IMPERIAL HERITAGE SCHOOL
SECTOR-102, GURUGRAM

SESSION 2025-26

HOLIDAY HOMEWORK

GRADE IX

GRADE IX HOLIDAY HOMEWORK

"Learning doesn’t take a break, and neither should our curiosity."

Dear Parents,
Greetings!

At Imperial Heritage School, we believe in nurturing young minds not just during the academic session, but beyond the classroom as well. Holiday homework plays a **pivotal role** in reinforcing classroom learning while encouraging independent exploration. It offers students the chance to engage with subjects at their own pace and reflect creatively on what they've learned.

🌿 Why Holiday Homework?

- To maintain continuity in the learning process.
- To apply concepts in real-life scenarios.
- To encourage responsibility, time management, and creativity.
- To foster research, problem-solving, and critical thinking skills.

📂 **Project-Based Learning** Each task or project has been designed in alignment with the **CBSE curriculum framework and guidelines**, ensuring relevance, engagement, and developmental appropriateness. These projects aim to promote a hands-on, practical approach that bridges theory with real-world applications.

📝 Evaluation Criteria (Rubrics)

Each subject's Holiday Homework will be evaluated as part of the **Internal Assessment**, based on the following parameters:

Content	Presentation	Relevance	Creativity	Originality	On time Submission

Smart Tips for Completing Your Holiday Homework

📌 Be Original

Let your work reflect your own thoughts and creativity. Avoid copying—originality always stands out!

📌 Plan Your Time Wisely

Divide your work across the holiday period to avoid last-minute stress. A little work each day goes a long way!

📌 Read Instructions Carefully

Each subject has specific guidelines. Go through them thoroughly before beginning.

📌 Neatness Matters

Good handwriting leaves a lasting impression. Ensure your work is clean, well-organized, and legible.

📌 Creativity Counts

Add a personal and creative touch to your presentations—be it through design, layout, or illustrations.

📌 **Leisure Reading is a Must**
Take time to read books of your choice. Reading enhances imagination, vocabulary, and comprehension skills.

📌 **Practice Math Daily**
Math requires consistency. Set aside time each day to revise concepts and solve problems—practice makes perfect!

📌 **Parental Guidance Only**
Parents are encouraged to guide, not complete, the assignments. Let students take the lead in their learning. **Outside help will not be accepted and will be given zero.**

📌 **Focus on Quality**
Aim for meaningful and well-researched content. Quality is more important than quantity.

📌 **Remember the Assessment**
Holiday Homework is part of **Subject Enrichment Activities** and will be evaluated as per the defined rubrics.

Let Curiosity Lead the Way
An inspirational poem for our learners:

"Learning Beyond the Bell"

When the school doors close and bells go mute,
Let not your books sit still or roots take root.
For in the pause, a spark may rise,
To chase new thoughts, to question why.

A walk through pages, a curious glance,
A project that gives your mind a chance—
To think, to build, to dream and do,
To craft a world from a different view.

With pencil, paint, or words you write,
You shape your learning, spark your light.
So take this time and make it shine—
For growth and joy can intertwine. 🌟

Submission Date: 7th July, 2025
Note: No work will be accepted after the said date.

We look forward to seeing the wonderful work our students will create. Let this break be a time to explore, express, and evolve.
Wishing all of you a very joyful, safe and fun packed summer break. Happy Holidays!

Best Regards
Ms. Neelu Sharma
Principal



Dear Young Explorers,

🎉 The sunshine is calling, the ice creams are melting, and the adventure of summer is here! 🎉It's time for a well-deserved break filled with laughter, fun, and family time. But guess what? Learning doesn't stop — it just takes a more exciting route!

We're thrilled to present your **Summer Holiday Homework** — not just worksheets and reading lists, but a **creative, playful, and brain-boosting journey** through everything you've learned (and more!).

Please note: The practical work/projects will be assessed under Internal Assessment as per the specific parameters outlined by the CBSE across different subjects. All homework will be assessed on the following criteria:

➢ Content
➢ Presentation
➢ For any verbal activities- confidence in delivery
➢ Power point presentations should not exceed 6-8 slides, unless specified.
➢ All homework is to be done neatly and put into a folder.

