

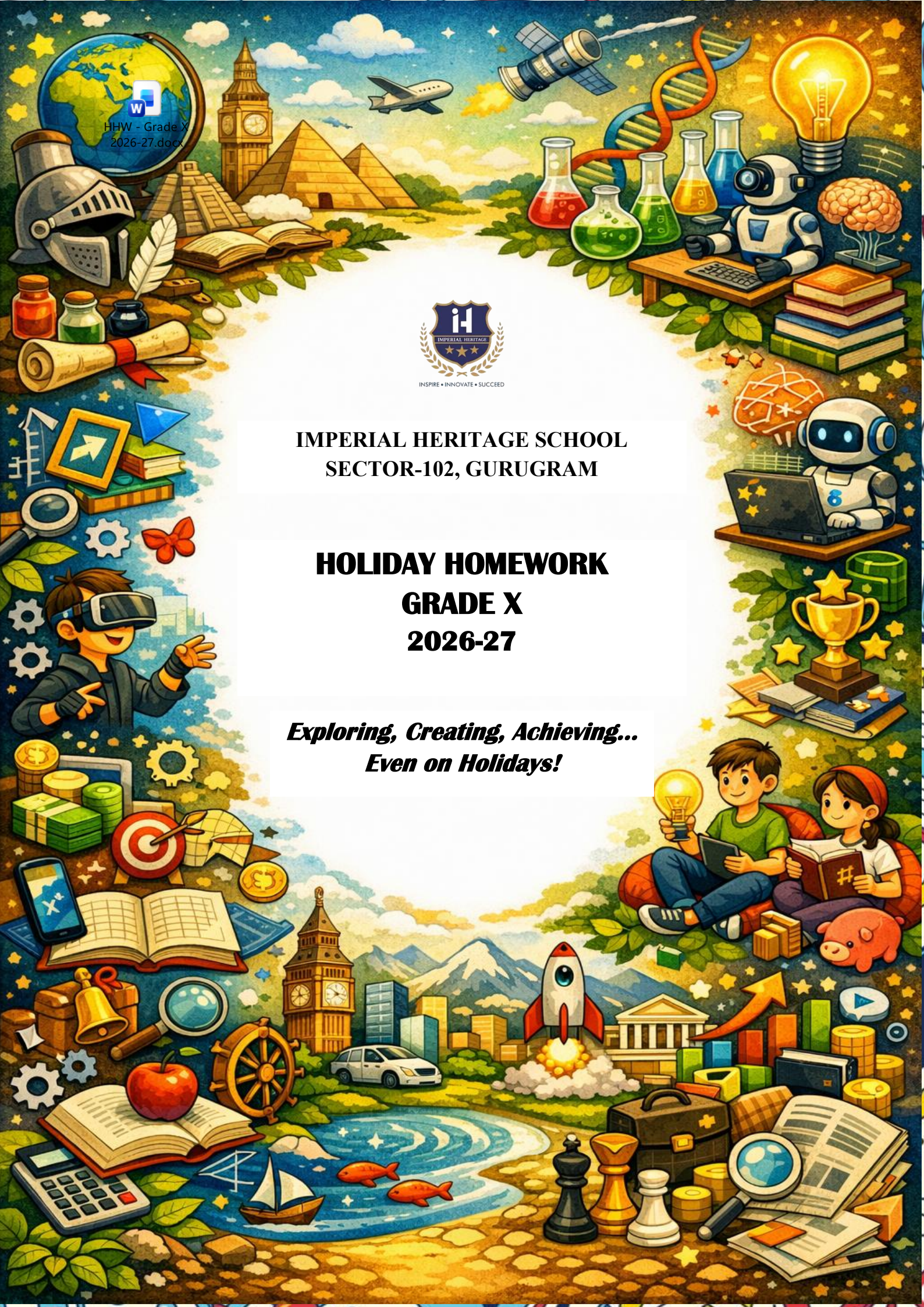


INSPIRE • INNOVATE • SUCCEED

IMPERIAL HERITAGE SCHOOL
SECTOR-102, GURUGRAM

HOLIDAY HOMEWORK
GRADE X
2026-27

*Exploring, Creating, Achieving...
Even on Holidays!*



“Curiosity Never Goes on Vacation—and neither does the joy of learning.”

Dear Parents,

Warm greetings!

At Imperial Heritage School, we view learning as a continuous journey—one that extends far beyond the classroom walls. The purpose of holiday homework is not merely to keep students occupied, but to inspire them to explore, reflect, and grow independently. It is an opportunity for children to connect classroom knowledge with the world around them, while discovering their own unique ways of learning.

The Purpose Behind Holiday Homework

Holiday assignments are thoughtfully designed to:

- Sustain the rhythm of learning even during the break
- Encourage application of concepts in everyday life
- Develop responsibility, discipline, and effective time management
- Strengthen analytical thinking, creativity, and problem-solving abilities

Learning Through Projects

Each assignment is aligned with CBSE guidelines and focuses on experiential, project-based learning. These tasks are curated to ensure meaningful engagement, allowing students to bridge theory with practical understanding in a creative and enjoyable manner.

