



JINDAL ADARSH GRAMYA BHARTI

HR. SEC. SCHOOL, KIRODIMAL

NAGAR

SUMMER VACATION HOMEWORK -

INTELLECTUAL

PERSISTENCE

2026

EXCELLENCE

CLASS - X

CBSE

JINDAL ADARSH GRAMYA BHARTI
HR. SEC. SCHOOL, KIRODIMAL NAGAR



SUMMER VACATION ASSIGNMENT



CLASS - X

SUBJECT - ENGLISH



1



Do the **Reading Section, Writing Section, and Grammar Section** of the last five years Sample Question Papers (2021, 2022, 2023, 2024, 2025) issued by CBSE for English Language and Literature in your English notebook.

FIRST FLIGHT

2



Recreate the story "**A Letter to God**" in your own words by imagining yourself in the place of Lencho. You may take the liberty to modify the story according to your imagination instead of copying from the textbook.
(150 words) (To be done in notebook)

3



What is an autobiography? Study the autobiography of **Mr. Nelson Mandela** and write the prominent features of his autobiography. Also write the lessons we can learn from it.
(100 words) (To be done on any sheet(s) available at home)

"EVERY PAGE YOU READ, EVERY WORD YOU WRITE,"
BRINGS YOU ONE STEP CLOSER TO **SUCCESS**."



SUBJECT - SANSKRIT

टिप्पणी - सभी प्रश्नों का उत्तर प्रोजेक्ट फ़ाइल में लिखना सुनिश्चित करें।

1. अधोलिखितश्लोकान् पठित्वा निर्देशानुसारं प्रश्नान् उत्तरत—

(क) दुर्वहमत्र जीवितं जातं प्रकृतिरेव शरणम्।

शुचि-पर्यावरणम्॥

महानगरमध्ये चलदनिशं कालायसचक्रम् ।

मनः शोषयत् तनुः पेषयद् भ्रमति सदा वक्रम्॥

दुर्दान्तैर्दशनैरमुना स्यान्नैव जनग्रसनम्।

प्रश्नाः

I. एकपदेन उत्तरत

(i) दुर्दान्तैः दशनैः किम् न स्यात्?

(ii) अत्र जीवितं कीदृशं जातम्?

II. पूर्णवाक्येन उत्तरत

कालायसचक्रम् महानगरमध्ये किम् करोति?

III. प्रदत्तविकल्पेभ्यो उचितम् उत्तरम् चित्वा लिखत

(i) 'अहर्निशम्' इति पदस्य पर्यायपदम् किम्?

(ii) 'दशनैः' इति पदस्य विशेषणपदं किम्?

(iii) 'सुकरम्' इति पदस्य विपरीतार्थकम् पदं किम्?

(iv) 'भ्रमति' इति क्रियापदस्य कर्तृपदम् किम्?

2. अधोलिखितकथनेषु स्थूलपदानि आधृत्य प्रश्ननिर्माणं क्रियताम् उत्तराणि

(i) प्रस्तरतले लतातरुगुल्माः पिष्टाः न भवन्तु।

(ii) मानवाय जीवनं कामये।

(iii) अस्मात् नगरात् बहुदूरम् माम् नय।

(iv) वायुमण्डलं दूषितं जातम्।

(v) वाष्पयानमाला ध्वानं वितरन्ती संधावति।

(vi) दुर्दान्तैः दशनैः जनग्रसनं न स्यात्।

(vii) एकान्ते कान्तारे क्षणम् अपि मे सञ्चरणम् स्यात्।

3. अधोलिखितश्लोकानाम् अन्वयानाम् समुचितपदानि चित्वा पूरयत-

(१) कज्जलमलिनं धूम मुञ्चति शतशकटीयानम्।

वाष्पयानमाला संधावति वितरन्ती ध्वानम्।।

यानानां पङ्क्तयो हनन्ताः कठिनं संसरणम्।

वाष्पयानमाला संधावति।

अन्वयः-शतशकटीयानम् (i)..... धूमं मुञ्चति। ध्वानं (ii) हि यानानां

(iii)..... पङ्क्त यः (iv)..... संसरणम्।

मञ्जूषा - | अनन्ताः, कठिन, वितरन्ती, कज्जलमलिनम् ।

4. अधोलिखितानि वाक्यानि घटनाक्रमानुसारेण योजयत -

(क) व्याघ्रः व्याघ्रमारी इयमिति मत्वा पलायितः।

(ख) प्रत्युत्पन्नमतिः सा शृगालं आक्षिपन्ती उवाच ।

(ग) जम्बुककृतोत्साहः व्याघ्रः पुनः काननम् आगच्छत्।

(घ) मार्गं सा एकं व्याघ्रम् अपश्यत्।

(ङ) व्याघ्रं दृष्ट्वा सा पुत्रौ ताडयन्ती उवाच-अधुना एकमेव व्याघ्रं विभज्य भुज्यताम्।

(च) बुद्धिमती पुत्रद्वयेन उपेता पितुर्गृहं प्रति चलिता।

(छ) 'त्वं व्याघ्रत्रयम् आनेतुं प्रतिज्ञाय एकमेव आनीतवान् ।

(ज) गलबद्धशृगालकः व्याघ्रः पुनः पलायितः ।

5. सधिं/सन्धिविच्छेदं वा कुरुत-

(क) पितुर्गृहम् = पितुः +

(ख) एकैकः = + एकः

(ग) अन्योऽपि = अन्यः +

(घ) इत्युक्त्वा =+ उक्त्वा

(ङ) यत्रास्ते = यत्र +

6. भवान् अरविन्दः। ग्रीष्मावकाशे भ्रमणाय स्वमित्रं प्रति लिखितम् इदं पत्रं मञ्जूषायां प्रदत्तैः उचितैः शब्दैः पूरयित्वा पुनः लिखतु।

आनन्दविहारः

नवदिल्लीतः

प्रिय मित्र (i).....

