## WINTER BREAK HOLIDAY HOME WORK

## Hindi

## *कक्षा VI

1. बालरामकथा से 10 बहुविकल्पीय प्रश्न एवं उत्तर (MCQ) तैयार कीजिए।
2. बालरामकथा से अपने पसंदीदा तीन पात्रों के परिचय दीजिए।(किन्हीं तीन)
(राम, लक्ष्मण, सीता, दशरथ, रावण)
3. वसंत में pt2 के पाठ्यक्रम को याद करें और प्रश्नों के उत्तर लिखकर तैयार करें
*कक्षा VIII
4. नई समस्याएं और युगों के दौर इन दोनों पाठकों से पांच पांच बहुविकल्पीय प्रश्न और उत्तर तैयार करें 2. वसंत में pt2 के पाठ्यक्रम को याद करें और प्रश्नों के उत्तर लिखकर तैयार करें *कक्षा IX*
5. पुस्तिका कृतिका भाग-1 से रीड की हड्डी पाठ से प्रश्न उत्तर तैयार कीजिए।

2 क्षितिज पुस्तक में pt2 के पाठ्यक्रम को याद करें और प्रश्नों के उत्तर लिखकर तैयार करें *कक्षा X

1. कृतिका भाग 2 के - माता का आंचल और साना साना हाथ जोड़ि पाठ पर आधारित प्रश्न उत्तर तैयार करें कीजिए।
2. व्याकरण का नियमित अभ्यास करें पद परिचय वाच्य वाक्य अलंकार आदि को भली भांति तैयार करें। 3.दो -दो प्रतिदर्श प्रश्न पत्र तैयार करें।

प्रश्न एवं उत्तर लिखिए।
कक्षा सातवीं -
*वसंत भाग 2 खानपान की बदलती तस्वीर से लेकर वीर कुंवर सिंह के प्रश्न उत्तर याद करने हैं।
*व्याकरण विशेषण द्वंद समास संधि उदाहरण अपनी अभ्यास पुस्तिका में लिखने हैं।
*बाल कथा महाभारत द्रौपदी स्वयंवर से लेकर भी और हनुमान तक प्रश्न उत्तर याद करने हैं।
कक्षा 8
*सुदामा चरित्र से लेकर अकबरी लोटा तक के प्रश्न उत्तर लिखने हैं तथा याद करने हैं।
*भारत की खोज में युगों का दौर,नई समस्याओं के प्रश्न उत्तर याद करने हैं।
*व्याकरण में मुहावरे उपसर्ग प्रत्यय पर्यायवाची शब्द विलोम शब्द लिखकर उन्हें याद करना है
कक्षा 9
क्षितिज में प्रेमचंद के फटे जूते मेरे बचपन के दिन ग्राम श्री में गाय के प्रश्न उत्तर याद करने हैं तथा लिखना भी है

## कृतिका के अंतर्गत रीड की हड्डी के प्रश्न उत्तर याद करने हैं

व्याकरण में प्रत्येक अलंकार के पांच पांच उदाहरण अभ्यास पुस्तिका में लिखें
लेखन के अंतर्गत दो संवाद और दो ईमेल अपने अभ्यास पुस्तिका में लिखें

## कक्षा 10

*प्री बोर्ड की तैयारी करनी है *सीबीएसई के 2 सैंपल पेपर अपने अभ्यास पुस्तिका में लिखने हैं।

## द्वारा- श्री राम प्रसाद एवं श्रीमती सुरभि त्रिपाठी(प्रशिक्षित स्नातक)

## English:

## Class- VI

Q-1)Read any two comprehension passages and write answers in your notebooks.
Q-2) Write paragraphs on the following topics a) My Aim of Life b) What I Hate to Do
Q-3) Write stories on the following topics:- a) Honesty is the Best Policy b)Unity is Strength
Q 4)Write a letter to the Principal of your school asking for transfer certificate (TC) due to your father's transfer.

Q-5) Learn and revise the following chapters for PT-2 Exam:- Honeysuckle 1)Who I Am 2)Fair play 3)The Banyan Tree Poems 1) Vocation 2) The Wonderful Words The Pact with the Sun 1) The Monkey and the Crocodile 2) The Wonder Called Sleep Grammar Preposition Spelling Make sentences from the jumbled word

## Class:-7

Q1) Read English newspaper daily and write five difficult words with their meanings and use it in your sentences.

Q2) greeting card activity on new year and Christmas celebration with short message
Q3) Reading Activity: Read a motivational story and write it in your own words.
Q4) Revise the formats of notice, message writing, informal writing and application
Q5) Do the following assignment according to given roll no: 1-26 :write The Biography of 5 Great Authors from English Literature along with their achievements 27-52: write the Biography of 5 great poets of English Literature along with their achievements. - Revise all the syllabus of Periodic test 2 Exam

## Class:-8

Q-1)Read any two comprehension passages and write answers in your notebooks.
Q-2) Write paragraphs on the following topics a) Description of My Pet b) A Visit to Hill Station
Q-3) Write a story on the following topic:- a) Honesty is the Best Policy
Q 4)Write a letter to a friend who is in other state. Invite him or her to visit your city.
Q-5) Learn and revise the following chapters and topics for PT-2 Exam:- Honeydew 1) This is Jody's Fawn 2)A Visit to Cambridge 3) A Monsoon Diary Poem ON THE GRASSHOPPER AND THE CRICKET Book- It So Happened a)The Fight b)Jalebis Informal Letter Writing Paragraph Writing Grammar from the chapters of Honeydew Use of all or both Correct form of words Transitive and Intransitive

CLASS:-9 ${ }^{\text {th }}$

1. READ A STORY OF YOUR CHOICE AND WRITE IT'S BOOK REVIEW.
2. WRITE A DIARY ENTRY ABOUT THE PLACE YOU VISITED IN THE HOLIDAYS.
3. SELECT ANY THREE POEMS OF THE BOOK AND WRITE THE POETIC DEVICES USED IN THEM. ( MAKE A LIST OF LITERARY DEVICES)
4. MAKE A COLLAGE ACTIVITY ON ANY ONE OF THE FOLLOWING

- Save the girl child • Save the environment • Stop child labour

5. WRITE A LETTER TO YOUR FRIEND MOTIVATING HIM/ HER TO STUDY FOR EXAMS.
6. READ THE REMAINING CHAPTERS AND WRITE THE MEANING OF DIFFICULT WORDS.
7. DO ANY 2 DESCRIPTIVE PARAGRAPHS.
8. REVISE ALL THE SYLLABUS FOR PT2 EXAMS. NOTE- ALL THE WORK SHOULD BE DONE IN SEPARATE SHEETS. L

## Class:-10

SAMPLE QUESTION PAPER (2023-24) ENGLISH
LANGUAGE AND LITERATURE (Code No. 184)
CLASS-X
Time allowed: 3 Hrs.
Maximum Marks: $\mathbf{8 0}$

## General Instructions:

1. The Question Paper contains THREE sections-READING, GRAMMAR \& WRITING and LITERATURE.

## SECTION A : READING SKILLS (20 marks)

## Reading Comprehension Through Unseen Passages

1. $\quad$ Read the following text.
(1) As a high school student, studying poetry can be a rollercoaster ride. This journey is punctuated by moments of profound appreciation for simpler pieces and intermittent frustration with more complex works. Let's be real here - some poems are just plain confusing and no amount of re-reading seems to help decipher the intended meaning. The puzzlement that results from such instances can be both vexing and demotivating. If solving a riddle is what was intended, then playing Sudoku is a better option. One is led to ponder if obscurity was the goal.
(2) Conversely, some pieces resonate with the reader's soul. stirring feelings of warmth, happiness, and connection to the world. Often, these compositions centre on themes that are universally understood, such as love, nature, or faith. Being able to actually understand what the poet is trying to say can feel like a little victory and is a welcome relief after grappling with more perplexing poetry.
(3) Then there are poems that are emotionally charged; the ones that make the reader curl up in a ball and cry or jump up and down with joy. One is left in awe of the poet's ability to convey emotion through words. Let's not forget the downright weird poems. These are the ones that defy categorization and leave the reader to their own devices in attempting to interpret meaning. The author's use of figurative language and unconventional imagery can create a sense of bewilderment that is either intriguing or off-putting. Regardless, the reader can appreciate the uniqueness of the work.
(4) Despite the wide range of emotions and reactions that come with studying poetry, it can be a rewarding pursuit. Not only does reading poetry allow one to appreciate the artistic beauty of the written word but also enables one to develop crucial critical thinking and analytical skills. The process of unlocking a poem's meaning can feel like cracking a code or solving a puzzle but the sense of accomplishment derived from mastering a challenging piece can be deeply gratifying. Finally, impressing an English teacher with a well-analysed poem can be a source of pride and validation.
(5) Overall, studying poetry is like a box of mixed chocolates, you never know what you're going to get. But whether it's complex, emotional, simple, or just downright weird, there's always something to be gained from the experience. So, let's applaud all the poets out there, for making us laugh, cry, scratch our heads, and occasionally feel like a genius.

Created for academic usage/ 414 words

## Answer the following questions, based on the passage above.

| i | Which of the following statements best describes the author's attitude towards studying <br> poetry? <br> A. Finds poetry to be a frustrating and meaningless endeavor. <br> B. Believes that the emotional rollercoaster of studying poetry is not worth the effort. <br> C. Recognizes the challenges of studying poetry but also acknowledges the rewards it <br> offers. <br> D. Feels that poetry is too obscure and abstract for the average person to appreciate. | 1 |
| :---: | :--- | :---: |
| ii | What is the tone of the writer in the given lines from paragraph (1)? Rationalise your response <br> in about 40 words. <br> If solving a riddle is what was intended, then playing Sudoku is a better option. One is led to <br> ponder if obscurity was the goal. | 2 |
| iii | Complete the sentence appropriately. <br> The author's use of vivid imagery in the paragraph (3), such as "curl up in a ball and cry" and <br> "jump up and down with joy", greatly affects the reader because_ | 1 |


| iv | The passage includes some words that are opposites of each other. From the sets (a)-(e) below, identify two sets of antonyms: <br> (a) intriguing and off-putting <br> (b) deciphering and interpreting <br> (c) appreciate and applaud <br> (d) simple and challenging <br> (e) emotions and feelings | 1 |
| :---: | :---: | :---: |
| v | Complete the sentence appropriately. <br> We can say that the author's tone becomes more neutral and objective when discussing weird poems, compared to other types of poetry because $\qquad$ . | 1 |
| vi | Based on the reading of the passage, examine, in about 40 words, how studying poetry can be like exploring a new city. | 2 |
| vii | What is the message conveyed by Hina's experience, in the following case? <br> Hina spends hours trying to analyze a poem for her assignment and finally feels a sense of accomplishment and pride, once she understands. <br> A. Only those with natural talent for poetry should engage with it. <br> B. Persistence makes studying poetry a rewarding pursuit. <br> C. Study of poetry is guaranteed to impress others. <br> D. The efforts of studying poetry is inversely proportional to the rewards gained. | 1 |
| viii | State whether the following lines display an example of a simple / complex / emotionally charged / downright weird, poem. <br> The sun rises in the east, <br> A new day begins, a fresh start. <br> Birds chirp, nature wakes up, <br> A peaceful feeling in my heart. | 1 |
| 2. | Read the following text. | 10 |
| (1) | Reduction in green areas has caused various environmental problems. People squeezed between concrete structures are looking for various ways to meet their longing for green. One of the ways to do so, is vertical gardens and green walls. Vertical gardening is a unique method of |  |
|  | gardening where plants are grown in a vertical position or upward, rather than in the traditional method of planting them on the ground. |  |
| (2) | The purpose of vertical gardens and green walls, which arises from the studies of different disciplines (landscape architects, architects, engineers, etc.), is to close the cold image of concrete and increase the visual value. In these systems, nature and structures are integrated, and thus, urban areas and the desired environment have become intertwined. |  |
| (3) | Vertical garden case studies often show that, though functionality should be in the foreground, when vertical gardens are planned, they are generally made as aesthetic elements in the city's underpasses and city squares, and decorative elements in residences, without seeking functionality. |  |
| (4) | Experts support that the visual quality and evaluation of landscape architecture is determined based on the satisfaction of the users. Hence, a survey questionnaire was prepared for residents of varied age groups from of a metropolitan city. The given Table 1, displays these responses: |  |