Assessment Parameters

Holiday homework will form a part of Internal Assessment and will be evaluated on:

- Content
- Presentation
- Relevance
- Creativity
- Originality
- Timely Submission

Kindly Note the Holiday Homework Marks are added in the Internal Assessment marks.

Guidelines for Students

- **Be Authentic:** Your work should reflect your own ideas and efforts.
- **Plan Ahead:** Break tasks into small parts and complete them gradually.
- **Follow Instructions:** Read each guideline carefully before beginning.
- **Maintain Neatness:** Clear, organized work always creates a strong impression.
- **Think Creatively:** Present your work in an innovative and engaging manner.
- **Read Daily:** Cultivate the habit of reading to expand your imagination and language skills.
- **Practice Mathematics:** Consistency is key—regular practice leads to mastery.
- **Seek Guidance, Not Substitution:** Parents may guide, but students must complete the work independently.
- **Prioritize Quality:** Focus on depth, clarity, and meaningful content.

A Fresh Thought for Our Learners

“Where Questions Bloom”

When holidays stretch like open skies,
Let wonder wake and questions rise.
Not all learning lives in books,
It hides in paths and curious looks.

In silent thoughts, in things you make,
In every risk you choose to take,
In colours mixed or stories spun,
In problems solved just for the fun.

A restless mind, a seeking heart,
That’s where true journeys always start.
So learn, explore in your own way—
Let curiosity lead each day.

Submission Date: 6th July, 2026

We eagerly await the thoughtful and creative work our students will present. May this vacation be a time of joyful discovery, meaningful experiences, and personal growth.

Wishing you all a safe, refreshing, and enriching summer break!

Warm regards,

Ms. Neelu Sharma

Principal

ENGLISH

I. LESSON INTEGRATED PROJECT

Topic - Fear vs Courage: The Inner Battle

Integrated Chapter – Nelson Mandela: Long Walk to Freedom (First Flight)

Objective - To investigate the meaning of courage and its manifestation in overcoming fear through research, analysis, creative expression and artistic representation. Here's a project outline:



Task 1: Cover page

Create a cover page giving relevant details of your project, a quote and a basic introduction of the theme.

Task 2: Research and Exploration

Students have to research any literary work (books, drama, plays, etc.) that illustrates the theme of courage overcoming fear and present a book review. They can select examples from classic literature or contemporary works and analyse how courage is depicted in the face of fear.

Write a book/poem review that includes:

- Title, author, genre
- Characters and their role
- Theme of the story in 50 words
- Summary in 500 words
- Personal Reflection from the book

Suggestions:

The Diary of a Young Girl – Anne Frank

Feel the Fear and Do It Anyway – Susan Jeffers

I Am Malala – Malala Yousafzai

The Lord of the Rings – J. R. R. Tolkien

Wings of Fire – A. P. J. Abdul Kalam

Task 3: Personal Reflection and Analysis

Reflect on a real moment in your life when you experienced fear but acted with courage.

Write a short narrative (200 words) describing:

- Setting/Plot
- What challenge did you face?
- How did you overcome it?

Task 4: Creative Expression

Create a colourful and creative split-page poster/mind map to depict Fear vs Courage. Add a quote to it.

OR

Task 4: Artistic Representation

Research on two modern-day heroes who have demonstrated courage in challenging circumstances. You can prepare a collage or a journal with their life sketch to convey their interpretation of courage.

Project Guidelines:

1. Make a file of your choice with A4-size sheets only.
2. Sheets can be colourful or plain.
3. Presentation should be neat.
4. Project must showcase your creativity.
5. Plagiarism of any kind will not be accepted.

II. STATE PAIRING: ART INTEGRATED PROJECT

Topic - Creating a Travelogue on Haryana and Telangana

Objective - To research and document the unique cultural and geographical features of Haryana and Telangana through the creation of a travelogue using Canva or PPT. Here's a project outline:

The class will be divided into groups, assigning each group either Haryana or Telangana as their focus. They can use presentation software to design their travelogue, incorporating text, images, maps, and graphics. Students will share the PPT or Canva presentation via MS Teams and upload it to the assignment section.

Task The groups will be instructed to conduct research on various aspects of their assigned state. Students may use a variety of sources, including books, articles, websites, and videos.

The various aspects include:

- **Geography:** Landforms, climate, rivers, and natural attractions.
- **Culture:** Traditions, festivals, cuisine, attire, and languages spoken.
- **History:** Significant events, historical landmarks, and heritage sites.
- **Tourism:** Popular tourist destinations, accommodations, transportation options, and activities.

III. Cover page: English Portfolio

Make an artistic cover page for your English Portfolio.