तिथिः

नमोनमः।

अत्र कुशलं (ii)। भवतः पत्रम् पठित्वा चित्तम् प्रासीदत्। अधुना (iii) अस्ति यत् अहं (iv)उत्तीर्णः अभवम्। आशास्ति त्वमपि उत्तमश्रेण्यां (v) भविष्यसि। अहं (vi)..... भवतां समीपम् आगन्तुम् इच्छामि। अहं (vii) सह ग्रीष्मावकाशं मसूरीनगरे यापयिष्यामि। तत्र हिमाच्छादिताः (viii)..... जनान् आकर्षयन्ति। अहमपि तत्र प्राकृतिकदृश्यस्य (ix) .. . कर्तुम् इच्छामि। गृहे माता-पित्रोः (x) मम प्रणामाः।

भवदीयं मित्रम्

अरविन्दः

मञ्जूषा- | मित्रैः, गौरव, प्रथमश्रेण्यां, ग्रीष्मावकाशे, उत्तीर्णः, पर्वतशृङ्खलाः, अवलोकनं, तत्रास्तु, समाचारः, चरणयोः |

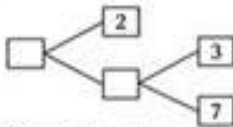
PERSISTENCE

EXCELLENCE

1 : Real Numbers

- HCF of 144 and 198 is [2020] ...[1M]
(a) 9 (b) 18
(c) 6 (d) 12
- 225 can be expressed as [2020] ...[1M]
(a) 5×3^2 (b) $5^2 \times 3$
(c) $5^2 \times 3^2$ (d) $5^3 \times 3$
- The total number of factors of a prime number is [2020] ...[1M]
(a) 1 (b) 0
(c) 2 (d) 3
- The HCF and the LCM of 12, 21, 15 respectively are [2020] ...[1M]
(a) 3, 140 (b) 12, 420
(c) 3, 420 (d) 420, 3
- HCF of 92 and 152 is [2021] ...[1M]
(a) 4 (b) 19
(c) 23 (d) 57
- HCF of two consecutive even numbers is [2021] ...[1M]
(a) 0 (b) 1
(c) 2 (d) 4
- The (HCF \times LCM) for the numbers 50 and 20 is [2021] ...[1M]
(a) 1000 (b) 50
(c) 100 (d) 500
- For which natural number, n , 6^n ends with digit zero? [2021] ...[1M]
(a) 6 (b) 5
(c) 0 (d) None
- The exponent of 5 in the prime factorisation of 3750 is [2021] ...[1M]
(a) 3 (b) 4
(c) 5 (d) 6
- What is the greatest possible speed at which a girl can walk 95 m and 171 m in an exact number of minutes? [2021] ...[1M]
(a) 17 m/min (b) 19 m/min
(c) 23 m/min (d) 13 m/min
- Three alarm clocks ring their alarms at regular intervals of 20 min, 25 min and 30 min respectively. If they first beep together at 12 noon, at what time will they beep again for the first time? [2021] ...[1M]
(a) 4 : 00 pm (b) 4 : 30 pm
(c) 5 : 00 pm (d) 5 : 30 pm
- The greatest number which when divides 1251, 9377 and 15628 leaves remainder 1, 2, and 3 respectively is [2021] ...[1M]
(a) 575 (b) 450
(c) 750 (d) 625
- If a and b are two coprime numbers, then a^3 and b^3 are [2021] ...[1M]
(a) Coprime (b) Not coprime
(c) Even (d) Odd
- If n is a natural number, then $2(5^n + 6^n)$ always ends with [2021] ...[1M]
(a) 1 (b) 4
(c) 3 (d) 2
- The LCM of two numbers is 2400. Which of the following CANNOT be their HCF? [2021] ...[1M]
(a) 300 (b) 400
(c) 500 (d) 600
- (HCF \times LCM) for the numbers 30 and 70 is [2023] ...[1M]
(a) 2100 (b) 21
(c) 210 (d) 70

- The number $(5 - 3\sqrt{5} + \sqrt{5})$ is [2023] ...[1M]
(a) an integer
(b) a rational number
(c) an irrational number
(d) a whole number
- The ratio of HCF to LCM of the least composite number and the least prime number is [2023] ...[1M]
(a) 1 : 2 (b) 2 : 1
(c) 1 : 1 (d) 1 : 3
- Complete the missing entries in the following factor tree: [2008] ...[1M]



- Find the (HCF \times LCM) for the numbers 100 and 190. [2009] ...[1M]
- What is the HCF of smallest prime number and the smallest composite number? [2018] ...[1M]
- Given that $\sqrt{2}$ is irrational, prove that $(5 + 3\sqrt{2})$ is an irrational number. [2018] ...[2M]
- Two numbers are in the ratio 2 : 3 and their LCM is 180. What is the HCF of these numbers? [2023] ...[2M]
- Prove that $3 + \sqrt{2}$ is an irrational number. [2009] ...[3M]
- Prove that $2 - 3\sqrt{3}$ is an irrational number. [2010] ...[3M]
- Find HCF and LCM of 404 and 96 and verify that HCF \times LCM = Product of the two given numbers. [2018] ...[3M]
- Prove that $\sqrt{2}$ is an irrational number. [2019] ...[3M]

- Given that $\sqrt{3}$ is an irrational number, show that $(5 + 2\sqrt{3})$ is an irrational number. [2020] ...[3M]

OR

An army contingent of 612 members is to march behind an army band of 48 members in a parade. The two groups are to march in the same number of columns. What is the maximum number of columns in which they can march? [2020] ...[3M]

- Prove that $\sqrt{3}$ is an irrational number. [2023] ...[3M]
- Khushi wants to organize her birthday party. Being health conscious, she decided to serve only fruits in her birthday party. She bought 36 apples and 60 bananas and decided to distribute fruits equally among all.