|  |  | 1 - Total number of participant | 400 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | Survey statements | Strongl y agree | Agre e | Neutra I | Disagre <br> e | Strongl <br> y <br> disagre <br> e |  |
|  | Vert | ical gardens- |  |  |  |  |  |  |
|  | 1 | improve quality of life of people in urban areas | 191 | 138 | 43 | 9 | 19 |  |
|  | 2 | reduce noise pollution | 128 | 164 | 77 | 25 | 6 |  |
|  | 3 | increase air quality -indoors and outdoors | 172 | 147 | 51 | 28 | 2 |  |
|  | 4 | reduce energy and water consumption | 58 | 47 | 125 | 68 | 2 |  |
|  | 5 | positively impact global warming | 114 | 144 | 106 | 30 | 6 |  |
|  | 6 | have a relaxing and calming effect | 161 | 177 | 44 | 7 | 11 |  |
|  | 7 | cost too much | 86 | 107 | 152 | 42 | 13 |  |
|  | 8 | make plants look beautiful | 195 | 139 | 44 | 6 | 16 |  |
|  | 9 | add naturalness to the environs | 135 | 173 | 55 | 25 | 12 |  |
|  | 10 | are among the determining factor to visiting a place | 59 | 133 | 141 | 54 | 13 |  |
|  | 11 | are inconvenient indoors | 9 | 84 | 123 | 126 | 48 |  |
|  | 12 | can be applied in every place | 71 | 132 | 97 | 77 | 23 |  |
|  | 13 | have a functional feature | 81 | 207 | 100 | 10 | 2 |  |
|  | 14 | distract drivers | 34 | 101 | 106 | 131 | 28 |  |
|  | 15 | funds are best used for social issues | 57 | 72 | 100 | 130 | 41 |  |
| (5) | The study green, su environm | acknowledged that vertical gard stainable areas, and further resear ent and human well-being. | ning has h should | e pote plore th | tial to tra impact | sform urba vertical | an space ardening | into the |
|  | Adapted fo | academic usage - 2019 case-study | -Investig | ing the | vertical ga | den applic | ations in words | urkey prox. |
| Ans | wer the foll | owing questions, based on the pa | ssage abo |  |  |  |  |  |
| i | Complete <br> \& 2 . <br> We can sa living in a fishbowl b | the following analogy appropriate <br> y that the situation of people living fishbowl, and the need for vertic because $\qquad$ . | ly, based <br> in concr cal garde | your u <br> struct to the | derstand <br> res is com need for | g of parag <br> parable with decoration | raphs 1 <br> h a fish in the | 1 |


| ii | Fill the blanks with the appropriate option from those given in brackets, based on your understanding of paragraph 2. <br> The statement that, urban spaces have become more closely connected with the desired natural surroundings through the incorporation of nature and structures in vertical gardens and green walls, is a $\qquad$ (fact/ opinion) because it is a $\qquad$ (subjective judgement/ objective detail). | 1 |
| :---: | :---: | :---: |
| iii | Justify the following, in about 40 words. <br> While the survey results suggest that vertical gardens may be effective in improving the quality of life in urban areas, further research and evaluation may be necessary to fully understand their effectiveness and potential drawbacks. | 2 |
| iv | Based on the survey results, which two concerns should a city government, looking to install vertical gardens, address? | 1 |
| v | In Table 1, the statement 3, "Vertical gardens increase air quality - indoors and outdoors," received the most neutral responses from participants, with 51 respondents indicating a neutral stance. State any one inference that can be drawn from this. | 1 |
| vi | Select the option that correctly displays what 'intertwined' signifies. (Reference-Paragraph 2) <br> (i) <br> (ii) <br> (iii) <br> (iv) <br> (v) <br> A. (i) , (iv) and (v) <br> B. Only (ii) <br> C. Only (iii) <br> D. (ii) and (v) <br> FOR THE VISUALLY IMPAIRED CANDIDATES <br> In the given sentence taken from paragraph 1, select the option that correctly replaces the underlined word, with its most likely antonym. <br> Vertical gardening is a unique method of gardening. <br> A. an indefinite <br> B. an exclusive <br> C. a combined <br> D. a standard | 1 |
| vii | Infer one benefit and one drawback of vertical gardening, in comparison to other solutions, such as community gardens or parks. (Answer in about 40 words) | 2 |

viii Which of the following is the main takeaway from the study mentioned in the passage?
A. Vertical gardening has minimal impact on the environment or human well-being.
B. Vertical gardening is a sustainable practice that can transform urban spaces into green areas.
C. The impact of vertical gardening on the environment and human well-being has already been thoroughly explored.
D. The study needs to include experts from horticultural firms to offer any recommendations for further research.

## SECTION B : WRITING SKILLS \& GRAMMAR (20 marks)

| GRAMMAR |  | 10 |
| :---: | :---: | :---: |
| 3 | Complete ANY TEN of twelve of the following tasks, as directed. | 1x10 |
| i. | Fill in the blank by using the correct form of the word in the bracket, for the given portion of a letter: <br> Dear Sir <br> This is with reference to committee's letter of recommendation that $\qquad$ (highlight) the nominations for 'Safe Residential Area' award for this current year. | 1 |
| ii. | Read the given sentence from a recipe review article. Identify the error and supply the correction in the sentence. <br> This delightful recipe must keep your hunger pangs at bay with its balanced spices and oriental flavour. <br> Use the given format for your response. | 1 |
| iii. | Abhilash and Neha had a conversation about the inauguration of Neha's Dance Academy. Report Abhilash's question. <br> Is your best friend helping you in this venture? | 1 |
| iv. | Read the dialogue between Shabnam and her mentor, Sara, regarding her summer internship programme. <br> Sara: Why did you choose to participate in this internship programme? <br> Shabnam: Ah! I am convinced this programme has the potential to enhance my abilities. <br> Select the correct option to complete the reporting of the above dialogue. <br> Sara asked Shabnam $\qquad$ in that internship programme. Shabnam sighed and exclaimed that she was convinced that programme had the potential to enhance her abilities. <br> A. why to choose to participate <br> B. to choose participation <br> C. why he had chosen to participate | 1 |


|  | D. with her choice in participating |  |
| :---: | :---: | :---: |
| v. | Fill the blank by choosing the correct option, to complete the concluding line of an issued circular by an Organisation, to its Managers. <br> A copy of the plan is enclosed and $\qquad$ (that/ then/ this) may be communicated to all Team Leaders for compliance. | 1 |
| vi. | Identify the error and supply correction for the given sentence from a commercial company's current marketing strategy. <br> The company aimed at increasing authority in areas frequently visited by the clients. <br> Use the given format for your response. | 1 |
| vii. | Select the option that identifies the error and supplies the correction for the closing line, from an analytical report. <br> In conclusion, this study explores the association among short-sleep pattern and overweight youngsters. | 1 |
| viii | Complete the given narrative, by filling the blank with the correct option. <br> The experience of nursing an injured bird left me $\qquad$ grateful for knowing the importance of being kind and compassionate to all creatures. <br> A. feeling <br> B. having felt <br> C. felt <br> D. feels | 1 |
| ix. | Report the dialogue between a vendor and his customer, by completing the sentence: <br> Vendor: It is nice to see you, Sir! <br> Customer: Yes, indeed! Unlike last month, I have been away for quite some time this month. <br> The vendor greeted his customer respectfully and mentioned that he was pleased to see him. The customer answered in the affirmative and explained that $\qquad$ | 1 |
| x. | Fill the blank by choosing the correct option to complete the live feed on a school news channel. <br> Congratulations Change Makers! <br> The regional competition awards have been announced and our school music club $\qquad$ the first prize. | 1 |


|  | A. had been won <br> B. will win <br> C. was winning <br> D. has won |  |
| :---: | :---: | :---: |
| xi. | Complete the line from a self- awareness song, by filling the blank with the correct option. <br> The river runs through your veins The trees and mountains $\qquad$ your name <br> The moon and stars watch over <br> You're guiding your way back home To dream the night away. <br> A. will call <br> B. call <br> C. had called <br> D. calls | 1 |
| xii. | Identify the error and supply correction for the following note in a passengers' flight instruction manual: <br> Note- Passengers will not reach the airport late in order to avoid a fine equivalent to $5 \%$ of the basic fare. <br> Use the given format for your response. | 1 |


| WRITING |  | $\mathbf{1 0}$ |
| :---: | :---: | :---: |
| Note : All details presented in the questions are imaginary and created for <br> assessment purpose . |  |  |
| 4.A | As Vaishali Nathani of 214, Indrayani Apartments, Vaishali Street, Daipur, you believe that <br> forming Ecology clubs and appointing Eco-minders in your city can aid in the preservation and <br> conservation of nature. <br> Write a letter to the MLA of your city area, in about 120 words, suggesting the need to form <br> such clubs. Share their importance and implications. Recommend the involvement of resident <br> volunteers for implementation of eco-club activities that nurture and protect the local <br> ecosystem. | 5 |
| OR |  |  |


5.B $\quad$ As the Captain of the school's Cultural Club, you have been asked to study the given itinerary provided by a tour-organizing vendor.