IV. Words & Expressions Workbook – II (Self Practice)

Complete all the exercises - Units 1 to 4 in the Words and Expressions Workbook – II prescribed in the CBSE curriculum.

V. Suggested Reading

'The Diary Of A Young Girl' by Anne Frank is a long reading text prescribed by CBSE for extensive study. Please find the link below for online reading. Happy Reading!

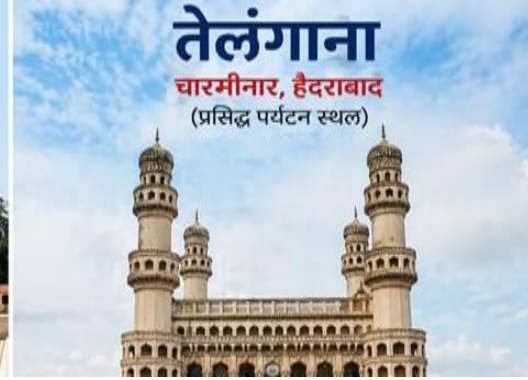
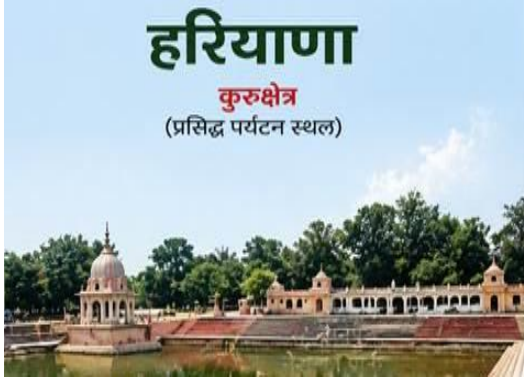
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हिंदी

भारत के अलग-अलग राज्यों में पर्यटन उनकी संस्कृति, इतिहास और प्राकृतिक सौंदर्य को दर्शाता है। हरियाणा और तेलंगाना भी अपने-अपने विशेष पर्यटन स्थलों के लिए प्रसिद्ध हैं।

1. हरियाणा और तेलंगाना राज्य के पर्यटन स्थलों का तुलनात्मक विवरण लिखें और पर्यटन के महत्व भी लिखें।



निर्देश -

- दोनों राज्यों का मानचित्र बनाओ
 - पर्यटन स्थलों के चित्र चिपकाओ और उनके बारे में विस्तार से लिखें।
 - रंगीन हेडिंग और बॉर्डर बनाओ
 - अंत में अपनी राय (4-5 पंक्तियाँ) जरूर लिखें
2. 'डिजिटल शिक्षा' के लाभ-हानि विषय पर एक अनुच्छेद लिखें।
 3. "प्लास्टिक मुक्त भारत" विषय पर सामाजिक जागरूकता लाने के लिए एक आकर्षक विज्ञापन तैयार कीजिए।

जल है।
तो कल है।

पृथ्वी की सतह पर दो तिहाई
जल है, परन्तु पीने योग्य
जल केवल 0.002 ही है।

सौजन्य से :

डी.ए.वी. स्कूल, चण्डीगढ़ (पहरेदार संस्था)



हम सब ने यह ठाना है
पानी को बचाना है।

4. विद्यालय में "विज्ञान प्रदर्शनी" आयोजित होने के लिए एक सूचना लिखिए।

नोट - संपूर्ण कार्य A4 साइज़ शीट पर करें।

MATHEMATICS

General Guidelines:

- Your Holiday Homework needs to have a cover page.
- Clearly mention parts/ sections of your holiday homework.
- Do proper survey, wherever required.

PART A - Attempt the following project.

Collect the data representing the areas of all the districts of Haryana. Organise the collected data as a grouped data choosing a suitable class size. Find the Mean and Mode of the data collected.

Follow the same procedure for the districts of Telangana. Now compare the Mean and Mode of both the data and interpret the conclusion.



Note: Your project should have introduction, content and conclusion. You can support your work with pictures.

Assessment Criteria: Content, presentation, authenticity and timely submission.

PART B (To be done on A4 size sheet)

1. Design a creative cover page on a coloured sheet for your Math Portfolio.
2. Prepare crossword puzzle of minimum 12 questions on an A4 size sheet as per the following:

Roll Number	Chapter
1 - 19	Chap -1 and Chap - 2
20 - 38	Chap -3 and Chap - 4

Note: You can provide the solution of the puzzle separately.

3. Brain Teasers Assignment uploaded on ERP.

PART C - Write the following activities in your Practical file. (You can refer ERP uploads)

1. To obtain the solution of a quadratic equation ($x^2 + 4x = 60$) by completing the square geometrically.
2. To identify Arithmetic Progressions in some given lists of numbers (patterns).

3. To find the sum of first n natural numbers.
4. To establish a formula for the sum of first n terms of an Arithmetic Progression.