Based on the above information, answer the following questions :

- How many guests Khushi can invite at the most? [2023] ...[1M]
- How many apples and bananas will each guest get? [2023] ...[1M]
- (A) If Khushi decides to add 42 mangoes, how many guests Khushi can invite at the most? [2023] ...[2M]

OR

- If the cost of 1 dozen of bananas is ₹60, the cost of 1 apple is ₹15 and cost of 1 mango is ₹20, find the total amount spent on 60 bananas, 36 apples and 42 mangoes. [2023] ...[2M]



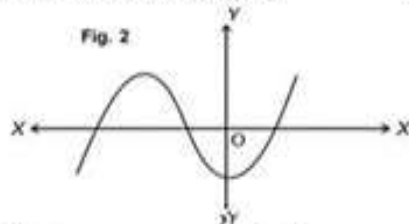
INSTRUCTIONS: Practice these questions on their respective Homework copy.

2 : Polynomials

- If $(x + a)$ is a factor of $2x^2 + 2ax + 5x + 10$, find a . [2008] ...{1M}
- If 1 is a zero of the polynomial $p(x) = ax^2 - 3(a - 1)x - 1$, then find the value of a . [2009] ...{1M}
- If α, β are the zeroes of a polynomial, such that $\alpha + \beta = 6$ and $\alpha\beta = 4$, then write the polynomial. [2010] ...{1M}
- If one zero of a quadratic polynomial $(kx^2 + 3x + k)$ is 2, then the value of k is [2020] ...{1M}

(a) $\frac{5}{6}$	(b) $-\frac{5}{6}$
(c) $\frac{6}{5}$	(d) $-\frac{6}{5}$

- The graph of a polynomial is shown in Fig. 2, then the number of its zeroes is [2020] ...{1M}



- | | |
|-------|-------|
| (a) 3 | (b) 1 |
| (c) 2 | (d) 4 |
- If one of the zeroes of the quadratic polynomial $x^2 + 3x + k$ is 2, then the value of k is [2020] ...{1M}

(a) 10	(b) -10
(c) -7	(d) -2
 - The quadratic polynomial, the sum of whose zeroes is -5 and their product is 6, is [2020] ...{1M}

(a) $x^2 + 5x + 6$	(b) $x^2 - 5x + 6$
(c) $x^2 + 5x - 6$	(d) $-x^2 + 5x + 6$

- Time taken by ball to reach maximum height is [2021] ...{1M}

(a) 2 sec.	(b) 4 sec.
(c) 1 sec.	(d) 2 min.

- Number of zeroes of the polynomial whose graph is given, is [2021] ...{1M}

(a) 1	(b) 2
(c) 0	(d) 3

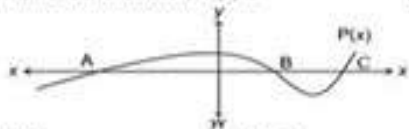
- Zeroes of the polynomial are [2021] ...{1M}

(a) 4	(b) -2, 4
(c) 2, 4	(d) 0, 4

- The graph of a polynomial $P(x)$ cuts the x -axis at 3 points and touches it at 2 other points. The number of zeroes of $P(x)$ is [2021] ...{1M}

(a) 1	(b) 2
(c) 3	(d) 5

- In figure, the graph of a polynomial $P(x)$ is shown. The number of zeroes of $P(x)$ is [2021] ...{1M}



- | | |
|-------|-------|
| (a) 1 | (b) 2 |
| (c) 3 | (d) 4 |
- If $x - 1$ is a factor of the polynomial $p(x) = x^3 + ax^2 + 2b$ and $a + b = 4$, then [2021] ...{1M}

(a) $a = 5, b = -1$	(b) $a = 9, b = -5$
(c) $a = 7, b = -3$	(d) $a = 3, b = 1$

- A quadratic polynomial having sum and product of its zeroes as 5 and 0 respectively, is [2021] ...{1M}

- | | |
|----------------|--------------------|
| (a) $x^2 + 5x$ | (b) $2x(x - 5)$ |
| (c) $5x^2 - 1$ | (d) $x^2 - 5x + 5$ |

- Zeroes of a quadratic polynomial $x^2 - 5x + 6$ are [2021] ...{1M}

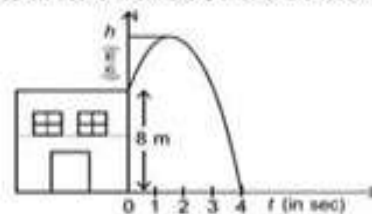
- | | |
|-----------|------------|
| (a) -5, 1 | (b) 5, 1 |
| (c) 2, 3 | (d) -2, -3 |

- The zeroes of quadratic polynomial $x^2 + 99x + 127$ are [2021] ...{1M}

- | |
|-----------------------------------|
| (a) Both negative |
| (b) Both positive |
| (c) One positive and one negative |
| (d) Reciprocal of each other |

Case Study Based Questions (Q.11 to Q.15) : Sukrit throws a ball upwards, from a rooftop which is 8 m high from ground level. The ball reaches to some maximum height and then returns and hit the ground. If height of the ball at time t (in sec) is represented by $h(t)$ m, then equation of its path is given as $h = -t^2 + 2t + 8$

Based on above information, answer the following:



- The maximum height achieved by ball is [2021] ...{1M}

(a) 7 m	(b) 8 m
(c) 9 m	(d) 10 m
- The polynomial represented by above graph is [2021] ...{1M}

(a) Linear polynomial	(b) Quadratic polynomial
(c) Constant polynomial	(d) Cubic polynomial