## A 3N/2D Educational Tour for the Senior School Students: Jabalpur and Ranha National Park (Vandhya Pradesh)

- Tour Travel \& sightseeing by bus.
- Accommodation on quad sharing basis.
- One staff complimentary for every 20 students.
- Bottled mineral water throughout the tour.
- Dance Party on 22 November.
- Insurance policy of ₹ 20,000/- per head.
- Provision of Tour Manager's assistance to all places.

| Day | Estimated time of departure from | Estimate d time of arrival | Sight-seeing Destination/ Activity | Time spentat the destination |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 22 Nov. <br> 2023 | 8:49 am (Nagpur Junction)-8 hrs. 30 min | 5:23 pm | Reporting at the hotel |  |  |
| $\begin{aligned} & \hline 23 \text { Nov. } \\ & 2023 \end{aligned}$ | 9:00am (hotel) | 10:00am | Bhawartal Garden | 1 hr . |  |
|  | 11:00am (garden) | 11:40am | Bhedaghat DhuandharFalls | 1 hr . |  |
|  | 12:40pm (falls) | 1:00pm | Lunch (nearby restaurant) | 1 hr . |  |
|  | 2:00pm (restaurant) | 2:15pm | Marble Rocks Cable car tour | 1 hr .30 mins |  |
|  | 3:45pm (Marble Rocks) | $4: 45 \mathrm{pm}$ | Rani Durgavati Museum | 1 hr .30 mins |  |
|  | 6:15pm (museum) | 7:00pm | Back to the hotel |  |  |
| $24 \text { Nov. }$ $2023$ | 5:30am (hotel)- 170 kms- 4 hrs. drive | 9:30am | Ranha Tiger Reserve | 7hrs. |  |
|  | 4:30pm (Tiger Reserve) | 9:00pm | Back to the hotel |  |  |
| $\begin{array}{\|ll\|} \hline 25 & \text { Nov. } \\ 2023 & \end{array}$ | 7:54 am (Jabalpur Railway station)- 8 hrs. 45 min | $4: 21 \mathrm{pm}$ | Nagpur Railway Junction |  |  |

Analyse this itinerary to either approve or reject the tour proposal, while focusing on the students' safety, interest, and physical wellness. Write this analytical paragraph in about 120 words, by selecting features that support your analysis.

You may begin like this :

A thorough analysis of the itinerary provided by the tour organizing vendor reveals that the tour proposal shouldbe accepted / rejected.

You may end like this:
Therefore, the tour proposal for the educational trip should be approved / rejected.

## SECTION D : LITERATURE TEXTBOOK AND SUPPLEMENTARY READING TEXT (40 <br> marks)

| 6. | Read the given extracts and answer the questions for ANY ONE of the two, given. | 5 |
| :---: | :--- | :---: |
| A. | The question he tried to answer was simple: What is the purpose of the twelve tiny gold spots on a <br> monarch pupa? <br> "Everyone assumed the spots were just ornamental," Ebright said. <br> "But Dr Urquhart didn't believe it." |  |
|  | To find the answer, Ebright and another excellent science student first had to build a device that <br> showed that the spots were producing a hormone necessary for the butterfly's full development. This <br> project won Ebright first place in the county fair and entry into the International Science and <br> Engineering Fair. There he won third place for zoology. He also got a chance to work during the <br> summer at the entomology laboratory of the Walter Reed Army Institute of Research. <br> (The Making of a Scientist) |  |
| i | State any one inference about Dr Urquhart from the given context: <br> Everyone assumed the spots were just ornamental," Ebright said. <br> "But Dr Urquhart didn't believe it." | 1 |
| ii | State TRUE or FALSE. <br> None of the terms (a) -(d) below, can be applied to the question - What is the purpose of <br> the twelve tiny gold spots on a monarch pupa? <br> (a) A hypothesis - a proposed explanation for a phenomenon <br> (b) An assumption - something that is taken for granted or assumed to be true without <br> proof <br> (c) A premise - a proposition that forms the basis of an argument <br> (d) A theory - a well-substantiated explanation for a natural phenomenon <br> iii <br> Ebright's approach towards finding the purpose of the gold spots on a monarch pupa was <br> highly effective. Elaborate in about 40 words, with reference to the extract. <br> iv <br> Which phrase would correctly substitute 'a chance' , in the given sentence from the <br> extract. <br> He also got a chance to work during the summer at the entomology laboratory of the <br> Walter Reed Army Institute of Research. | 2 |


| B. | LOMOV : It's cold... I'm trembling all over, just as if I'd got an examination before me. The great thing is , I must have my mind made up. If I give myself time to think, to hesitate, to talk a lot, to look for an ideal, or for real love, then I'll never get married. Brr...It's cold! Natalya Stepanovna is an excellent housekeeper, not bad-looking, well-educated. What more do I want? But I'm getting a noise in my ears from excitement. (Drinks) And it's impossible for me not to marry. In the first place, I'm already 35 - a critical age, so to speak. In the second place, I ought to lead a quiet and regular life. I suffer from palpitations, I'm excitable and always getting awfully upset; at this very moment my lips are trembling, and there's a twitch in my right eyebrow. <br> (The Proposal) |  |
| :---: | :---: | :---: |
| i | Which of the following is NOT a reason why Lomov thinks he must marry? <br> A. He is already 35 years old. <br> B. He suffers from palpitations. <br> C. He is excitable and easily upset. <br> D. He is in love with Natalya. | 1 |
| ii | Why is it fair to say that Lomov's tone, when he says "What more do I want?", is uncertain and questioning? Answer in about 40 words. | 2 |
| iii | Read the following descriptions (a)-(c) and identify which one correctly corresponds to the extract. <br> (a) A debate is a formal discussion on a particular topic, usually with two or more people presenting different viewpoints and arguments. | 1 |
|  | (b) A soliloquy is a speech given by a character alone on stage, which reveals their innermost thoughts and feelings to the audience. <br> (c) An aside is a brief comment or remark made by a character directly to the audience, which is not intended to be heard by other characters on stage. |  |
| iv | If an actor were to enact this extract, what would he be required to focus on, while modulating his voice? | 1 |
| 7. | Read the given extracts and answer the questions for ANY ONE of the two, given. | 5 |
| A. | But if it had to perish twice, I think I know enough of hate To say that for destruction ice Is also great And would suffice. (Fire and Ice) |  |
| i | Fill the blank with one word. <br> When the speaker says that ice could also bring about the end of the world, he refers to $\qquad$ , as the means for destruction. | 1 |
| ii | What does the speaker's alignment with those who favour ice, suggest? | 1 |
| iii | Which of the following best describes the speaker's attitude towards destruction caused by ice? <br> A. Indifferent <br> B. Fearful <br> C. Dismissive <br> D. Respectful | 1 |


| iv | Comment on the poet's use of language in these lines. | 2 |
| :---: | :---: | :---: |
| OR |  |  |
| B. | The fog comes on little cat feet. It sits looking over harbour and city on silent haunches and then moves on. (Fog) |  |
| i | In what way does the language used in this poem challenge traditional ideas of what poetry should be? | 1 |
| ii | What is the significance of the use of the word "little" to describe the fog in the poem and how does this word choice contribute to the overall mood and tone of the poem? Answer in about 40 words. | 2 |
| iii | Complete the sentence with the appropriate option. The lines from the poem tell us that the city is $\qquad$ <br> A. hilly <br> B. coastal <br> C. industrial <br> D. under-developed | 1 |
| v | Identify the type of imagery used in the lines of the poem. | 1 |
| 8 | Answer ANY FOUR of the following five questions, in about 40-50 words. | $4 \times 3=12$ |
| i | Justify the opinion that the traditional baker and his bread play a significant role in the cultural and social fabric of Goan society. (Glimpses of India-I) | 3 |
| ii | How does Leslie Norris use vivid imagery and metaphorical language in A Tiger in the Zoo, to effectively depict the confinement and oppression, experienced by the captive tiger. | 3 |
| iii | Explain how the description of the devastation caused by the hailstorm reflects the sadness within Lencho, in A Letter to God? <br> Refer to the given lines, from the text - <br> Not a leaf remained on the trees. The corn was totally destroyed. The flowers were gone from the plants. Lencho's soul was filled with sadness. | 3 |
| iv | Kitty was a trusted friend to Anne. Elaborate. (From the Diary of Anne Frank) | 3 |
| v | How does Ogden Nash's The Tale of Custard the Dragon, challenge the notion that individuals should conform to societal expectations? | 3 |
| 9 | Answer ANY TWO of the following three questions, in about 40-50 words. | 2x3=6 |
| i | The story, A Triumph of Surgery is a powerful example of the importance of saying "no". Explain. | 3 |
| ii | How does education play a transformative role in Bholi's life? (Bholi) | 3 |


| iii | The various elements of Robert Arthur's writing style work together to create a sense of <br> tension, uncertainty, and suspense, well-suited to the mystery and suspense genre of the <br> story, The Midnight Visitor. Comment, with reference to any one element. | 3 |
| :---: | :--- | :---: |
| 10 | Answer ANY ONE of the following two questions, in about 100-120 words. | $1 \times 6=6$ |
| (A) | You have been asked to present an evaluation of the approaches of the mothers of both, the baby <br> seagull and Amanda, towards helping their children. Write this presentation draft including your <br> insights, in about 120 words, comparing the approaches of both parents. <br> You may begin this way: <br> One acknowledges that both parents, Amanda's mother and the baby seagull's mother <br> both....however, ... <br> (Reference -Amanda! \& His First Flight) |  |
| (B) | You have been chosen to address a student gathering from the neighbourhood schools, to speak on <br> the resilience of human spirit required to transcend discrimination. Prepare the speech draft in not <br> more than 120 words, with reference to the commonality of themes in Nelson Mandela: Long Walk <br> to Freedom and The Trees by Adrienne Rich. <br> You may begin this way: <br> Good morning, everyone. Today, I'd like to discuss two pieces of literature that offer a powerful <br> insight into the resilienceof the human spirit required to transcend discrimination. |  |
| You may end this way. <br> To conclude, I'd like to say that ... <br> Thank you |  |  |
| 11 | Answer ANY ONE of the following two questions, in about 100-120 words. |  |
| (A) | Imagine that M. Loisel, from The Necklace by Guy de Maupassant, writes a diary entry, exploring the <br> theme of class and social status, and the nature of social mobility, in the context of his own <br> experience. <br> Write this diary entry, as M. Loisel, in about 120 words. |  |
| (B) | A character arc is the transformation or development of a character throughout a story and refers to <br> the changes a character undergoes as a result of their experiences, challenges, and interactions with <br> other characters. <br> In the light of the above information, trace the character arc of the thief in Ruskin Bond's The Thief's <br> Story, in about 120 words. |  |

## MATHS:-

## Class VII

- Complete your learner diary upto chapter Symmetry
- Complete your MDP work of term-II
- Do practice these questions


## Algebra

1-Find the rule which gives the number of matchsticks required to make the alphabet from $A$ to $Z$.

2- (a) Look at the following matchstick pattern of squares (Fig 11.6). The squares are not separate. Two neighbouring squares have a common matchstick. Observe the patterns and find the rule that gives the number of matchsticks in terms of the number of squares. (Hint : If you
remove the vertical stick at the end, you will get a pattern of Cs.
(b) Fig 11.7 gives a matchstick pattern of triangles. As in Exercise 11 (a) above, find the general rule that gives the number of matchsticks in terms of the number of triangles.

## Ratio and Proportion

1.Saurabh takes 15 minutes to reach school from his house and Sachin takes one hour to reach school from his house. Find the ratio of the time taken by Saurabh to the time taken by Sachin.
2. Cost of a toffee is 50 paise and cost of a chocolate is ₹ 10 . Find the ratio of the cost of a toffee to the cost of a chocolate.
3. In a school, there were 73 holidays in one year. What is the ratio of the number of holidays to the number of days in one year?
4. Find the ratio of length to breadth of window of your room.
5. Find the ratio of length to breadth of your maths notebook.

## Symmetry

1Copy the following on a squared paper.( A square paper is what you would have used in your arithmetic notebook in earlier classes). Then complete them such that the dotted line is the line of symmetry.

2.Trace each figure and draw the lines of symmetry, if any:
3.Find the number of lines of symmety for each of the following shapes :


## Area and Perimeter

1.Take a A4 sheet and cut a circle of radius 7 cm ,from this sheet, two circles of diameter 3.5 cm and a rectangle of length 3 cm and breadth 2 cm are removed. (as shown in the adjoining figure).