PART D (To be done in a practice notebook)

1. Do 5 questions daily of chapters 1, 2, 3, 4, 5 and 13 from NCERT Exemplar and other reference books.
2. Do all examples of chapters 1, 2, 3, 4, 5 and 13.

PHYSICS

1. Design an attractive portfolio cover page on an A4 size coloured sheet for Science Portfolio.



2. Explain the following terms in your own words (In white A-4 size sheets)

- (i) Power of accommodation
- (ii) Refractive index
- (iii) Principal focus and focal length for spherical mirrors and lenses.
- (iv) Dispersion of Light and spectrum
- (v) Tyndall Effect
- (vi) Atmospheric Refraction
- (vii) Scattering of Light
- (viii) Rainbow formation

3. DIAGRAM PRACTICE

- (i) Human eye (On A-3 size sheet)
- (ii) Ray diagrams for myopia & hypermetropia with their correction. (On A-4 size sheet)
- (iii) Refraction through glass slab (On A-4 size sheet)

4. **CREATIVE TASK-** (i) is compulsory. Students must attempt either (ii) or (iii).

- (i) Make a poster on “Save Your Eyes”
- (ii) Create a comic strip/story explaining the reflection of light.
- (iii) Create a comic strip/story explaining refraction of light.

Rubrics for comic strip:

- (i) Content Accuracy
- (ii) Creativity & Presentation
- (iii) Neatness & Organization
- (iv) Originality and completion

5. **REVISION TASK-** Complete the Physics Revision Worksheet in your notebook. The worksheet has been uploaded on the ERP.

THE MIRROR MAGIC! STORY OF REFLECTION

1 Riya stands in front of a mirror.
Wow! I can see myself!

2 She shines a torch on the mirror.
The light bounces back!

3 Let's see what really happens.
Incident ray, Normal, Reflected ray, i , r

4 Riya measures the angles.
Angle of incidence (i) is equal to angle of reflection (r)!

5 Real-life examples of reflection.
Mountains in water, Rear-view mirror in vehicles, Shiny spoons and surfaces

6 Riya smiles.
Reflection helps us see many beautiful things around us!

KEY FACTS – REFLECTION

- When light falls on a smooth surface, it bounces back into the same medium.
- Angle of incidence (i) = Angle of reflection (r)
- The incident ray, reflected ray and the normal lie in the same plane.

MORAL:
Light may bounce back, but knowledge always shines forward! ✨

CHEMISTRY

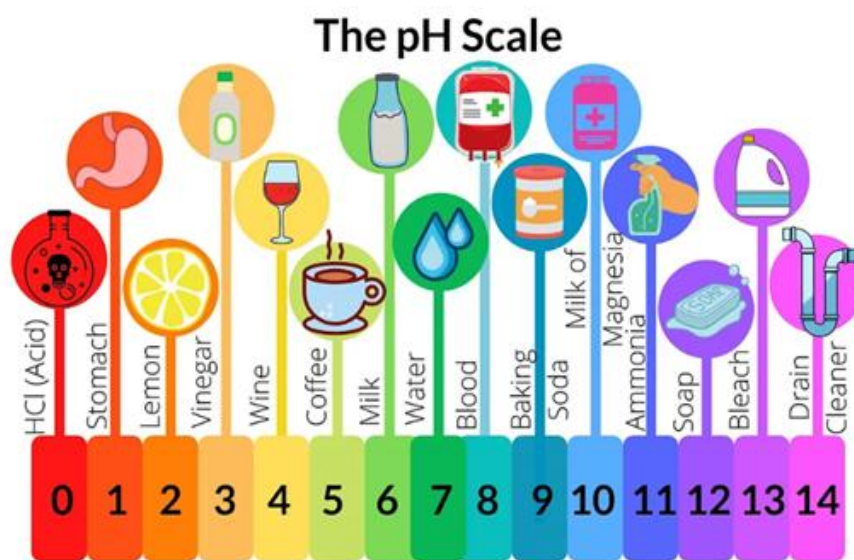
“pH plays a vital role in maintaining balance in nature and human life.”

1. Prepare a project report to study and understand the role of pH and its importance in maintaining balance in nature and human life with special reference to its impact on agriculture, water quality, industrial activities, medicine, environment, food industry in the states of Telangana and Haryana.

- Make a file of your choice with A4 size sheets only.
- The project should include the following: -

Cover Page, Acknowledgment, index, introduction, content, Bibliography (all the sources of information from where you gathered the information)