- A quadratic polynomial, the product and sum of whose zeroes are 5 and 8 respectively is [2021] ...{1M}

(a) $k[x^2 - 8x + 5]$	(b) $k[x^2 + 8x + 5]$
(c) $k[x^2 - 5x + 8]$	(d) $k[x^2 + 5x + 8]$

- If α are the zeroes of the quadratic polynomial $p(x) = x^2 - (k + 6)x + 2(2k - 1)$, then the value of k , if $\alpha + \beta = \frac{1}{2}\alpha\beta$, is [2021] ...{1M}

- | | | |
|--------|-------|-------|
| (a) -7 | (b) 7 | (d) 3 |
|--------|-------|-------|

- If $p(x) = x^2 + 5x + 6$, then $p(-2)$ is [2023] ...{1M}

- | | | |
|--------|-------|-------|
| (a) 20 | (b) 0 | (d) 8 |
|--------|-------|-------|

- A quadratic polynomial whose sum and product of zeroes are 2 and -1 respectively is [2023] ...{1M}

(a) $x^2 + 2x + 1$	(b) $x^2 - 2x - 1$
(c) $x^2 + 2x - 1$	(d) $x^2 - 2x + 1$

- If α, β are zeroes of the polynomial $x^2 - 1$, then the value of $(\alpha + \beta)$ is [2023] ...{1M}

- | | | |
|-------|-------|-------|
| (a) 2 | (b) 1 | (d) 0 |
|-------|-------|-------|

- If α, β are the zeroes of the polynomial $p(x) = 4x^2 - 3x - 7$, then $\left(\frac{1}{\alpha} + \frac{1}{\beta}\right)$ is equal to: [2023] ...{1M}

- | | | | |
|-------------------|--------------------|-------------------|--------------------|
| (a) $\frac{7}{3}$ | (b) $-\frac{7}{3}$ | (c) $\frac{3}{7}$ | (d) $-\frac{3}{7}$ |
|-------------------|--------------------|-------------------|--------------------|

- If one zero of the polynomial $p(x) = 6x^2 + 37x - (k - 2)$ is reciprocal of the other, then find the value of k . [2023] ...{2M}

- Find the value of k such that the polynomial $x^2 - (k + 6)x + 2(2k - 1)$ has sum of its zeroes equal to half of their product. [2019] ...{3M}

- If α and β are the zeroes of the polynomial $f(x) = x^2 - 4x - 5$, then find the value of $\alpha^2 + \beta^2$ [2020] ...{3M}

- Find a quadratic polynomial whose zeroes are reciprocals of the zeroes of the polynomial $f(x) = ax^2 + bx + c, a \neq 0, c \neq 0$. [2020] ...{3M}

- If α, β are zeroes of the quadratic polynomial $x^2 - 5x + 6$, form another quadratic polynomial whose zeroes are $\frac{1}{\alpha}, \frac{1}{\beta}$. [2023] ...{3M}



INSTRUCTIONS: Practice these questions on their respective Homework copy.

AIM

To study the chemical reaction of an iron nail with aqueous copper sulphate solution; and to study the burning of magnesium ribbon in air.

(a) Chemical reaction of iron nail with copper sulphate solution in water.

THEORY

Iron displaces copper ions from an aqueous solution of copper sulphate. It is a single displacement reaction of one metal by another metal. Iron is placed above copper in the activity series. Elements placed above in this series are more reactive than those placed below them. Thus iron is more reactive than copper. In this reaction, metallic iron is converted into ferrous ion (Fe^{2+}) and cupric ion (Cu^{2+}) is converted into metallic copper.

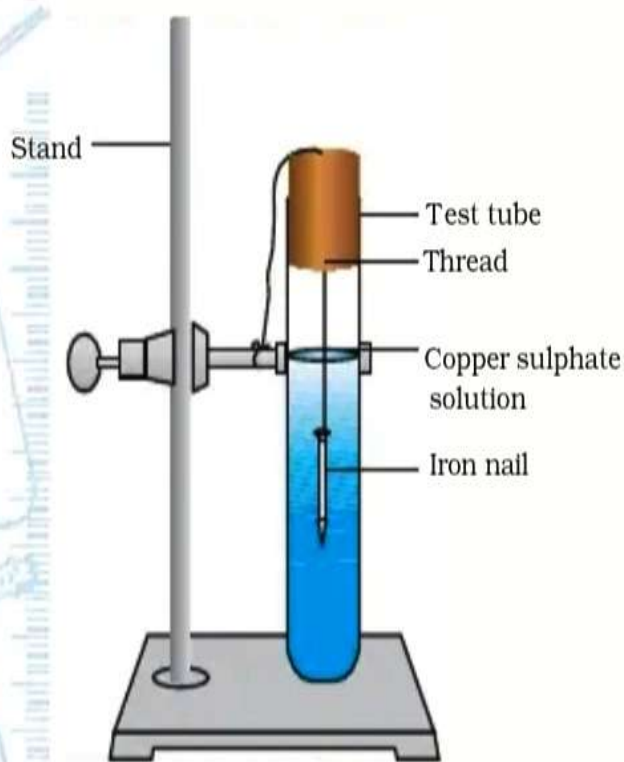


MATERIALS REQUIRED

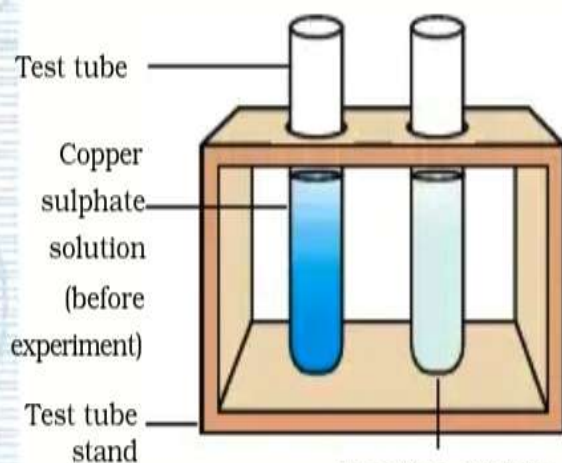
Two test tubes, two iron nails, measuring cylinder (50 mL), laboratory stand with clamp, test tube stand, thread, a piece of sand paper, single bored cork, copper sulphate, distilled water, and dil. sulphuric acid,

