following sentence.
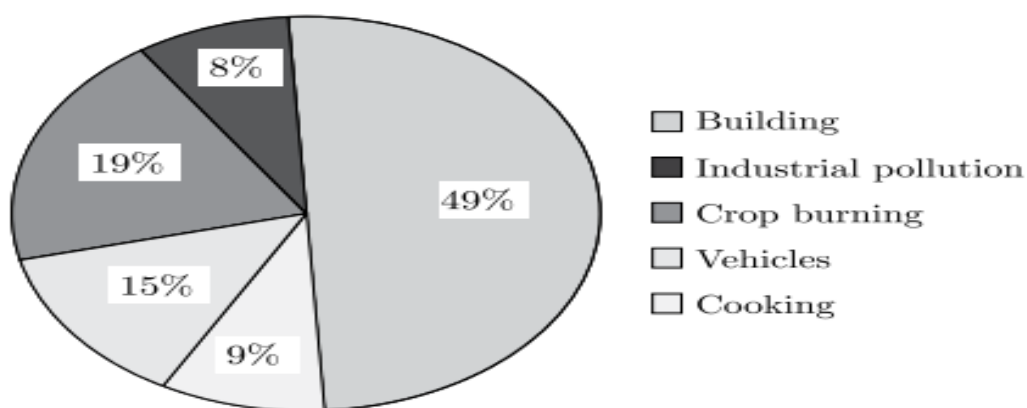Citizens of Delhi/NCR have time and time again pondered over the possibilities of how to reduce traffic congestion.

Passage 3

1. Air pollution affects health seriously. Of the most polluted 30 cities in the world, 21 were in India in 2019. As per a 2016 study, at least 140 million Indians breathe air that is 10 times or more over the WHO safe limit and 13 of the world's 20 cities with the highest annual levels of air pollution are in India.

2. Air pollution kills 2 million Indians prematurely every year. Emissions come from vehicles and industry, whereas in rural areas, much of the pollution stems from biomass burning for cooking and keeping warm. In autumn and winter months, large scale crop residue burning in farms — a cheaper alternative to mechanical tilling — is a major source of smoke, smog and particulate pollution.

3. India has a low per capita emissions of greenhouse gases but the country as a whole is the third largest greenhouse gas producer after China and the United States. A 2013 study on non-smokers has found that have 30% have weaker lung function than Europeans. 4. The Air (Prevention and Control of Pollution) Act, 1981 has failed to reduce or regulate pollution because of poor enforcement of the rules

Sources of Air Pollution

5. In 2015, GOI, together with IIT Kanpur launched the National Air Quality Index. In 2019, India launched 'The National Clean Air Programme' with tentative national target of 20%¬30% reduction in PM2.5 and PM10 concentrations by 2024, considering 2017 as the base year for comparison. It will be rolled out in 102 cities that are considered to have air quality worse than the National Ambient Air Quality Standards.

6. There are other initiatives such as a 1,600 kilometre-long and 5 kilometre-wide The Great Green Wall of Aravalli-an ecological corridor along Aravalli range from Gujarat to Shivalik Hills with the planting of 1.35 billion native trees over 10 years to combat the pollution.

7. In 2019, IIT Bombay, in partnership with the McKelvey School of Engineering (USA), launched the Aerosol and Air Quality Research Facility to study air pollution in India.

Answer the following questions, based on the passage above.

i. Complete the following analogy appropriately, based on your understanding of paragraphs 1 and 2.
 The fact- 'Of the most polluted 30 cities in the world, 21 were in India in 2019' is comparable with urban Indians living in gas-chambers and the air that we breathe can be compared to a mixture of ....

 ii. Fill in the blanks with the appropriate option from those given in brackets, based on your understanding of paragraph 2.

Air quality in India has worsened so much in the last few years that is contributing to the premature deaths of 2 million Indians every year is .... (a fact/ opinion) because unfortunately, it is .... (a/an subjective judgement/ objective detail) that proves that air pollution can be fatal to human health.

iii. Toxic air emissions are not just rampantly widespread in the cities but are equally pervasive in rural areas threatening the health of people. Justify the following, in about 40 words.

iv. List any two examples of indoor or domestic pollution as mentioned in the passage.

v. Study the statement.
Mechanical tilling is an unpopular method to remove stubs from the fields. State any one inference that can be drawn from this.

vi. Select the options that correctly display what 'tilling' signifies. (Reference-Paragraph 2) 1

| (i) | (ii) | (iii) | (iv) | (v) |

(a) Only (i)   (b) Only (ii)
(c) (ii), (iii) and (iv)   (d) (i) and (v)

vii. Mention a few steps taken by the government to tackle the problem of air pollution and why some of the efforts fail to make a mark. (Answer in about 40 words)

viii. Select the correct option to complete the following sentence. In 2019, India Launched. The National Clean Air Programme with tentative national target of _____.
1. 20%- 30% reduction in PM 2.5.
2. Study air pollution in 102 cities that are worst affected.
3. 20%-30% reduction in PM 10.
4. Take 2017 as the base year.