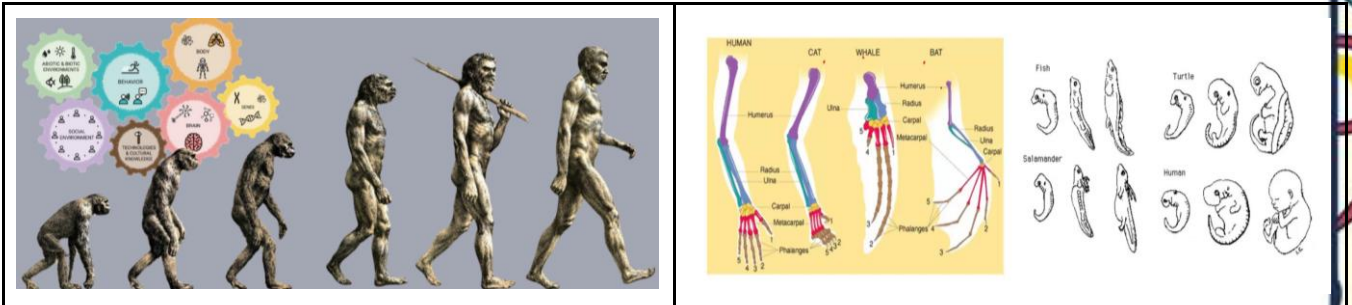
- Use illustrative pictures (printout or drawing) and data wherever necessary to make the project informative.



2. (a) To prepare natural indicators and test them with common substances, and understand how they help in distinguishing acids and bases based on colour change. Write the procedure for the same on A4 size sheet.
- (b) Draw a well labelled diagram to show Chlor-alkali process (on A4 size sheet).
3. Revise chapter 1 and 2 and do revision worksheet

BIOLOGY

ACTIVITY 1



This activity is based on Chapter Heredity and Evolution and it will be incorporated in the portfolio. In this activity, we wish you to make a detailed report on the topics as per the roll numbers mentioned below on A4 sheets:

1. MECHANISM OF EVOLUTION & FORMATION OF SPECIES (Odd Roll numbers):

- Evolution: Evolution as change in gene frequency in populations, Role of variation in evolution
- Natural Selection: Selection based on environmental advantage, Survival and reproduction of favourable traits
- Genetic Drift: Random changes in small populations, Chance events affecting gene frequency
- Acquired and Inherited Traits (Evolution Context): Role of germ cells in inheritance, Non-inheritance of acquired traits, Importance in evolution
- Factors Leading to Evolution: Variation, Natural selection, Genetic drift
- Speciation: Formation of new species, Role of geographical isolation, Reduction in gene flow
- Mechanism of Speciation: Accumulation of variations, Reproductive isolation, Behavioural and genetic differences

EVIDENCE OF EVOLUTION & EVOLUTIONARY RELATIONSHIPS (Odd Roll numbers):

- Evolution and Classification: Classification based on similarities, Link between classification and evolution
- Tracing Evolutionary Relationships: Common ancestry, Homologous organs, Analogous organs
- Fossils: Formation and types of fossils, Fossils as evidence of evolution
- Fossil Dating: Relative dating (rock layers), Absolute dating (radioactive methods)
- Fossil Records and Evolution: Sequence of fossil formation, Understanding evolutionary history
- Evolution by Stages: Gradual development of organs, Intermediate stages and adaptations
- Molecular Phylogeny: DNA comparison, Evolutionary relationships using molecular data
- Human Evolution: Origin and migration of humans, Unity of human species

Note:

- Make a file of your choice with A4 size sheets only (sheets can be colourful or plain).
- Use illustrative pictures (printout or drawing) and data wherever necessary to make the project informative.
- Apart from the above-mentioned content, project should include the following:

- Cover page
- Acknowledgments (Thanksgiving to those who helped you in understanding the concept of the project).
- Bibliography (all the sources of information where you gathered the information from; examples: books, internet links etc.)

ACTIVITY 2

Make well labelled diagrams of the following on A4 size sheets (use NCERT for the reference):

- Human Elementary Canal
- Human Respiratory System
- Human Heart
- Schematic representation of transport and exchange of oxygen and carbon dioxide
- Human Excretory system
- Structure of Nephron

ACTIVITY 3: Revise the chapter: Life processes and attempt revision worksheet.

SOCIAL SCIENCE

CONSUMER AWARENESS PROJECT



SUSTAINABLE DEVELOPMENT



AWARE · ACT · ACHIEVE

- Be a Responsible Consumer
- Support Sustainable Choices
- Build a Better Tomorrow



“Small Choices, Big Impact – For People and the Planet”

CBSE CLASS X PROJECT

Every student must undertake one project on the given topic.

I. Consumer Awareness OR Social Issues OR Sustainable Development

General Instructions:

- For example, your Topic is: Consumer Awareness
- Use A4 sheets/project file with neat presentation
- Include: Introduction, Rights, Responsibilities, Consumer Protection Act, Timeline, Maps, Mind maps, Pictures, etc. (Organization of Material/Data Present
- Material/Data) Case Study
- Need of the Study, Objective of the Study
- Add pictures/posters (collage) for better presentation
- Draw the Relevant Conclusion
- Write in your own words (no copying)
- Keep it 20–25 pages
- Maintain clean handwriting & proper headings
- Add Acknowledgement & Bibliography
- Submit on time in a properly bound file
- Be ready for viva (explain your project)