PROCEDURE

1. Take two iron nails and clean them with a sand paper.

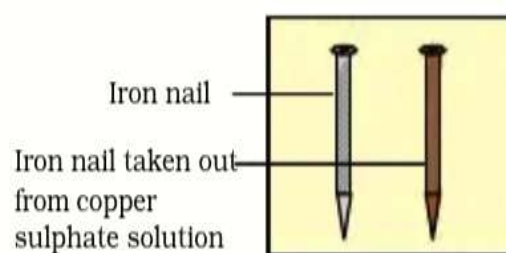


(a)



Reaction mixture
(after experiment)
(b)

2. Take 20 mL of distilled water in a clean test tube and dissolve 1.0 g of copper sulphate in it. Add 2 or 3 drops of dil. sulphuric acid to it to check hydrolysis of CuSO_4 in water. Label this test tube as A.
3. Transfer about 10 mL of copper sulphate solution from tube A to another clean test tube. Label this test tube as B.
4. Tie one iron nail with a thread and immerse it carefully in copper sulphate solution in test tube B through a bored cork [as shown in the Fig 1.1(a)] for about 15 minutes [Fig. 1.1(a)]. Keep the another iron nail separately for comparison afterwards.
5. After 15 minutes take out the iron nail from the copper sulphate solution.



(c)

Fig. 1.1 : (a) Iron nail dipped in copper sulphate solution; and (b) Iron nails and copper sulphate solutions are compared

6. Compare the intensity of blue colour of copper sulphate solution before and after the experiment in tubes A and B, and also compare the colour of iron nail dipped in copper sulphate solution with the one kept separately [Fig. 1.1(b) and (c)]. Record your observations.

Sl.No.	Property	Before experiment	After experiment
1.	Colour of copper sulphate solution		
2.	Colour of iron nail		

RESULTS AND DISCUSSION



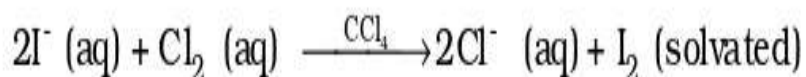
Infer from your observations about the changes in colours of copper sulphate solution and iron nail. Discuss the reason(s).

PRECAUTIONS

- The iron nails must be cleaned properly by using sand paper before dipping them in copper sulphate solution.

QUESTIONS

- Why does the colour of copper sulphate solution change, when an iron nail is dipped in it?
- How would you devise the procedure to show that $Mg > Fe > Cu$ in reactivity series?
- What is the basic principle involved in this experiment?
- Why does the following reaction takes place?

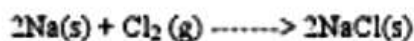


TEST PAPER

CLASS - X Science (chemical equations and reactions)

Q 1. Give reasons for the following: [1x5=5M]

- (i) Keeping food in air tight containers help in preventing rancidity.
- (ii) Moist air and acidic gases are not good for some metals.
- (iii) Manufactured chips usually flush bags of chips with nitrogen gas.
- (iv) Sodium acts as an oxidizing agent while chlorine acts as a reducing agent in the following reaction:



- (v) White colored silver chloride turns gray when kept in sunlight.

Q 2 When a green iron salt is heated strongly its colour finally changes to black and odour of burning sulphur is given out. [1x5=5M]

- (i) Name the iron salt.
- (ii) Name the type of reaction that take place.
- (iii) Name the compound which changes into Brownish black colour.
- (iv) Name the compound which is responsible for its odour.
- (v) Write the chemical equation of the above statement.

3. A chemical is heated in a test tube brown fumes comes out and a black residue is left behind

- (a) Name the chemical which gives brown fumes.
- (b) Write the equation.
- (c) Name the compound which gives black residue. [1x3=3]

Q4. Give one example of decomposition reaction which is carried in the presence of

- (i) Electrical energy (ii) Sun light (iii) Heat energy [1x3=3]

Q5. Give two examples of everyday life situations where redox reaction are taking place. [1x2=2]