WORKSHEET ON GRAMMAR

(i) Fill in the blank by choosing the correct option to complete the online update. The burglar _____ the house when the owners were away.
        (a) broke up (b) broke away (c) broke into (d) broke down

ii) Select the correct option to fill in the blank for the given line from the weather report. The report read, "there _____ heavy rainfall due to western disturbances over the Arabian Sea".
(a) should be (b) must be (c) ought to be (d) will be

iii) Select the option that identifies the error and supplies the correction for the following line from a news report. :
The traffic situation in the city calls out immediate intervention by the traffic police.

Option No.	Error	Correction
a	traffic	traffics
b	out	for
c	immediate	later
d	by	with

iv) Fill in the blank by using the correct form of the word in the bracket for the given portion of the letter :
 Subject : Complaint about Poor Service. Dear Sir, I _____ (will) like to draw your attention to the poor service provided by your technical team.

v)) Identify the error in the given sentence and supply the correction : The new machines are used to identify the differences among two types of grains.
Use the given format for your response :

Error	Correction

vi) Identify the error in the given sentence and supply the correction. At the age of seventeen, Galileo know that he had discovered an important law- a law of a pendulum. Use the given format for your response.

Error	Correction

vii) Identify the error in the given sentence and supply the correction. You have a large number of shirts. You can not buy any more. Use the given format for your response.

Error	Correction

viii) Select the option that identifies the error and supplies the correction for the following line : The people of India show remarkable unity at the time of Kargil Conflict.

Option No.	Error	Correction
(a)	time	times
(b)	conflict	conflicts
(c)	show	showed
(d)	The	A

ix) Identify the error and supply the correction, for the following sentence : Every tree have a single woody stem called a trunk which supports a mass of branches carrying leaves. Use the given format for your response.

Error	Correction

x) Select the correct option to fill in the blank for the given line. The swimmer was tired but he _____ reach the shore before he collapsed.
 (a) will (b) could (c) may (d) must

xi) Fill in the blank by using the correct form of the word in the bracket. Chris, in addition to his brother Zack, _____ (play) hockey on Saturday.

xii) Complete the given sentence, by filling in the blank with the correct option :
They met you at night after you _____ your work.
(a) had finished (b) have finished
(c) finished (d) will finish

xiii) Select the option that identifies the error and supplies the correction for the following line : A little political thinkers think that liberty and equality can't go together.

Option No.	Error	Correction
(a)	can't	couldn't
(b)	think	thinks
(c)	A little	Some
(d)	go	goes

xiv) Complete the given sentence, by filling in the blank with the correct option : 1
Had the police not reached there in time, the bandits _____ him.
(a) did have killed
(b) will have killed
(c) would kill
(d) would have killed

xv) Fill in the blank by choosing the correct option to complete the sentence. 1
If only he _____ us truth in the first place, things would not have gone wrong.
(a) has told (b) would have told
(c) had told (d) should have told

xvi)Identify the error in the given sentence and supply the correction. 1
There are a little countries in the world where the population is not growing fast.
Use the given format for your response.

Error	Correction

xvii) Fill in the blank by using the correct form of the word in the bracket.
 The Sushi and the pasta _____ (look) delicious.

xviii) Identify the error in the given sentence and supply the correction.

Have you got some proof that he committed the crime? Use the given format for your response.

Error	Correction

xix) Select the option that identifies the error and supplies the correction for the following line : A pleasure in being outdoors is fundamental for human happiness.

Option No.	Error	Correction
(a)	being	be
(b)	A	The
(c)	is	are
(d)	in	at

xx) Complete the given sentence, by filling in the blank with the correct option : 1
When he died, Ramanujan _____ behind 3 notebooks.
(a) was leaving   (b) had left
(c) left   (d) leaves

LITERATURE
Based on the given context, **write a diary entry**, as the narrator(Hari Singh), on what you experienced and the possible reason for it.
"I should have been able to jump into one of the carriages, but I hesitated— for some reason I can't explain— and I lost the chance to get away." (The Thief's Story)

MUSIC – HINDUSTANI (VOCAL)

1 Descriptionand practice of the Ragas Bhupali and Khamaz with
   Taan and Aalap.

2 Description the Tala- Chautal, Jhanptaal, and Teentaal with single and double laykari.

3. Learn a folk song of Sikkim and prepare a video of your performance at   home.

4. Description and Practice of Ragas taught online.

5. Tick mark (√) the correct answer:
   (a) correct the arrangement of Vibhagas in Sultal:

   (i)   12/345/67/8910
   (ii)   12/34/56/78/910
   (iii)   123/45/67/8910
   (iv)   123/34/5/67/8910

(b) In which Raga Ma and Ni are not used:
   (a) Kafi
   (b) Desh
   (c) Khamaj
   (d) Bhupali

(c) Aroh of Raga Des is

   (i)   Sa Re Ma Pa Ni S'a
   (ii)   Sa Re Ga Ma Pa Dha Ni S'a
   (iii)   Sa Re Ga Ma Pa Dha S'a
   (iv)   Sa Re Ga Ma Pa Dha Ni S'a

(d) In Tala Ektal, Khali falls on the beat:

   (i)   1 and 7
   (ii)   3 and 7
   (iii)   5 and 7
   (iv)   3 and 9