The distribution of marks over different rubrics relating to Project Work is as follows:

S.no	Aspects	Marks
a	Content accuracy, originality, and collaborative skills	7
b	Competencies exhibited and Presentation	7
c	Viva	6

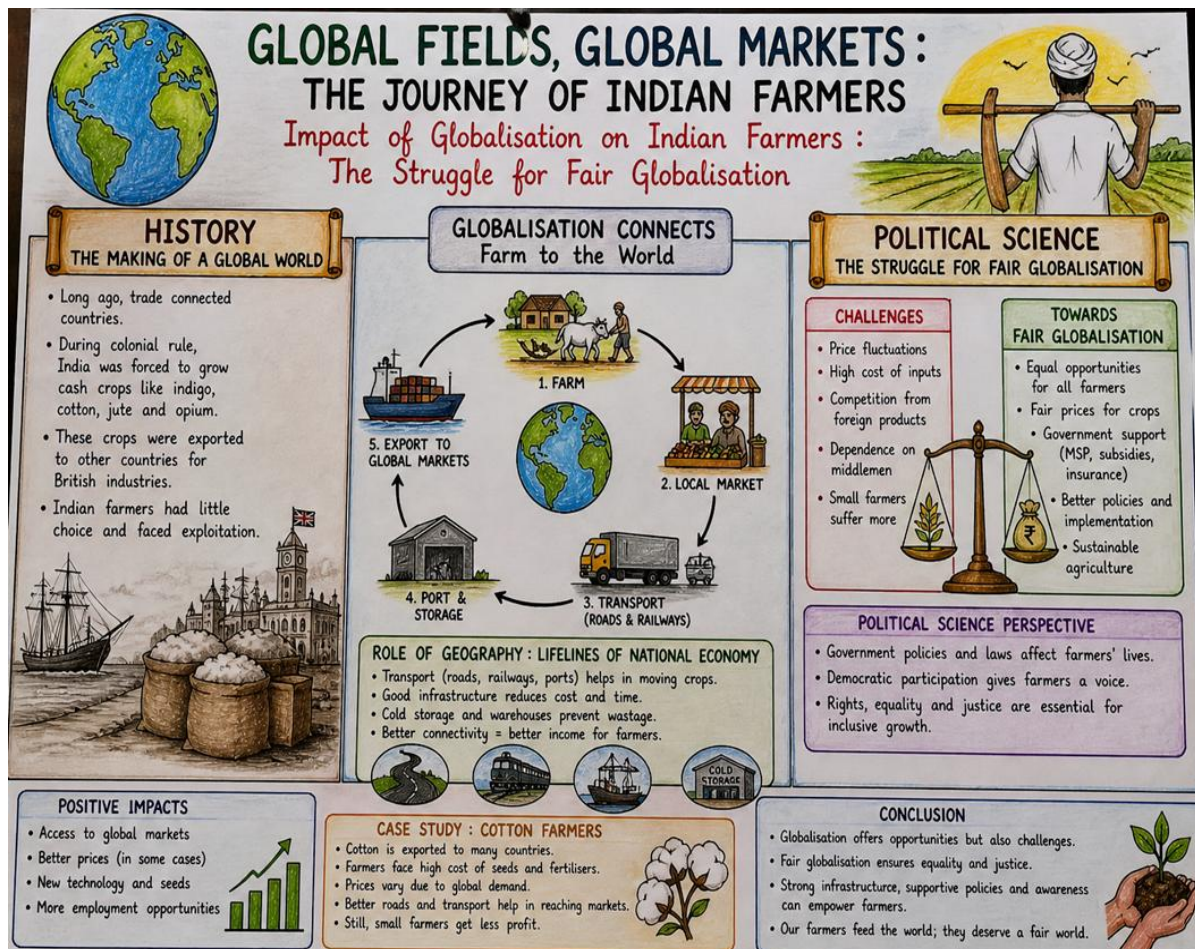
Total Marks: 20

II. INTERDISCIPLINARY PROJECT:

Topic - Title: "From Fields to Foreign Shores: Are Indian Farmers Winning in the Global World?"

Learning Objectives

- Understand the concept of globalisation and its real-life impact
- Analyse how globalisation affects Indian farmers
- Explore the role of transport and infrastructure in agricultural trade
- Develop awareness about fair globalisation and inclusive growth
- Integrate knowledge from History, Geography, and Economics



GENERAL INSTRUCTIONS

- Prepare the project in an A4 file (handwritten)
- Maintain proper sequence and headings
- Include maps, diagrams, charts, and case study
- Use colours, borders, and creative presentation
- Avoid copying—write in your own words

PROJECT STRUCTURE (STEP-BY-STEP)

1. Cover Page

Design a creative cover page including:

- Project Title
- Name, Class, Section, Roll Number
- Subject: Social Science (Interdisciplinary)

Creative Tip: Draw farms, globe, transport (ships/trucks), crops.