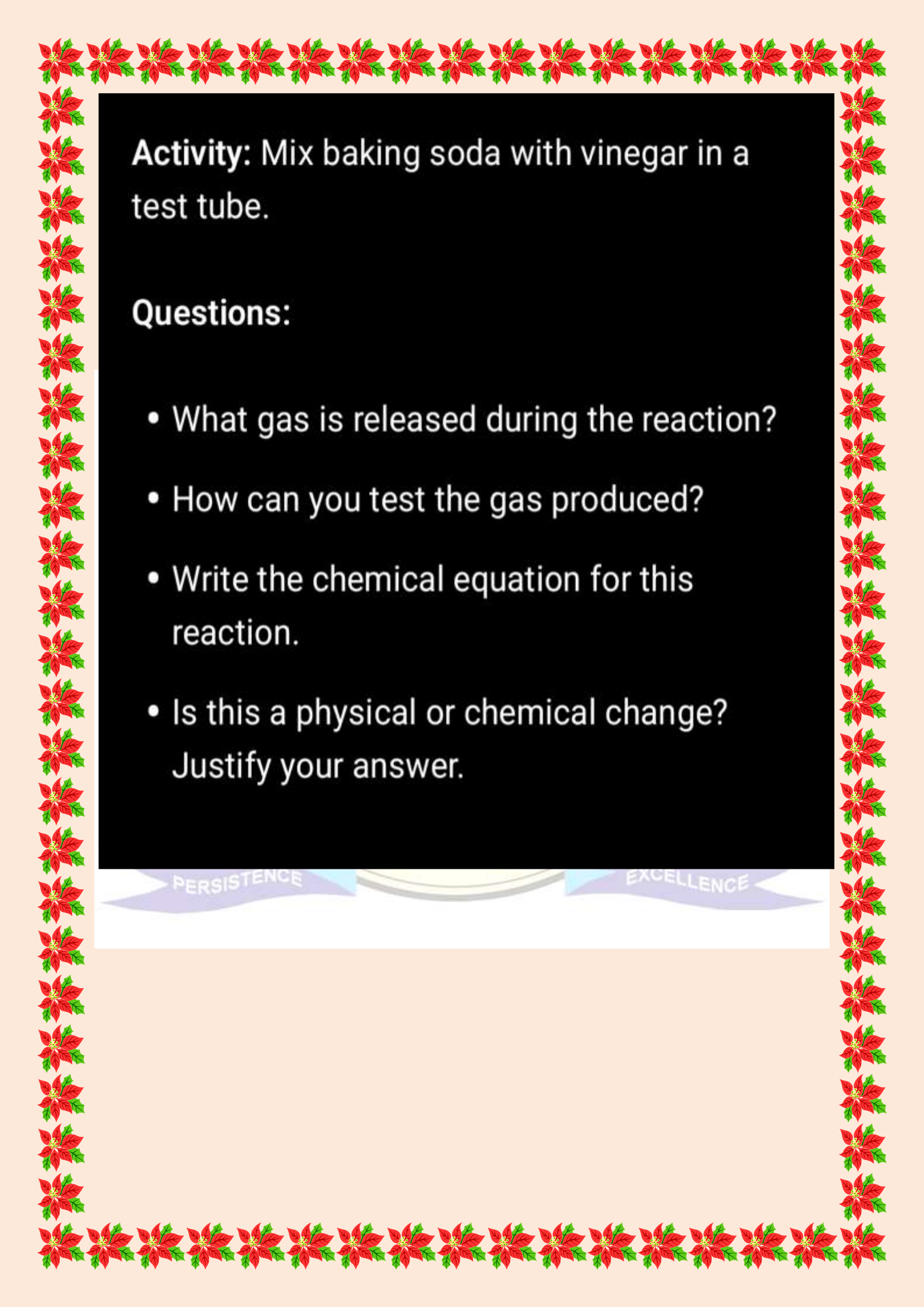
Q 6. Why does the blue colour of copper sulphate solution change when a piece of iron dropped into it? Explain with the help of chemical reaction. [2M]

Q 7. State any two ways to prevent the rancidity of food containing fats and oil ? [2M]

Q 8 Why respiration is exothermic reaction?

Q 9. Very short answers (1 mark)

- a. What type of reaction is represented by the digestion of food in our body ?
- b. When ammonium hydroxide solution is added to aluminium chloride, a white ppt. of aluminium hydroxide is formed along with ammonium chloride solution what type of chemical reaction is stated in the above chemical change.
- c. In the refining of silver, the recovery of silver from silver nitrate solution involves displacement reaction with copper metal. Write down the chemical equation for the reaction.

A decorative border of red poinsettias with green leaves surrounds the entire page. The main content is on a black background.

Activity: Mix baking soda with vinegar in a test tube.

Questions:

- What gas is released during the reaction?
- How can you test the gas produced?
- Write the chemical equation for this reaction.
- Is this a physical or chemical change?
Justify your answer.

PERSISTENCE

EXCELLENCE

CLASS 10 BIOLOGY

SUMMER VACATION HOMEWORK

(NUTRITION)



SECTION A: DEFINITIONS

1. Define the following terms with examples:

- Nutrition – _____
- Autotrophic nutrition – _____
- Heterotrophic nutrition – _____
- Saprophytic nutrition – _____
- Parasitic nutrition – _____

2. Differentiate between:

Autotrophic Nutrition	Heterotrophic Nutrition
• _____	• _____
• _____	• _____
• _____	• _____

Holozoic Nutrition	Saprophytic Nutrition
• _____	• _____
• _____	• _____
• _____	• _____

3. Write the steps involved in nutrition in Amoeba with a neat diagram.



SECTION B: PLANT NUTRITION

4. Explain the process of photosynthesis. Write the word equation and explain each component.

- _____
- _____
- _____
- _____

5. Draw and label:

(a) Structure of a Leaf

(b) Stomata

6. Write factors affecting photosynthesis and explain any two.

- _____
- _____
- _____

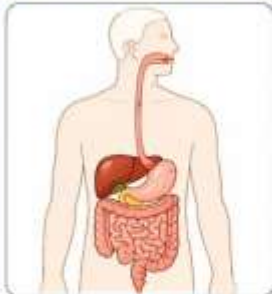
7. Activity: Perform an activity to show sunlight is necessary for photosynthesis.

Aim	_____
Materials	_____
Procedure	_____
Observation	_____
Conclusion	_____

SECTION C: HUMAN NUTRITION

8. Explain the process of nutrition in human beings.

9. Draw and label the human digestive system.



10. Write functions of:

- Saliva – _____
- Hydrochloric acid – _____
- Bile juice – _____
- Pancreatic juice – _____

11. Describe digestion of:

Nutrient	Where it starts	Enzyme	End products
Carbohydrates			
Proteins			
Fats			

SECTION D: APPLICATION & HOTS

12. Why do we get instant energy from glucose?

13. What happens if:

- (i) There is no bile secretion? _____
- (ii) The villi in the small intestine are damaged? _____

14. Why are green plants called producers?

15. Case Study:

A person suffers from indigestion and acidity. Suggest reasons and preventive measures.