Find the area of the remaining sheet. (Take $\pi=22 / 7$ )

2. The minute hand of a circular clock is 15 cm long. How far does the tip of the minute hand move in 1 hour. (Take $\pi=3.14$ )
3. A circle of radius 3.5 cm is cut out from a square piece of an aluminium sheet of side 10 cm . What is the area of the left over aluminium sheet?
4. The circumference of a circle is 31.4 cm . Find the radius and the area of the circle?

## Algebra

1.Find the values of the following expressions for (a) $x=2$.(b) $x=-2$
(i) $x+4$ (ii) $4 x-3$ (iii) $19-5 x^{2}$
(iv) $100-10 x^{3}$
2. Find the value of the following expressions when $n=-2$.
(i) $5 n-2$ (ii) $5 n^{2}+5 n-2$ (iii) $n^{3}+5 n^{2}+5 n-2$

3 . Find the value of the following expressions for $a=3, b=2$.
(i) $a+b$ (ii) $7 a-4 b$ (iii) $a^{2}+2 a b+b^{2}$
(iv) $a^{3}-b^{3}$

## Symmetry

-Make a working model on showing order of rotational symmetry.

## CLASS 8:

1. Complete the MDP of term 2 (only remaining question)
2. Complete your learner diary in your Math Notebook
3. SUBJECT ENRICHMENT ACTIVITY:

MAKE A WORKING MATHEMATICAL MODEL DISPLAYING FORMULA FOR DIFFERENT 3D SHAPES .(MENSURATION)

MAKE A MATHS TOY ON THE THEME "MATHEMATICS FOR US "
4. WORKSHEET:

Do the following question in your seprate holiday homework notebook:

1. Coefficient of $x^{2}$ in this algebraic expression $4 x^{3}+x^{2}+5$
2. Adding $\mathrm{ab}-\mathrm{bc}, \mathrm{bc}-\mathrm{ca}, \mathrm{ca}-\mathrm{ab}$, we get-
3. find the product of $4 p^{3},-3 p$
4. Simplify $3 x(4 x-5)+3$ and find its values for $x=3$
5. Find the value of $(x-y)(x+y)+(y-z)(y+z)+(z-x)(z+x)$.
6. Using $(x+a)(x+b)=x^{2}+(a+b) x+a b$, find $101 \times 103$
7. Find the height of a cuboid whose base area is $180 \mathrm{~cm}^{2}$ and volume is $900 \mathrm{~cm}^{3}$ ?
8. The area of a rhombus whose diagonals are of lengths 10 cm and 8 cm is:
9. A closed cylindrical tank of radius 7 m and height 3 m is made from a sheet of metal. How much sheet of metal is required.
10. The area of a trapezium is $34 \mathrm{~cm}^{2}$ and the length of one of the parallel sides is 10 cm and its height is 4 cm . Find the length of the other parallel side.
11. A milk tank is in the form of cylinder whose radius is 3 m and length is 7 m . What is the quantity of milk in litres that can be stored in the tank
12. The internal measures of a cuboidal room are $12 \mathrm{~m} \times 8 \mathrm{~m} \times 4 \mathrm{~m}$. Find the total cost of whitewashing all four walls of a room, if the cost of white washing is Rs. 5 per $\mathrm{m}^{2}$. What will be the cost of white washing if the ceiling of the room is also whitewashed.
13. find the value of $\left(3^{-1}+4^{-1}+5^{-1}\right)^{0}$
14. Evaluate. Find the value of $m$ for which $5^{m} \div 5^{-3}=5^{5}$.
15. Find $m$ so that $\left(-3^{m+1}\right) \times\left(-3^{5}\right)=\left(-3^{7}\right)$
16. Simplify :- i) $\frac{25 \times t^{-4}}{5^{-3} \times 10 \times t^{-8}} \quad(\mathrm{t} \neq 0) \quad$ ii) $\quad \frac{3^{-5} \times 10^{-5} \times 125}{5^{-7} \times 6^{-5}}$
17. Express in usual form: The distance between Sun and Earth is $1.496 \times 10^{11} \mathrm{~m}$
18. Express the following number in usual form : $3.02 \times 10^{-6}$
19. Three persons could fit new windows in a house in 4 days.
(i) One of the persons fell ill before the work started. How long would the job take now?
(ii) How many persons would be needed to fit the windows in one day?
20. A loaded truck travels 14 km in 25 minutes. If the speed remains the same, how far can it travel in 5 hours?

## Class:- IX

- Revise chapter related to term -2
- Make a project on maths for term -2
- Solve the given problems -


## TRIANGLES: -

1. Prove that two triangles are congruent if two angles and the included side of one triangle are equal to the two angles and the included side of other triangle.
2. Prove that angles opposite to equal sides of an isosceles triangle are equal.
3. $A B C$ is an Isosceles Triangle with $A B=A C$, Draw $A P$ perpendicular $B C$. To show that angle $B=$ angle $C$.

## QUADRILATERALS: -

1. Prove that a diagonal of a parallelogram divides it into two congruent triangles.
2. The angles of Quadrilateral are in the ratio $3: 5: 9: 13$. Find all the angles of the Quadrilateral.
3. Show that the diagonals of a Square are equal and bisect each other at Right Angles .
4. If the diagonals of a Parallelogram are equal , then show that it is a Rectangle.

## AREA OF PARALLELOGRAM AND TRIANGLES: -

1. Prove that llgm on the same base and between same parallel are equal in area.
2. Show that diagonals of parallelogram divided it into four equal triangles.
3. $D$ and $E$ are points on sides $A B$ and $A C$ respectively of Triangle $A B C$ such that $\operatorname{ar}(D B C)=$ $\operatorname{ar}(E B C)$. Prove that $D E$ is parallel to $B C$.

## CIRCLES: -

1. Prove that equal chords of a circle subtend equal angles from centre.
2. Prove that angles subtended by an arc at the centre is double the angle subtended by it at any point on the remaining part of the circle.
3. Prove that a cyclic parallelogram is a rectangle.

## HERON'S FORMULA: -

1. An isosceles triangle has a perimeter 30 cm and each of the equal side is 12 cm . Find the area of triangle.
2. Side of triangle are in the ratio $12: 17: 25$ and its perimeter is 540 cm . Find its area.
3. A triangle and a parallelogram have the same base and the same area. If the side of the triangle are $26 \mathrm{~cm}, 28 \mathrm{~cm}$ and 30 cm , and the parallelogram stands on the base 28 cm , find the height of the parallelogram.
4. A rhombus shaped has green grass for 18 cows to graze. If each side of the rhombus is 13 m and diagonal is 48 m . how much area of grass field each cow be getting.

## SURFACE AREA AND VOLUME: -

1. The floor of rectangular hall has a perimeter 250 m . if the cost of painting the 4 walls at the rate of Rs10 per $\mathrm{m}^{2}$ is Rs 15000 , find the height of the hall.
2. Find
a. The lateral or curved surface area of closed cylindrical petrol storage tank that is 4.2 m in diameter and 4.5 in height.
b. How much steel was actually used, if one/twelfth of the steel actually used was wasted in making the tank.
3. A conical tent is 10 m high and the radius of its base is 24 m . Find
a. Slant height of the tent.
b. Cost of canvas required to make the tent, if the cost of $1 \mathrm{~m}^{2}$ of canvas is Rs70.
4. A right circular cylinder just encloses sphere of radius $r$. Find
a. surface area of the sphere,
b. curved surface area of the cylinder
c. ratio of the area obtained in $a$. and b.

## Science:-

## CLASS X

SAMPLE PAPER 1
TIME: 3 HOURS
MM: 80
General instructions
Read the following instructions carefully and strictly follow them:
(i) This question paper consists of 39 questions. All questions are compulsory.
(ii) Question paper is divided into five sections viz. section $A, B, C, D$ and $E$
(iii) In section A- question number 1 to 20 are multiple choice questions( MCQs) carrying 1 mark each
(iv) In section B- question number 21 to 26 are Very Short Answer (VSA) type questions carrying 2 marks each.
(v) In section C- question number 27 to 33 are Short Answer (SA) type questions carrying 3 marks each
(vi) In section D- question number 34 to 36 are Long Answer (LA) type questions carrying 5 mark each
(vii) In section E- question number 37 to 39 are of source-based/ case- based units of assessments carrying 4 mark each with sub-parts.

## SECTION A

Select and write one of the most appropriate option out of the four options given for each of the questions 1-20:

1. When a ray of light passes from water to a glass prism, it :
(a) Bends towards the normal at the point of incidence
(b) Bends away from the normal at the point of incidence
(c) Goes undeviated
(d) None of these
2. Select washing soda from the following:
(a) $\mathrm{NaHCO}_{3}$
(c) $\mathrm{Na}_{2} \mathrm{CO}_{3} .5 \mathrm{H}_{2} \mathrm{O}$
(b) $\mathrm{Na}_{2} \mathrm{CO}_{3} .10 \mathrm{H}_{2} \mathrm{O}$
(d) NaOH
3. Butanone is a four carbon compound with the functional group
(a) Carboxylic group
(b) Ketone
(c) Aldehyde
(d) Alcohol
4. Which of these can be used as olfactory indicator?
(a) Vanilla
(b) Onion
(c) Clove
(d) All of these
5. Characters transmitted from parents to offspring are present in
(a) Cytoplasm
(b) Genes
(c) Golgi bodies
(d) Ribosomes
6. In domestic electric circuits the wiring with 15 A current rating is for the electric devices which have
(a) Higher power ratings such as geyser.
(b) Lower power ratings such a fan.
(c) Metallic bodies and low power ratings.
(d) Non- metallic bodies and low power ratings.
7. If four identical resistors of resistance 8 ohm , are first connected in series so as to give an effective resistance $R_{s}$, and then connected in parallel so as to give an effective resistance $R_{p}$ then the ratio of $R_{s} / R_{p}$ is
(a) 32
(b) 2
(c) 0.5
(d) 16
8. The ability of a cell to divide into several cells during reproduction In Plasmodium is called
(a) Budding
(b) Regeneration
(c) Binary fission
(d) Multiple fission
9. Which of the following determines the direction of magnetic field due to a current carrying conductor?
(a) Lenz' rule
(b) Fleming's right hand rule
(c) Fleming's left hand rule
(d) Right hand thumb rule
10. For verifying ohm's law we design an electric circuit diagram in which we show the arrangement of different circuit components. We find that with respect to the resistor, the
(a) Ammeter is connected in parallel and the voltmeter in series.
(b) Ammeter is connected in series and the voltmeter in parallel.
(c) Ammeter and voltmeter are both connected in series.
(d) Ammeter and voltmeter are both connected in parallel.
11. Which gas will be evolved when metal is reacted with some mineral acid?
(a) $\mathrm{H}_{2}$
(b) $\mathrm{O}_{2}$
(c) $\mathrm{CO}_{2}$
(d) $\mathrm{N}_{2}$
12. Which among the following diseases is not a sexually transmitted?
(a) Syphilis
(b) Hepatitis
(c) HIV- AIDS
(d) Gonorrhea
13. Consider the pH value of the following acidic samples:

| S.No | Sample | pH value |
| :--- | :--- | :--- |
| 1 | Rain water | 5.6 |
| 2 | Gastric juice | 1.2 |
| 3 | Dilute acetic acid | 3.0 |
| 4 | Lemon juice | 2.2 |

The decreasing order of their $\mathrm{H}^{+}(\mathrm{aq})$ ion concentration is:
(a) $1>2>3>4$
(b) $2>4>3>1$
(c) $1>3>4>2$
(d) $2>4>1>3$
14. Sexual reproduction leads to
(a) Genetic recombination
(b) Formation of identical clones
(c) Regeneration
(d) Both a and b
15. A trait in an organism is influenced by
(a) Parental DNA only
(b) Maternal DNA only
(c) Both maternal and parental DNA
(d) Neither by parental nor by maternal DNA
16. Force on a current carrying conductor in a magnetic field depends on
(a) Direction of the current
(b) Direction of the magnetic field
(c) Only a
(d) Both a and b

Direction for question 17 to 20 are Assertion-Reason based questions:
The following questions, consist of Assertion (A) and Reason (R). Read the statements carefully and choose the correct alternative from the following:
(a) Both the Assertion (A) and the Reason (R) are correct and the Reason (R) is the correct explanation of the Assertion (A).
(b) Both the Assertion (A) and the Reason(R) are correct but the Reason $(R)$ is not the correct explanation of the Assertion (A)
(c) Assertion (A) is true, but the Reason (R) is false.
(d) Both Assertion (A) and Reason(R) are false.