2. Acknowledgement

Write 4–5 lines thanking your teacher and parents.

3. Introduction

Explain:

- Meaning of globalisation
- Importance of global trade in today's world
- Brief idea of how farmers are connected to global markets

4. Historical Background (History Link)

Include:

- Trade of agricultural goods in the past
- Colonial impact on Indian agriculture (cash crops like indigo, cotton)
- How India became part of the global market

You may add a timeline or small paragraph explanation

5. Role of Transport (Geography Link)

Explain how crops move through stages:

Flowchart:

Farm → Local Market → Transport → Port → International Market

Include:

- Role of roads, railways, ports
- Importance of cold storage and storage facilities

Add a diagram or map showing movement of goods

6. Impact of Globalisation on Farmers

- Positive Impacts
- Negative Impacts

7. Struggle for Fair Globalisation

Explain:

- Meaning of fair globalisation (equal benefits for all)

Issues:

- Unequal distribution of benefits
- Small farmers face more challenges

Solutions:

- Government support (MSP, subsidies)
- Better transport and storage
- Direct access to markets

8. Case Study

Choose one type of farmer:

- Cotton / Wheat / Vegetable farmer

Include:

- Problems faced
- Market conditions
- Role of transport
- Impact of globalisation

9. Data Representation

Include at least one:

- Bar graph (price changes)
- Chart (income vs cost)

10. Analysis

Write your own views:

- Is globalisation helpful for farmers?
- Who benefits more?
- What needs improvement?

11. Conclusion

Summarise:

- Balanced view of globalisation
- Need for fair and inclusive growth
- Importance of supporting farmers

CREATIVE ADD-ONS

- Flowchart of crop movement
- Map showing export routes
- Newspaper clipping on farmers
- Drawings of farms, markets, transport

SUBMISSION GUIDELINES

- Submit in a neat A4 file
- All pages must be properly arranged and tagged
- Include all sections in order

SANSKRIT

1. चित्र-वर्णनम् (A3 Sheet)

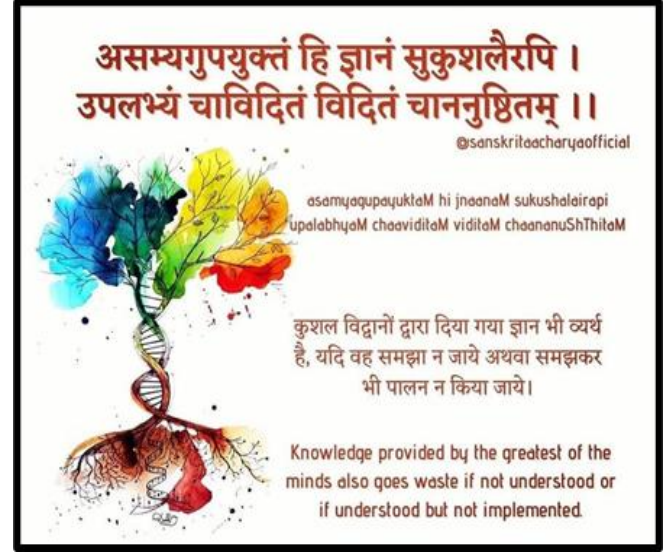
- प्रकृते: (पर्वतः, नदी, वनम्, पुष्पाणि) चित्रं अंकयन्तु
- तस्य वर्णनं 5-6 वाक्यैः कुर्वन्तु

2. लघुनिबन्धः (A4 Sheet)

- विषयः- रमणीय सृष्टिः

3. श्लोक-लेखनम् (A3 Sheet)

- प्रकृतिवर्णनसम्बद्धाः 5-6 श्लोकाः लिखन्तु-
- उदाहरणम्-
“पृथ्वी शस्यशालिनी रम्या, नद्यः
शीतलजलाः शुभाः।”



4. अनुसन्धानम् - उत्सव-तुलना (तेलङ्गाणम् च हरियाणा च) (A3 Sheet)