Reasons

Preventive Measures

- _____
- _____
- _____

- _____
- _____
- _____





CLASS 10th SST HOLIDAY HOMEWORK



Name: _____ Class & Sec.: _____
Roll No.: _____ Date: _____

HOLIDAY HOMEWORK

- Define the term "Resource". Explain its types with examples.
 - Describe the characteristics of resources.
 - Differentiate between:
 - Renewable and Non-renewable resources
 - Biotic and Abiotic resources
 - Explain the importance of resource planning.
 - Write a short note on sustainable development.
 - Answer the case study questions given in the textbook.
-
- What is Nationalism? Explain briefly.
 - Discuss the causes of the rise of nationalism in India.
 - Explain the role of:
 - Indian National Congress
 - Press
 - Swadeshi Movement
 - Revolutionaries
 - Describe the impact of World War I on Indian nationalism.
 - Answer in-text questions from the chapter.

PROJECT WORK (HANDMADE)

Prepare a handwritten project file on the given topics.

PROJECT TOPICS (CHOOSE ANY ONE)

RESOURCE & DEVELOPMENT

- Resources and its Types
- Land Resources
- Water Resources
- Mineral and Energy Resources
- Agriculture Resources
- Sustainable Development
- Resource Planning in India

NATIONALISM IN INDIA

- The Rise of Nationalism in India
- Indian National Congress
- Role of Press in Nationalism
- The Swadeshi Movement
- Revolutionary Activities in India
- Impact of World War I on India
- Nationalism and Unity in India

INSTRUCTIONS FOR PROJECT FILE:

- The project must be completely **handwritten** (no printouts).
- Use an **A4 size** ruled/plain file.
- Cover page should be **neat** and creatively designed.
- Include **index, acknowledgement, and conclusion**.
- Use **diagrams, pictures, and maps** wherever required.
- Maintain **proper headings and subheadings**.
- Write in **neat and legible** handwriting.
- Highlight important points using **colors**.
- Collect information from reliable sources (textbook, newspapers, magazines, internet, etc.).
- Content should be well-researched, relevant and in your own words.
- Do not copy directly from the internet or any source.
- Ensure the project is well-organized and properly stapled/filed.
- Marks will be given for content, presentation, creativity, neatness and timely submission.



MAP WORK

On an outline map of India, mark and label:

GEOGRAPHY RELATED

- Major Soil Types
- Major Mineral Resources
- Major Power Resources
- Major Agricultural Regions



HISTORY RELATED

- Important Congress Session Centres
- Centres of Important Newspapers
- Swadeshi Movement Centres
- Revolutionary Activity Centres



GENERAL INSTRUCTIONS

- All work should be done neatly in a separate notebook.
- Map work should be clean, labeled, and properly colored.
- Project work should be handwritten and well-decorated.
- Revise all chapters thoroughly.



"The beautiful thing about learning is that no one can take it away from you."







CLASS 10th SST – MAP WORK


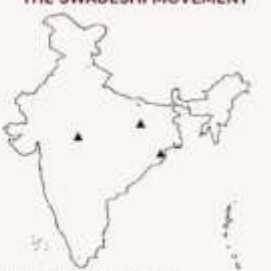

GEOGRAPHY (CHAPTER 1) + HISTORY (CHAPTER 2)

Note: Draw outline maps neatly and label correctly with appropriate symbols.

GEOGRAPHY – CHAPTER 1: RESOURCES AND DEVELOPMENT

<p>1. MAJOR SOIL TYPES</p>  <ul style="list-style-type: none"> ■ Alluvial Soil ■ Black Soil ■ Red & Yellow Soil ■ Laterite Soil ■ Arid Soil ■ Forest Soil 	<p>2. MAJOR MINERAL RESOURCES</p>  <ul style="list-style-type: none"> ■ Coal ▲ Iron Ore ● Manganese ◆ Bauxite ★ Mica □ Limestone × Copper △ Natural Gas ○ Petroleum 	<p>3. MAJOR POWER RESOURCES</p>  <ul style="list-style-type: none"> ■ Thermal Power Plant ▲ Hydel Power Plant ● Nuclear Power Plant <p>(Label any 2-3 of each)</p>	<p>4. MAJOR AGRICULTURAL REGIONS</p>  <ul style="list-style-type: none"> ■ Rice Region ■ Wheat Region ■ Millets Region ■ Maize Region ■ Cotton Region ■ Jute Region ■ Plantation Region ■ Mixed Farming Region
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HISTORY – CHAPTER 2: NATIONALISM IN INDIA

<p>1. IMPORTANT CENTRES OF INDIAN NATIONAL CONGRESS</p>  <p>Mark and label the places where INC sessions were held. (Any 5)</p> <ul style="list-style-type: none"> • Bombay (1885) • Calcutta (1890) • Madras (1897) • Lahore (1929) • Karachi (1931) 	<p>2. CENTRES OF THE PRESS</p>  <p>Mark and label the places of important newspapers. (Any 5)</p> <ul style="list-style-type: none"> • Amrita Bazar Patrika (Calcutta) • Kesari (Pune) • The Hindu (Madras) • The Tribune (Lahore) • The Bengalee (Calcutta) 	<p>3. IMPORTANT CENTRES OF THE SWADESHI MOVEMENT</p>  <p>Mark and label the places associated with the Swadeshi Movement. (Any 5)</p> <ul style="list-style-type: none"> • Calcutta • Dhaka • Barisal • Poona • Nagpur 	<p>4. IMPORTANT CENTRES OF REVOLUTIONARY ACTIVITIES</p>  <p>Mark and label the places associated with revolutionary activities. (Any 5)</p> <ul style="list-style-type: none"> • Lahore • Delhi • Alipore (Bengal) • Pune • Nasik
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COMPLETE MAP WORK INDEX – ALL SYLLABUS