Q17. Assertion (A): Photosynthesis is an endothermic reaction.
Reason (R): Energy from sunlight is absorbed in photosynthesis.

Q18. Assertion (A): The colour of aqueous solution of copper sulphate turns colourless when a piece of lead is added to it

Reason (R): Lead is more reactive than copper, and hence displaces copper from its salt solution.

Q19. Assertion (A): Left atrium receives oxygenated blood from pulmonary vein.
Reason (R): Right atrium transfers deoxygenated blood to the right ventricle, which pumps it to the lungs for oxygenation.

Q 20. Assertion (A): pH of ammonium sulphate solution is acidic.
Reason $(R)$ : solution of a weak base and strong acid is acidic.

## SECTION B

## Q No. 21 to 26 are very short answer questions.

21. A plant hormone helps in bending of stem towards light. Name the hormone and explain how the movement is achieved.
22. A compound ' $X$ ' which is prepared from gypsum has the property of hardening when mixed with proper quantity of water.

Identify ' $X$ ' and write its chemical formula and its preparation.
23. What is an alloy? Write the constituents of solder alloy?
24. Why is damage to the ozone layer a cause for concern? What steps are being taken to limit this damage?
25. A chemical compound $X$ is used in glass, soap and paper industries. On treatment with ethanoic acid, it forms salt, water and carbon dioxide.
(a) Identify $X$
(b) How is the compound obtained from brine? Write the equation involved.
(c) State the number of molecules of water of crystallization present in compound X .
26. Name the acid released by the gastric glands in the stomach and write its role in digestion.

## SECTION- C

## Q No. 27 to 33 are short answer questions.

27. A student wants to project the image of a candle flame on a screen 60 cm in front of a mirror by keeping the candle at a distance of 15 cm from its pole.
(a) Name the type of mirror used.
(b) Also calculate:
(i) Magnification of the image produced
(ii) Distance between object and its image

## 28. Write the function of each of the following (a) Seminal vesicle (b) Ovary (c) Testis

29. (a) State the rule used to find the force acting on a current carrying conductor placed in a magnetic field.
(b) Draw the pattern of magnetic field lines of a bar magnet
(c) Why two magnetic field lines never cross each other?

## 30. Answer the following

(i) Construct a food chain of four tropic levels comprising the following:

Hawk, snake, plants, rat.
(ii) 20,000 J of energy was transferred by the producers to the organism of second trophic level. Calculate the amount of energy that will be transferred by organisms of third trophic level to the organisms of the fourth trophic level.
31. A person cannot see distinctly the object placed beyond 5 m from his eyes. Name he defect of vision the person is suffering from. Write the possible causes. Name the lens used for the correction off this defect.
32. A saturated organic compound ' $A$ ' belongs to the homologous series of alcohols. On heating ' $A$ ' with concentrated sulphuric acid at 443 K , it forms an unsaturated compound $B$ with molecular mass 28 u. The compound B on addition of one mole of hydrogen in the presence of Nickle changes to a saturated hydrocarbon ' $C$ '.
(a) Identify A, B and C
(b) Write the chemical equations showing the conversion of $A$ into $B$
(c) Name the products formed when compound A reacts with sodium.
33. After self-pollination in pea plant with round, yellow seeds, following types of seeds were obtained by Mendel:

| Seeds | Number |
| :--- | :--- |
| Round, yellow | 630 |
| Round, green | 216 |
| Wrinkled, yellow | 202 |
| Wrinkled, green | 64 |

Analyze the result and describe the mechanism of inheritance which explains these results.
OR
In humans, there is a $50 \%$ probability of the birth of a boy and $50 \%$ probability that a girl will be born. Justify the statement on the basis of the mechanism of sex determination in human beings.

## SECTION D

## Q No. 34 to 36 are Long answer questions.

34. Answer the following questions
(a) If the cerebellum is not functioning properly, what are the activities of our body affected?
(b) Which part of the brain control thinking and memory
(c) Name the hormone injected to a diabetic patient and why is it done?
(d) Why should we use iodized salt in our diet?
(e) If iodine is insufficient in one's diet, what might be the deficiency disease and its symptoms?
35. (a) an electric iron consumes energy at a rate of 880 W when heating is at the maximum rate and 330 W when the heating is at the minimum. If the source voltage is 220 V calculate the current and resistance in each case.
(b) What is the heating effect of current?

What is electric fuse?
36. A green salt, ' $X$ ' is heated strongly in a dry test tube. The green colour finally changes to brown and odour of burning sulphur is given out. Now answer the following questions based on the above reaction.
(a) Name the salt X .
(b) Name the type of reaction.
(c) Write number of water of crystallization present in salt X
(d) Write the chemical equation of the reaction involved.

## SECTION E

37. Hold a concave mirror in your hand and direct its reflecting surface towards the sun. Direct the light reflected by the mirror on to a white card-board held close to the mirror. Move the cardboard back and forth gradually until you find a bright, sharp spot of light on the board. This spot of light is the image of the sun on the sheet of paper; which is also termed as "Principal Focus " of the concave mirror.
(a) List two applications of concave mirror.
(b) If the distance between the mirror and the principal focus is 15 cm , find the radius of curvature of the mirror.
(c) An object 10 cm in size is placed at 100 cm in front of a concave mirror. If its image formed at the same point where the object is located find the focal length of the mirror.
38. Almost all metals combine with oxygen to form metal oxides. Metal oxides are generally basic in nature. But some metal oxides show both basic as well as acidic behaviour. Different metals show different reactivities towards oxygen. Some react vigorously while some do not react at all.
(a) What happens when copper is heated in air? (Give the equation of the reaction involved)
(b) Why are some metal oxides categorized as amphoteric? Give one example.
(c) Complete the following equations:
(i) $\mathrm{Al}_{2} \mathrm{O}_{3}+2 \mathrm{NaOH}$ $\qquad$
(ii) $\mathrm{ZnO}+\mathrm{HCl}$-----
39. Respiration is a biochemical process which involves exchange of respiratory gases (i.e. intake of oxygen and release of carbon dioxide) and stepwise oxidation of food to liberate energy. It is of two types Aerobic and Anaerobic.
(a) What is aerobic respiration and what are the end products of it?
(b) Name the respiratory pigment in human beings.
(c) Where does the exchange of gases takes place?
(d) What is the difference between respiration and breathing?

| Q. <br> No. | Expected Answer | Marks Allotted to each question | Total of each question |
| :---: | :---: | :---: | :---: |
| Section A |  |  |  |
| 1 | (a) Bends towards the normal at the point of incidence | 1 | 1 |
| 2 | (b) $\mathrm{Na}_{2} \mathrm{CO}_{3} .10 \mathrm{H}_{2} \mathrm{O}$ | 1 | 1 |
| 3 | (b)Ketone | 1 | 1 |
| 4 | (d)All of these | 1 | 1 |
| 5 | (b) Genes | 1 | 1 |
| 6 | (a) Higher power ratings such as geyser. | 1 | 1 |
| 7 | (a) 32 | 1 | 1 |
| 8 | (d) Multiple fission | 1 | 1 |
| 9 | (d) Right hand thumb rule | 1 | 1 |


| 10 | (b) Ammeter is connected in series and the voltmeter in parallel | 1 | 1 |
| :---: | :---: | :---: | :---: |
| 11 | (a) $\mathrm{H}_{2}$ | 1 | 1 |
| 12 | (d) Hepatitis | 1 | 1 |
| 13 | (c) $1>3>4>2$ | 1 | 1 |
| 14 | (d) Both a and b | 1 | 1 |
| 15 | (c) Both maternal and parental DNA | 1 | 1 |
| 16 | (d) Both a and b | 1 | 1 |
| 17 | (a) Both the Assertion (A) and the Reason (R) are correct and the Reason $(R)$ is the correct explanation of the Assertion (A). | 1 | 1 |
| 18 | (a) Both the Assertion (A) and the Reason (R) are correct and the Reason $(R)$ is the correct explanation of the Assertion (A). | 1 | 1 |
| 19 | (b) Both the Assertion (A) and the Reason(R) are correct but the Reason( $R$ ) is not the correct explanation of the Assertion (A) | 1 | 1 |
| 20 | (a) Both the Assertion (A) and the Reason (R) are correct and the Reason $(R)$ is the correct explanation of the Assertion (A). | 1 | 1 |
| Section-B |  |  |  |
| 21 | Name of hormone- Auxin | 1 Mark | 2 |


|  | Correct Explanation | 1 Mark |  |
| :--- | :--- | :--- | :--- |
| 22 | X- Plaster of paris <br> CaSO4. 2H2O + heat—-> CaSO4. <br> $0.5 \mathrm{H} 2 \mathrm{O}+1.5 \mathrm{H} 2 \mathrm{O}$ | 1 Mark | 2 |
| 23 | a metal made by mixing two types of <br> metal together <br> Solder Alloy- Lead \& Tin | 1 Mark <br> 1 Mark | 2 |
| 24 | Damage to the layer could lead to the <br> death of a large number of <br> phytoplanktons, resulting in increased <br> global warming. CFCs <br> (chlorofluorocarbons) are chemicals <br> that deplete the ozone layer. The <br> release of CFCs into the atmosphere <br> must be curtailed to limit the harm to <br> the ozone layer | 2 | 2 |
| 25 | (a) Compound X is sodium <br> carbonate <br> (b) 2NaOH + CO2 -> 2Na2CO3 + <br> H2O. <br> (c) 10 molecules | $1 / 2$ marks |  |
| 26 | The hydrochloric acid in the gastric <br> juice breaks down the food and the <br> digestive enzymes split up the <br> proteins. The acidic gastric juice also <br> kills bacteria. | 2 | 2 |
| $1 / 2$ Mark |  |  |  |