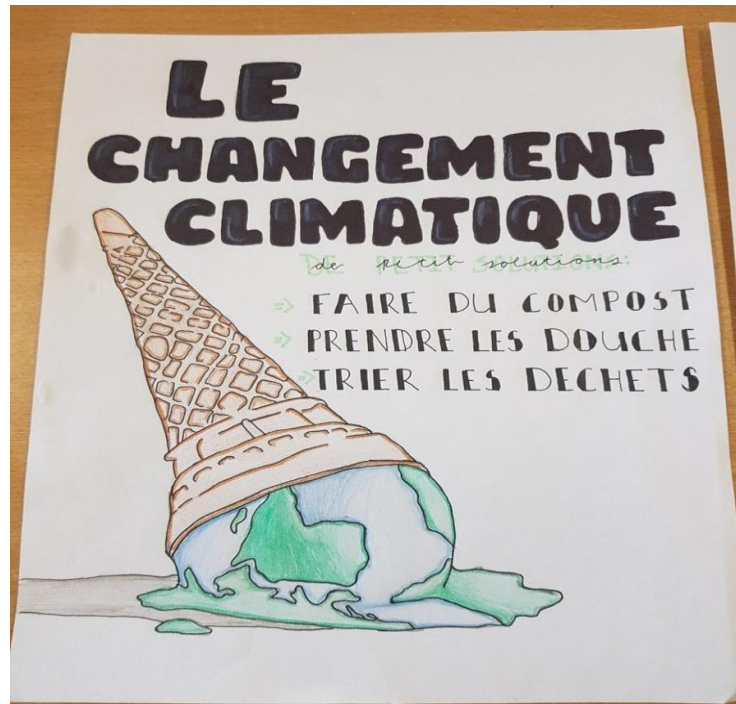
- तेलङ्गानस्य बथुकम्मा-उत्सवस्य हरियाणायाः तीज्-उत्सवस्य च तुलना कुरुत- ऋतुः, देवता, अनुष्ठानानि च दर्शयन्ती संस्कृत-तालिका चित्राणि सहितम् निर्मायताम्।



5. महत्वपूर्ण नोट- एक पुनरावृत्ति कार्य पत्रिका संस्कृत की उत्तर पुस्तिका में करें जो आपकी टीम पर संलग्न होगी।

FRENCH

- Kanika est à Lyon en France. Elle aime aller à la bibliothèque et elle veut avoir une carte de lecture. Ecrivez une lettre et dites-lui ce qu'elle doit faire pour en avoir. (on A4 sheet)
- **Créer une publicité (Create an Advertisement)**
Create a French Advertisement (Poster): Design an A3 size poster for a new French product or a social cause (e.g., environmental protection) with a catchy slogan in French.



- **Journal Intime (Diary Entry):** Write a diary entry for five days of the vacation (in French) covering your daily routine, activities, and feelings, using a mix of past and present tenses. (A4 sheet)
- Make a table of verbs (avoir, être, aller, vouloir, savoir and faire) in present, passe compose, futur simple, futur antérieur et plus que parfait on an A4 sheet.
- Solve the French Practice paper 1 and 2 from "Together with French" (Only Grammar and literature) in the French notebook.

ARTIFICIAL INTELLIGENCE

Activity 1: Case Study (To be done on A3 coloured sheet)

Choose any AI application, such as:

- Face Recognition
- Chatbots
- Recommendation Systems
- Smart Assistants

Write:

- Purpose of the AI system
- Benefits
- Ethical concerns
- Suggestions for responsible use

Activity 2: AI Project Cycle Chart (to be done on A3 coloured sheet)

Prepare a chart explaining the five stages of the AI Project Cycle:

- Problem Scoping
- Data Acquisition
- Data Exploration
- Modelling
- Evaluation

Use diagrams or examples.

Activity 3: 4W Canvas Problem (to be done in Practical File)

Topic: Cyberbullying Among Students

1. WHO: Identify the people affected by cyberbullying.

Points to Include:

- School students
- Teenagers using social media
- Parents
- Teachers and counselors

2. WHAT: Describe the problem clearly.

Points to Include:

- Sending hurtful messages online
- Sharing embarrassing photos or rumors
- Online teasing and threats
- Fake accounts and misuse of social media

3. WHERE: Identify where the problem happens.

Points to Include:

- Social media platforms
- Online games
- Chat groups
- Messaging apps
- School online communities

4. WHY: Explain why the problem should be solved.

Points to Include:

- To ensure student safety
- To promote positive online behavior
- To reduce stress and fear
- To create a healthy digital environment

Activity 4: Python Programs (to be done in Practical File)

1. Write a program to add the elements of the two lists.
2. Write a program to calculate the mean, median, and mode using Numpy.
3. Write a program to display a line chart from (2,5) to (9,10).
4. Write a program to display a scatter chart for the following points (2,5), (9,10), (8,3), (5,7), (6,18).
5. Read the CSV file saved in your system and display 10 rows.
6. Read the CSV file saved in your system and display its information
7. Write a program to read an image and display it using Python
8. Write a program to read an image and identify its shape using Python
9. Write a program to Count Vowels in a String.
10. Write a program to find the square and Cube of a Number
11. Write a program to Check Whether a Character is a vowel or a consonant.
12. Write a program to find the smallest number in a List.
13. A program that displays all three Set Operations (Union, Intersection & Difference).
14. Create a dictionary in Python and display the result.
15. A program to check if a year is a leap year or not.
16. A program to Calculate Simple Interest.
17. Write a program to find the largest among three numbers.
18. Write a program to join two tuples together and display the result.
19. Create a list and check whether the item is present in the list or not.
20. Create the following list['Red', 'Green', 'Blue', 'Yellow', 'Purple', 'Orange'] and apply slicing to the list[1:4], [:2], [3:]

Activity 5: Do the revision assignment in the notebook uploaded on ERP.