GEOGRAPHY (CHAPTER 1)			
1. MAJOR SOIL TYPES	2. MAJOR MINERAL RESOURCES	3. MAJOR POWER RESOURCES	4. MAJOR AGRICULTURAL REGIONS
1. IMPORTANT CENTRES OF INDIAN NATIONAL CONGRESS	2. CENTRES OF THE PRESS	3. IMPORTANT CENTRES OF THE SWADESHI MOVEMENT	4. IMPORTANT CENTRES OF REVOLUTIONARY ACTIVITIES

INSTRUCTIONS

- Use a good quality outline map of India.
- Mark all places with appropriate symbols.
- Use different colours for different themes.
- Write index and title neatly.
- Maps should be neat, accurate and well-labelled.

SYMBOLS YOU CAN USE

- City/Place
- Power Plant / Centre
- ▲ Hydel / Location
- ◆ Mineral / Resource
- ★ Revolutionary Centre

NAME: _____
 CLASS & SEC: _____
 ROLL NO.: _____
 DATE: _____

Jindal Adarsh Gramya Bharti Hr. Sec. School



SUMMER VACATION HOMEWORK

CLASS - 10TH SUBJECT - IT

PART-A (Unit-2 Self-Management Skill)

Self-Management skills:

- 1. Goal Setting:** The ability to define clear and achievable objectives. Importance: Goals provide direction, purpose, and motivation. Effective goal-setting involves breaking larger goals into smaller, manageable tasks.
- 2. Time Management:** Efficiently allocating and prioritizing time to tasks and activities. Importance: Time management enhances productivity, reduces stress, and allows for the pursuit of personal and professional priorities.
- 3. Organization:** Maintaining order and structure in daily activities and environments. Importance: Being organized facilitates efficiency, reduces clutter, and ensures that resources are used effectively.
- 4. Prioritization:** Identifying and focusing on tasks that have the highest impact or urgency. Importance: Prioritization helps individuals allocate time and resources effectively, ensuring that critical tasks are addressed first.
- 5. Adaptability:** The ability to adjust and thrive in changing circumstances. Importance: Adaptability is essential in a dynamic world, allowing individuals to navigate uncertainties and seize new opportunities.
- 6. Decision Making:** Making informed and timely choices based on careful consideration. Importance: Strong decision-making skills contribute to effective problem-solving and goal achievement.
- 7. Self-Discipline:** The ability to control impulses, stay focused, and persevere in the face of challenges. Importance: Self-discipline is crucial for maintaining consistency, overcoming obstacles, and achieving long-term goals.
- 8. Self-Motivation:** The ability to inspire and drive oneself to achieve goals. Importance: Self-motivation sustains momentum, even in the absence of external rewards, fostering continuous growth and achievement.

Q1. What is Stress and how do you manage it?

Stress is the body's natural response to challenges or demands, whether they are physical, emotional, or psychological. It is a normal part of life and can be triggered by various situations, such as work pressures, relationship issues, financial concerns, or major life changes.

Managing Stress:

1. Identify Stressors: Recognize the specific factors causing stress.
2. Goal Setting: Break down tasks into manageable steps, set realistic goals, and prioritize them.
3. Time Management: Organize your time effectively, create schedules, and allocate time for work, relaxation, and self-care.
4. Practice Relaxation Techniques: Incorporate relaxation techniques such as deep breathing, meditation, or mindfulness.
5. Regular Physical Activity: Engage in regular exercise.

Q2. What is Emotional Intelligence in Self-management skills?

The ability to recognize and regulate one's own emotions, as well as the emotions of others, is referred to as emotional intelligence.

1. Emotional awareness – Recognize and name one's own feelings.
2. Harnessing emotions – Apply emotions to thinking and problem solving.
3. Managing emotions – Control one's emotions appropriately.

Q3. How can one manage emotional intelligence?

1. Understand your emotions – Analyze your behavior.
2. Rationalize – Think logically.
3. Practice – Meditation and yoga.

Q4. How can you identify your strengths and weaknesses?

Finding Strengths:

1. Think of anything you are always successful at.
2. Think about what others like in you.
3. Take time to think about what you do well.

Finding Weaknesses:

1. Point out the areas where you struggle.
2. Look at the feedback others usually give you.
3. Be open to feedback and accept your weaknesses without feeling low about it.

Q5. What are the different types of motivation?

1. Internal motivation – many things we do which make us happy, feel good and healthy.
2. External motivation – if you are working for recognition, respect and appreciation.

Q6. What are the qualities of Self-motivated people?

1. Know what they want from life.
2. Are focused.
3. Know what is important.
4. Are dedicated to fulfill their dreams.

Q7. What are the ways to build self-motivation?

1. Find out your strength.

2. Set and focus on your goals.
3. Develop a plan to achieve your goals.
4. Stay loyal to your goals.

Q8. How can one set goals in self-management Skills?

1. Specific – Clear goals.
2. Measurable – Track progress.
3. Achievable – Break goals into smaller parts.
4. Realistic – Practical goals.
5. Time bound – Set timeframe.

Q9. What are the four steps for effective time management?

1. Organize – Plan daily activities.
2. Prioritize – Make to-do list.
3. Control – Control time.
4. Track – Keep record of time.

Q10. How can you improve your time management?

1. Do not delay work.
2. Organize your desk.
3. Create "NO DISTURBANCE ZONE".
4. Use waiting time productively.
5. Prepare a "To-do" list.

Note: Write these questions in your IT notebook.

Note: Write this content in your IT notebook.