| 27 | (i) He should use a concave mirror, as it forms a real image on the same side of the mirror. <br> (ii) Object distance, $\mathrm{u}=-15 \mathrm{~cm}$ <br> Image distance, $v=-60 \mathrm{~cm}$ Magnification, $\mathrm{m}=-\mathrm{v} / \mathrm{u}=-(-60) /(-$ $15)=-4 \mathrm{~cm}$. The minus sign in magnification shows that the image formed is real and inverted. (iii) The image is formed at a distance of 45 cm from the object. | 1 Mark <br> 1⁄2 Mark <br> 1/2 Mark <br> 1 Mark | 3 |
| :---: | :---: | :---: | :---: |
| 28 | (a) The two seminal vesicles are glands that produce the fluids that will turn into semen. The vesicles may also be called seminal glands or vesicular gland <br> (b) They produce eggs for fertilization and they make the hormones estrogen and progesterone. <br> (c) First, it produces spermatozoa, the male gametes. Second, it synthesizes testosterone, the principal male sex hormone. Third, it participates with the hypothalamus-pituitary unit in regulating reproductive function | 1 Mark <br> 1 Mark | 3 |


|  |  | 1 Mark |  |
| :--- | :--- | :--- | :--- |
| 29 | (a) Fleming's left hand rule is used <br> to find the direction of force <br> acting on a current carrying <br> conductor, placed in a <br> magnetic field. <br> (b) Correct diagram <br> (c) if two or more lines intersect <br> each other than it means that <br> at that point of intersection, <br> the magnetic field has two <br> directions at the same point. <br> This is not possible for a <br> magnetic field to point in more <br> than one direction at the same <br> point. | 1 Mark | 3 |
| 32 | C-Ethane |  |  |
| 30 | (a)A- Ethanol <br> B-Ethene <br> Plants $\rightarrow$ Rats $\rightarrow$ Snakes $\rightarrow$ <br> Hawks <br> 20,000J 2000J 200J <br> Possible causes- (1) increase in of Vision- Myopia <br> curvature of the lens. <br> (2) increase in length of the eyeball <br> Correction- Use of concave lens | 1 Mark | 1 Mark |


|  | (b) $\mathrm{C} 2 \mathrm{H} 5 \mathrm{OH}----------->\mathrm{C}_{2} \mathrm{H}_{4}+\mathrm{H}_{2} \mathrm{O}$ <br> Conc.Acid <br> (c) A reacts with sodium to form Hydrogen gas | 1 Mark <br> 1 Mark |  |
| :---: | :---: | :---: | :---: |
| 33 | Dihybrid cross Ratio 9:3:3:1 <br> Explanation of Law of independent assortment <br> $\underline{O r}$ <br> In human beings, the genes inherited from our parents decide whether we will be boys or girls. Women have a perfect pair of sex chromosomes (XX). But, men have a mismatched pair (XY) <br> All children will inherit an $X$ chromosome from their mother regardless of whether they are boys or girls. Thus, the sex of the children will be determined by what they inherit from their father. A child who inherits an $X$ chromosome from her father will be a girl, and one who inherits a $Y$ chromosome from him will be a boy. | 1 Mark <br> 2 Mark <br> 3 | 3 |
| Section-D |  |  |  |
| 34 | (a) Difficulties in coordination resulting in ataxia, uncoordinated movements, imbalance, speech problems <br> (b) Hippocampus | 1 Mark <br> 1 Mark | 5 |


|  | (c) Insulin Hormone It works by helping move sugar from the blood into other body tissues where it is used for energy. It also stops the liver from producing more sugar <br> (d) Iodine is important in development of brain and proper functioning of thyroid gland which in turn regulates growth related activities <br> (e) Hypothyroidism, swelling of thyroid gland,affects growth and development process | 1 Mark |  |
| :---: | :---: | :---: | :---: |
| 35 | Given : | ½ Marks | 5 |
|  | Power at maximum rate $=\mathrm{P}=880 \mathrm{~W}$ |  |  |
|  | voltage $=\mathrm{V}=220 \mathrm{volts}$. |  |  |
|  | We know that $\mathrm{P}=\mathrm{V}^{2} / \mathrm{R}$ | 1⁄2 Marks |  |
|  | $\mathrm{R}=\mathrm{V}^{2} / \mathrm{P}$ |  |  |
|  | $\Rightarrow 220 \times 220 / 880$ |  |  |
|  |  | 1 Mark |  |
|  | $\Rightarrow 48400 / 880$ |  |  |
|  | $\Rightarrow 550 \mathrm{mms}$ |  |  |
|  | Maximum current I is |  |  |
|  | $\mathrm{P}=\mathrm{IV}$ |  |  |



|  | $\Rightarrow 2 \mathrm{~A}$ <br> (b) As per Joules law of Heating Heat is produced when we provide electricity for certain time in a wire of specific resistance <br> Electric fuse is a device of low resistance wire to protect electric appliances from damage. on excessive heat the wire of the fuse get melts . | $11 / 2$ Mark <br> 1 Mark |  |
| :---: | :---: | :---: | :---: |
| 36 | (a) ferrous sulfate <br> (b) Thermal Decomposition <br> (c) 7 water of crystallization molecule <br> (d) $2 \mathrm{FeSO}_{4}$ (s) Heat $\rightarrow \mathrm{Fe}_{2} \mathrm{O}_{3}$ (s) $+\mathrm{SO}_{2}$ | 1 Mark <br> 1 Mark <br> 1 Mark <br> 2 Marks | 5 |
| Section-E |  |  |  |
| 37 | (a) Used by Dentist, and in Headlights of vehicle <br> (b) $F=C / 2 \quad C=2 F$ i.e. 30 cm <br> (c) $1 / f=1 / v+1 / u$ $1 / \mathrm{f}=1 /-100+1 /-100$ <br> $1 / f=-2 / 100$ $\mathrm{f}=-50 \mathrm{~cm}$ | 1 Mark <br> 1 Mark <br> 1Mark <br> 1⁄2 Marks <br> 1/2 Marks | 4 |
| 38 | (a) $2 \mathrm{Cu}+\mathrm{O} 2 \rightarrow 2 \mathrm{CuO}$ <br> (b) Have both acidic and basic properties $\mathrm{Al}_{2} \mathrm{O}_{3}, \mathrm{ZnO}$ | 1 Mark <br> 1 Mark | 4 |


|  | (I)AI $\mathrm{O}_{3}+2 \mathrm{NaOH} \rightarrow \mathrm{H}_{2} \mathrm{O}+2$ <br> $\mathrm{NaAlO}_{2}$ <br> (ii) $\mathrm{ZnO}+2 \mathrm{HCl} \rightarrow \mathrm{ZnCl} 2+\mathrm{H} 2 \mathrm{O}$. |  |  |
| :--- | :--- | :--- | :--- |
| 39 | (a) During aerobic cellular <br> respiration, glucose reacts with <br> oxygen, forming ATP that can <br> be used by the cell. Carbon <br> dioxide and water are created <br> as byproducts. | 1 Mark |  |
| (b) Haemoglobin <br> (c) Alveoli <br> (d) Breathing refers to the physical <br> act of inhaling and exhaling air <br> through the lungs, while <br> respiration is a chemical <br> process that involves the <br> exchange of gases between the <br> lungs, blood, and body cells | 1 Mark | 1 Mark | 4 |

Blue print

| Chapter | MCQ | VSA | SA | LA | CS | TOTAL |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| CHEMICAL <br> REACTIONS <br> AND <br> EQUATIONS | 2 |  |  | 1 |  | 7 |
| ACIDS,BASES <br> AND SALTS | 4 | 1 |  |  |  |  |
| METALS AND <br> NON- METALS | 1 | 1 |  |  | 1 | 7 |
| COARBON AND <br> ITS <br> COMPOUNDS | 1 | 1 | 1 |  |  | 6 |
| LIFE <br> PROCESSES | 1 | 1 |  |  | 1 | 7 |
| CONTROL AND <br> CORDINATION |  | 1 | 1 | 7 | 6 |  |
| HOW DO <br> ORGANISM <br> REPRODUCE? | 3 |  |  |  |  |  |


| HEREDITY | 2 |  | 1 |  |  | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| LIGHT |  |  | 1 |  | 1 | 7 |
| HUMAN EYE | 1 |  | 1 |  |  | 4 |
| ELECTRICITY | 2 |  |  | 1 |  | 7 |
| MAGNETIC <br> EFFECTS OF <br> CURRENT | 3 | 1 |  | 6 |  |  |
| OUR <br> ENVIRONMENT |  | 1 | 1 |  |  | 5 |
| GRAND TOTAL |  |  |  |  |  | 80 |

# KENDRIYA VIDYALAYA SANGATHAN CLASS X <br> SUBJECT SCIENCE (086) <br> SAMPLE PAPER (2023-24) 

Max. Marks: 80
Duration: 3
hours

## General Instructions:

I. This question paper consists of 39 questions in 5 sections.
II. All questions are compulsory. However, an internal choice is provided in some questions. A student is expected to attempt only one of these questions.
III. Section A consists of 20 Objective type questions carrying 1 mark each.
IV. Section B consists of 6 Very Short questions carrying 02 marks each. Answers to these questions should in the range of 30 to 50 words.
V. Section C consists of 7 Short Answer type questions carrying 03 marks each. Answers to these questions should in the range of 50 to 80 words
VI. Section D consists of 3 Long Answer type questions carrying 05 marks each. Answer to these questions should be in the range of 80 to 120 words.
VII. Section E consists of 3 source-based/case-based units of assessment of 04 marks each with sub-parts.

## SECTION - A

[Select and write one most appropriate option out of the four options given for each of the questions 1 -20]

1. In one of the industrial processes used for manufacture of sodium hydroxide, a gas $X$ is formed as by-product. The gas $X$ reacts with lime water to give a compound $Y$ which is used as a bleaching agent in chemical industry. The compound $X$ and $Y$ could be:
(a) $\mathrm{H}_{2}$ and $\mathrm{NaHCO}_{3}$ respectively
(b) $\mathrm{CO}_{2}$ and $\mathrm{CaOCl}_{2}$ respectively
(c) $\mathrm{Cl}_{2}$ and $\mathrm{CaOCl}_{2}$ respectively
(d) $\mathrm{Cl}_{2}$ and $\mathrm{NaHCO}_{3}$ respectively
2. Keeping food in airtight containers helps to slow down:
(a) Reduction
(b) Displacement
(c) Oxidation
(d) all of the above
3. When Ag is exposed to air it gets a black coating of
(a) $\mathrm{AgNO}_{3}$
(b) $\mathrm{Ag}_{2} \mathrm{~S}$
(c) $\mathrm{Ag}_{2} \mathrm{O}$
(d) $\mathrm{Ag}_{2} \mathrm{CO}_{3}$
4. Identify the parent acid and parent base of salt $\left(\mathrm{NH}_{4}\right)_{2} \mathrm{CO}_{3}$.
(a) $\mathrm{NH}_{3}$ and $\mathrm{H}_{2} \mathrm{CO}_{3}$
(b) $\mathrm{NH}_{4} \mathrm{OH}$ and $\mathrm{H}_{2} \mathrm{CO}_{3}$
(c) $\mathrm{H}_{2} \mathrm{CO}_{3}$ and $\mathrm{NH}_{4} \mathrm{OH}$
(d) $\mathrm{H}_{2} \mathrm{CO}_{3}$ and $\mathrm{NH}_{3}$
5. Observe the rate of evolution of hydrogen gas given by five metals $P, Q, R, S$ and T at room temperature.


What could be the metals $\mathrm{P}, \mathrm{Q}, \mathrm{R}, \mathrm{S}$ and T?
(a) $\mathrm{Zn}, \mathrm{Al}, \mathrm{Mg}, \mathrm{Cu}, \mathrm{Fe}$
(b) $\mathrm{Al}, \mathrm{Zn}, \mathrm{Mg}, \mathrm{Fe} \mathrm{Cu}$
(c) $\mathrm{Mg}, \mathrm{Al}, \mathrm{Zn}, \mathrm{Fe}, \mathrm{Cu}$
(d) $\mathrm{Fe}, \mathrm{Zn}, \mathrm{Mg}, \mathrm{Al}, \mathrm{Cu}$
6. When hydrogen chloride gas is prepared on a humid day, the gas is usually passed through the guard tube containing calcium chloride. The role of calcium chloride taken in the guard tube is to
(a) absorb moisture from the gas
(b) absorb the evolved gas
(c) moisten the gas
(d) Absorb $\mathrm{Cl}^{-}$ions from the evolved gas
7. Which of the following statements are correct for carbon compounds?
(i) Most carbon compounds are good conductors of electricity.
(ii) Most carbon compounds are poor conductors of electricity.
(iii) Force of attraction between molecules of carbon compounds is not very strong.
(iv) Force of attraction between molecules of carbon compounds is very strong.
(a) (ii) and (iv)
(b) (ii) and (iii)
(c) (i) and (iv)
(d) (i) and (iii)
8. To test the presence of starch on leaf, the leaf is boiled in alcohol within a water bath to
(a) de-starch the leaf
(b) to kill the cells
(c) dehydration of leaf
(d) de-colourise the leaf
9. Through the same stomatal opening, carbon dioxide diffuses into the plant during photosynthesis.

Reason out the above statements using one of the following options.
(a) The above processes happen only during night time.
(b) One process occurs during day time and the other at night.
(c) Both processes cannot happen simultaneously.
(d) Both processes can happen together at day time.
10. Pure-breed pea plant $A$ is crossed with pure-breed pea plant $B$. It is found that the plants which look like A do not appear in F1 generation but reemerge in F2 generation. Which of the plants A and B are tall and dwarf?
(a) A are tall and B are dwarf.
(b) A are tall and B are also tall.
(c) A are dwarf and B are also dwarf
(d) A are dwarf and B are tall
11. After our nose senses a smell, which option shows the mechanism of the travelling of sense signals in our body?
(a) olfactory receptors $\rightarrow$ dendritic tip of a nerve cell $\rightarrow$ axon $\rightarrow$ nerve ending $\rightarrow$ release of signal $\rightarrow$ dendritic tip of other nerve cell
(b) olfactory receptors $\rightarrow$ dendritic tip of a nerve cell $\rightarrow$ axon $\rightarrow$ cell body $\rightarrow$ release of signal $\rightarrow$ dendritic tip of other nerve cell
(c) gustatory receptors $\rightarrow$ dendritic tip of a nerve cell $\rightarrow$ cell body $\rightarrow$ axon $\rightarrow$ release of signal dendritic tip of other nerve cell
(d) gustatory receptors $\rightarrow$ dendritic tip of a nerve cell $\rightarrow$ axon $\rightarrow$ cell body $\rightarrow$ release of signal dendritic tip of other nerve cell
12. Name the type of asexual reproduction taking place in an organism causing disease kalazar.
(a) budding
(b) binary fission
(c) sore formation
(d) fragmentation
13. The resistivity of a metallic wire does not change if
(a) the material is changed
(b) the shape of the resistor is changed
(c) the temperature is changed
(d) both material and temperature are changed
14. A positively-charged particle (alpha particle) projected towards west is deflected towards north by a magnetic field. The direction of magnetic field is:
(a) towards south
(b) towards east
(c) downward
(d) upward
15. Which of the given statements is not true, regarding the electrical set-up for the verification of Ohm's law:
(a) The voltmeter is connected in parallel with the known resistance
(b) The ammeter is connected in series circuit
(c) The rheostat can only increase the resistance in electric circuit
(d) The single key is used to switch on/off the electric circuit
16. A magnetic field exerts no force on :
(a) an electric charge moving perpendicular to its direction
(b) an electric charge moving parallel to its direction
(c) a stationary electric charge
(d) all of the above
Q. no 17 to 20 are Assertion - Reasoning based questions.

These consist of two statements - Assertion (A) and Reason (R). Answer these questions selecting theappropriate option given below:
(a) Both $A$ and $R$ are true and $R$ is the correct explanation of $A$
(b) Both $A$ and $R$ are true and $R$ is not the correct explanation of $A$
(c) $A$ is true but $R$ is false
(d) $A$ is False but $R$ is true
17. Assertion : Green fumes are produced when lead nitrate is heated.

Reason : Nitrogen dioxide gas is produced as a by-product due to the decomposition of lead nitrate.
18. Assertion : Haemoglobin content is more in the children than the adult.

Reason: Children have higher metabolic rate and growth rate than the adults.
19. Assertion : Acquired trait cannot be passed on from one generation to next generation.

Reason : Inaccuracy during DNA copying of acquired trait is minimum
20. Assertion: When two long parallel wires, hanging freely are connected to a battery, they come close to each other.

Reason:Wires carrying current in opposite direction repel each other.

## SECTION B

[Q. no. 21 to 26 are very short answer questions carrying 2 marks each]
21. Write one equation each for decomposition reactions where energy is supplied in the form of heat and light.

## OR

Write one equation each for
(a) A reaction in which the reaction mixture becomes warm.
(b) A reaction in which an insoluble substance is formed.
22. Explain the statement, 'Bile does not contain any enzyme but it is essential for digestion.'
23. Explain how transportation of water in xylem differs from transportation of food in phloem.
24. Nervous and hormonal system together perform the function of control and coordination in human beings. Justify the statement.
25. A person can see clearly up to 3 m . Prescribe a lens for spectacles so that he can see clearly up to 12 m . Also calculate its focal length.

## OR

Draw a labelled diagram to explain the formation of a rainbow in the sky.
26. The following organisms form a food chain.

Insects, Hawk, Grass, Snake, Frog
Which of these will have the highest concentration of non-biodegradable chemicals? Name the phenomenon associated with it.

## SECTION C

## [Q.no. 27 to 33 are short answer questions carrying 3 marks each]

27. Lead nitrate solution is added to a test tube containing potassium iodide solution.
(a) Write the name and colour of the compound precipitated.
(b) Write the balanced chemical equation for the reaction involved.
(c) Name the type of this reaction justifying your answer.
28. A cloth's strip dipped in onion juice is used for testing a liquid ' $X$ ' and ' $Y$ '. The liquid ' X changes itsodour whereas no change in odour is observed in liquid 'Y'.
(a) Which type of an indicator is onion juice?
(b) The liquid ' Y ' turns blue litmus red. List the observations the liquid ' Y ' will show on reacting with the following:
I. Zinc granules
II. Solid sodium carbonate

Write the chemical equations for the reactions involved.
29. How is lymph an important fluid involved in transportation? Give two points of difference between blood and lymph.

## OR

Draw a diagram of human respiratory system and label - pharynx, trachea, diaphragm and alveolar sac on it.
30. The image formed by a spherical mirror is real, inverted and its magnification is -2 . If the image is at a distance of 30 cm from the mirror, where is the object placed? Find the focal length of the mirror. List two characteristics of the image formed if the object is moved 10 cm towards the mirror.
31. A child while playing with his father's spectacles burnt a hole in a piece of paperby focusing a small image of the sun on it.
(i) What defect of vision his father is suffering from?
(ii) Write two causes for this defect?
(iii) Name the corrective lens used for correction of above defect.
32. (a) What are magnetic field lines?
(b) How is the direction of magnetic field at a point determined?
(c) List any two properties of magnetic field lines.

OR
Observe the figure given below and answer the following questions:

(a) Write the special name given to the coil AB which has many circular turns of insulated copper wire.
(b) State the nature of magnetic field inside $A B$ when a current is passed through it.
(c) List two factors on which the strength of the magnetic field produced by AB depends.
33. How is ozone formed in the upper atmosphere? Why is the damage of ozone layer a cause of concern to us? State cause of this damage.

## SECTION D

[Q.no. 34 to 36 are Long Answer Questions carrying 5 marks each]
34. A compound ' C ' (molecular formula, $\mathrm{C}_{2} \mathrm{H}_{4} \mathrm{O}_{2}$ ) reacts with Na-metal to form a compound ' $R$ ' and evolves a gas which burns with a pop sound. Compound ' C ' on treatment with an alcohol ' A ' in presence of an acid forms a sweetsmelling compound ' S ' (molecular formula, $\mathrm{C}_{3} \mathrm{H}_{6} \mathrm{O}_{2}$ ). On addition of NaOH to ' C ', it also gives ' R ' and water. ' S ' on treatment with NaOH solution gives back ' R ' and ' A '.
Identify 'C', ' R ', ' A ', ' S ' and write down the reactions involved.

## OR

Look at the given figure and answer the following questions:

(a) What change would youobserve in the calciumhydroxide solution taken intube B?
(b) Write the reaction involved in test tubes A and B respectively.
(c) If ethanol is given instead of ethanoic acid, would you expect the same change?
(d) How can a solution of lime water be prepared in the laboratory?
35. (a) List the sequence of events in the uterus of a human female from fertilisation of egg till childbirth.
(b) State the changes that are observed in the uterus if fertilisation of egg does not occur.

## OR

(a) "Use of a condom is more beneficial than any other contraceptive method." Justify this statement giving two reasons.
(b) How does oral contraceptive help in avoiding pregnancies?
(c) What is gender selective abortion? How does it affect a healthy society?(State any one consequence)
36. Read the following information:
I. Resistivity of copper is lower than that of aluminium which in turn is lower than that of constantan.
II. Six wires labelled as A, B, C, D, E, F have been designed as per the following parameters:

| Wire | Length | Diameter | Material | Resistance |
| :---: | :---: | :---: | :---: | :---: |
| A | 1 | 2 d | Aluminium | $\mathrm{R}_{1}$ |
| B | 21 | $\mathrm{~d} / 2$ | Constantan | $\mathrm{R}_{2}$ |
| C | 31 | $\mathrm{~d} / 2$ | Constantan | $\mathrm{R}_{3}$ |
| D | $1 / 2$ | 3 d | Copper | $\mathrm{R}_{4}$ |
| E | 21 | 2 d | Aluminium | $\mathrm{R}_{5}$ |
| F | $1 / 2$ | 4 d | Copper | $\mathrm{R}_{6}$ |

Answer the following questions using the above data:
(a) Which of the wires has maximum resistance and why?
(b) Which of the wires has minimum resistance and why?
(c) Arrange $R_{1}, R_{3}$, and $R_{5}$, in ascending order of their values. Justify your answer.
[Q.no. 37 to 39 are case - based/data -based questions with 2 to 3 short sub - parts. Internal choice is provided in one of these sub-parts.]
37. Elements are classified into metals, non-metals and metalloids. Metals are lustrous, malleable, ductile and good conductors of heat and electricity, mostly solids, form positive ions and basic oxides. Non-metals arena-lustrous, brittle, exist as solids, liquids and gases, non-conductor of heat and electricity, form negative ions and acidic oxides mostly.
Metals are obtained from nature either in Free State or combined state depending upon their reactivity. Most of metals occur in combined state in form of ores. The process of obtained pure metals from ores is known as metallurgy. Metallurgical processes include following steps

1. Concentration of ore
2. Converting non oxide ore into metal oxide
3. Converting metal oxide into metal

Metal obtained from above process contains impurities, so it undergoes refining.
(a) Identify and define the step of metallurgical process shown in below reaction.

$$
\mathrm{ZnCO}_{3} \xrightarrow{\Delta} \mathrm{ZnO}+\mathrm{CO}_{2}
$$

(b) Name any two methods for concentration of ores.
(c) Name and briefly define the process of obtaining of highly reactive metals.

## OR

(c) What is electro refining? Name the cathode, anode and electrolyte used in electro refining of copper.
38. Mendel crossed tall and dwarf pea plants to study the inheritance of one gene. He collected the seeds produced as a result of this cross and grew them to generate plants of the first hybrid generation which is called the first filial progeny or F1 generation. Mendel then self pollinated the tall F1 plants and he obtained F2 generation.
(a) In the garden pea round shape of seed is dominant over wrinkled shape. A pea plant heterozygous for round shape of seed is selfed and 1600 seeds produced during the cross are subsequently germinated. How many seedlings would have non parental phenotype?
(b) Which trait is not expressed in F1 generation? Why?
(c) Give genotypic ratio of F2 generation.

## OR

(c)Which character in height of pea plant is dominant?
39. Analyse the following observation table showing variation of image distance (v) with object distance (u) in case of a convex lens and answer the questions that follow, without doing any calculations:

| S. NO. | Object distance, $u(\mathrm{~cm})$ | Image distance, $v(\mathrm{~cm})$ |
| :--- | :--- | :--- |


| 1 | -90 | +18 |
| :--- | :--- | :--- |
| 2 | -60 | +20 |
| 3 | -30 | +30 |
| 4 | -20 | +60 |
| 5 | -18 | +90 |
| 6 | -10 | +100 |

(a) State the lens formula.
(b) Write the serial number of that observation which is not correct. How did you arrive at this conclusion?
(c) In which S . No. the size of object is equal to the size of image?

## OR

(c) Take an appropriate scale to draw ray diagram for the observation at S. No. 4.

1. Solve 2 sample papers.
2. Complete your practical file.

CLASS - VI
Answer the following questions with diagram where necessary :

1. What is a shadow ? Describe the characteristics and all the conditions needed to form a shadow .
2. Define -transparent, translucent and opaque objects with examples.
3. Explain-rectilinear motion, circular and periodic motion.
4. What would happen if you joined the two terminals of an electric cell directly through a wire?
5. Explain why an electrician use rubber gloves while repairing an electric switch / equipment.
6. How can you measure the length of a curved line ?
7. Draw a simple circuit diagram to show battery, wire, switch and bulb.
8. Make a science toy or do any science activity related to magnet, electricity or Air around us.
9. Learn all the chapters of PT-2 Syllabus.

CLASS - VII
SUB. SCIENCE
Answer the following questions with diagram where necessary :

1. Draw a diagram to show the connection of four electric cells in a closed circuit .
2. Explain the process of seed dispersal by different agents with the help of examples.
3. If a simple pendulum completes 20 oscillations in 28 s , what is the time period of this pendulum?
4. Harshit takes 20 minutes from his house to reach his school on a bicycle. If the bicycle has a speed of $15 \mathrm{Km} / \mathrm{h}$, calculate the distance between his house and the school.
5. Draw the shapes of the distance -time graphs for the motion in the following cases-
(i) A bus moving with constant speed.
(ii) A bus moving withnon uniform speed.
(iii) A bus parked on a roadside.
6. Conductany activity or make a science toy .
7. Learn all the chapters of PT-2 Syllabus.

CLASS - VIII SUB. SCIENCE
Answer the following questions with diagram where necessary :

1. (a) What are seismic zones?
(b) By drawing a labelled diagram explain the focus and epicentre of an earthquake.
2. What is a lighting conductor? Explain its construction and working.
3. Explain the construction and working of an electroscope with diagrams.

Also mention its two uses.
4. Write the precautionary steps you should take to protect yourself during an earthquake.
5. Write the do's and don'ts during a thunderstorm. (Outside the House)
6. What is an earthquake? Why does it occur?
7. Mention some preventive measures to be taken at the time of earthquake?
8. Describe purification of copper with the help of a labelled diagram.
9. Learn all the chapters of PT-2 Syllabus.

## CLASS - IX

1. Define up thrust or buoyant force. Describe an activity to show that a body loses
its weight when immersed in a liquid.
2. Archimedes' principle has wide application in making ships and submarines. Explain.
3. A stone is allowed to fall from the top of a tower 10 m high and at the same time another stone is projected vertically upward from the ground with a velocity of 25 $\mathrm{m} / \mathrm{s}$. Calculate when and where the two stones will meet. (Hint. Equations of motion)
4. Calculate the force of gravitation between the Earth and the Sun. Given that the mass of the earth is $6 \times 1024 \mathrm{~kg}$ and of the sun is $2 \times 1030$ kilogram. The average distance between the two is $1.5 \times 1011 \mathrm{~m}$. (Hint. use expression of Newton's law of gravitation)
5. Define kinetic energy. Write an expression for kinetic energy and the SI unit of kinetic energy. Two cars are moving with velocities of $36 \mathrm{~km} / \mathrm{h}$ and $54 \mathrm{~km} / \mathrm{h}$ on a highway. Find the ratio of their kinetic energies if mass of the cars is 400 kg and 600 k respectively?
6. State the law of conservation of energy. Show that when a body falls from a height the total mechanical energy remains same?
7. How much work is done when a force of 2 N moves a body through distance of 10 cm in the perpendicular direction of force?
8. Identify in each case whether work done in each case is negative, positive or zero by giving appropriate reason in support of your answer
(a) Work done by the gravitational force of earth acting on a satellite moving around it in a circular path
(b) A man of 60 kg carrying a luggage of 80 kg on his head waiting for the train on platform.
(c) A squirrel going up a tree.
(d) An engine is pulling coaches of train.
(e) A body falling freely due to force of gravity.
9. Prepare a Science toy based on any of the chapter.
10. Learn PT-2 Syllabus.

## Social Science:-

Class 8A and 8B
It subject social science geography-industries

History -When people Rebel 1857 and after civilizing the 'native' educating the nation Civics-understanding marginalization confronting marginalization
Question answer of mention chapter for PT-2 2023-24
Class 7 Syllabus of PT 2 Exam 2023-24 ( Social Science) History- 1.Tribes, nomads and settled communities 2.Devotional path to divine Geography - 1.Water 2.Human Interaction: Tropical and subtropical region Civics-1.women change the world 2 .Understanding media Make at least 10 mcqs from these chapters in separate notebook Prepare these chapters for Periodic Test 2 Revise all maps of syllabus PT 2 MDP : Make a project on Markets Around Us

Class 9 Winter Break Holiday HW History: ch :3 Nazism and the rise of the Hitler Economics: Ch 3 Poverty as Challenge Civics: Ch 4 Working of Institutions Geography ch 4 Climate Learn all the questions and answers for PT3 exam Project: make a project on Disaster Management

Class 10 *Practice Pre Board 1 question paper of social science in your social science notebook * Revise at least 5 sample paper of social science for Pre Board 2 * Revise all maps * Complete the given project work and submit after winter Break for marking. (20 marks)

## History:

Class 11D
Winter break holiday homework

1. Changing cultural traditions
2. Display Singh indigenous people

Learn MCQ, short answer long answer, case study based questions and do map practice for pt 2 2023-24
Class -12 D

## History \& Geography

1. Write an learn question answer of CBSE model sample paper 2023-24
2.Learn question answer of first pre board exam 2023-24 question paper.
2. Learn all important question answer or each chapter of history.
(a) Class XI
(b) Project work-
(c) (i) Interlinking of river
(d) (ii) conservation of biodiversity
(e) 2. Complete all five chapters in practical file.
(f) Class VIII
(g) MDP on climate change.
(h) Prepare for PT2

Class XII
(i) Complete practical file.
(j) Solve previous year question paper, CBSE model paper 2023-24 in your notebook.
(k) Prepare for board exam

## Computer Science:-

Class - XII S

Write five questions on each of the following topics:

## Data file handling

Push and pop functions of stack
Output based questions.

Questions based on error finding
To write SQL Commands

Write output of the given SQL commands
Write syntax of all DDL and DML commands.
Do sample papers and 1st pre board Question Papers of different region for practice.
Complete Practical File.
Complete Project file.

Class - XI Sc.
WAP that asks the user for a string (only single space between words) and returns an estimate of how many words in the string.

WAP that inputs a line of text and prints out the count of vowels in it.
WAP that inputs a line of text and print the biggest word (length wise) from it.

WAP to take two lists of same size and adds their elements together to form a new list. eg: $L=[2,3,4], M=[1,6,8]$ then new list should be $N=[3,9,12]$

WAP to arrange the elements of a list in increasing order of their value.
WAP to find out the total number of odd and even elements in the list.
WAP to print the largest even number from the list, if there no even number in the input, print "Even not found in the list".

Given a tuple namely cars storing car names as element :
('Toyota’, ‘Honda’, ‘GM', ‘Ford’, ‘BMW’, 'Volkswagon’, 'Mercedes', 'Ferrai’, 'porshe’)
Write a program to print names of the cars in index range 2 to 6 , both inclusive. The output should also include the index in words as shown below :

One Honda Two GM
:

Write a Python program to convert a list to a tuple.
Write a Python program to check if a specified element presents in a tuple of tuples. Original list:
(('Red', 'White', 'Blue'), ('Green', 'Pink', 'Purple'), ('Orange', 'Yellow', 'Lime')) Check if White presenet in said tuple of tuples!

True

Check if Olive presenet in said tuple of tuples! False
Write a Python program to unpack a tuple in several variables.
Write a Python script to check whether a given key already exists in a dictionary.

Write a Python script to generate and print a dictionary that contains a number (between 1 and n ) in the form ( $\mathrm{x}, \mathrm{x}^{*} \mathrm{x}$ ). Sample Dictionary ( $\mathrm{n}=5$ ) :

WAP to enter names of employees and their salaries as input and store them in a dictionary. Why is dictionary termed as an unordered collection of objects

[^0]Library holiday homework
Class 6
Q- Learn and Write 5 new words daily during winter vacation in English in your library notebook also try to use it during conversation.

Q- Read a book of your choice and write it's review in your own word in your library notebook.

## Class 7

Q- Learn and Write 5 new words daily during winter vacation in English in your library notebook also try to use it during conversation.

Q- Write Your experiences from your Trip during the winter vacation in your library notebook.

## Class 8

Q- Read a book of your choice and write it's review in your own word in your library notebook.
Q- Write Your experiences from your Trip during the winter vacation in your library notebook.

## Class 9

Q- Read a book of your choice and write it's review in your own word in A4 sheet.

## Class 11

Q- Read a book of your choice and write it's review in your own word in A4 sheet.


[^0]:    ** Revise chapters: Strings, Lists, Tuples.