Let this summer be a colorful blend of sunshine, stories, discovery, doodles, puzzles, and play. We can't wait to see all the amazing work you'll create!

🌈 **Happy holidays, happy learning, and see you soon with loads of stories to share!** 🌈

ENGLISH

I. LESSON INTEGRATED PROJECT

Topic - Crossroads of Life - every decision leads us to where we are today.

Integrated Poem – The Road Not Taken (Beehive)

Objective - To explore the theme of choices and consequences through personal reflection, research, creative expression, and artistic representation. The project will focus on how decisions shape the course of life, drawing inspiration from Robert Frost's poem The *Road Not Taken*. 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
Choose a literary work (book, drama, play, etc.) that explores the theme of choices and consequences.
Present a **book review**:

- **Title & Author**: Name of the book and its author.
- **Summary**: A brief summary of the story or play.
- **Analysis**: How does the work illustrate the theme of crossroads in life?
- **Characters**: Identify the main characters and discuss the decisions they face. How do these decisions shape their journey and growth?

Suggestions: *The Alchemist* by Paulo Coelho, *Harry Potter by J.K. Rowling , The Choice* by Edith Eger, etc.

Task 3: Personal Reflection and Analysis
Reflect on a moment in your own life when you faced a crossroads—an important decision that shaped your future.
Write a **personal narrative in 120-150 words**:

- **The Situation**: Describe the situation or decision you had to make.
- **The Fear or Uncertainty**: What were the fears or doubts you had at that moment?
- **The Decision**: How did you make the decision? What factors influenced your choice?
- **Outcome**: What happened as a result of your decision? How do you feel about it now?
- **Lesson Learned**: What did you learn from this experience? Would you make the same choice if given the chance?

Task 4: Creative Expression
Create a **Life Map or Journal** that charts your life's decisions as a series of roads or pathways. Each key decision (e.g., what school to attend, which friendships to nurture, major career choices) is marked as a turning point.
How to Make It:

- Draw a map of your life as if it were a journey. Start at the "beginning" of your life (e.g., birth) and plot major milestones or turning points as different "crossroads."
- Each path should reflect a choice, with the subsequent paths showing the consequences of each choice.

Task 5: Artistic Representation
With the help of Visual Metaphor/Imagery/Contrast (Poetic Devices), illustrate your idea with symbolic representations of different life choices or varied perspectives.
Suggestions:

- **Trees/Branches:** A tree with multiple branches or roots can symbolize how one decision grows into many possibilities. Each branch represents a different future that stems from one initial decision.
- **Animals:** Animals can symbolize guidance or struggle in decision-making. For example, a **bird** flying freely could symbolize taking risks, while a turtle may represent caution and slow, steady progress.
- **Clouds and Sunlight:** Use clouds to represent uncertainty or doubt in decision-making, while sunlight or rainbows can symbolize hope or clarity after a choice is made.
- **Facial Expressions:** You can depict a figure standing at a crossroads, where their expression conveys uncertainty, fear, or excitement—showing the emotional weight of making life decisions.
- **Juxtaposition:** Place opposite concepts in the same image, such as a peaceful path leading to calm, or a stormy path representing challenges. This shows that each choice has its own benefits and drawbacks.

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 - Exploring Haryana and Telangana: A Digital Travel Blueprint

Objective - To create a comprehensive travel blueprint for a trip to Haryana and Telangana, highlighting key highlights in each region using Canva or PPT. Here's a project outline:

Task 1: The class will be divided, assigning each student either Haryana or Telangana as their focus.

Task 2:. Create a Travel Blueprint:
Each student will create a travel blueprint for a trip to their assigned state, spanning a duration of 5 days. Include details such as:

- Attractions & Activities: Outline tourist attractions and activities, sightseeing, for each day of the trip.
- Transportation: Specify modes of transportation (e.g., trains, buses, taxis, flights) between regional destinations.
- Accommodation and Dining: Recommend hotels, guesthouses, or homestays for overnight stays, considering budget, location, and amenities. Highlight local cuisine and recommend restaurants or eateries for meals throughout the day.
- Budgeting: Trip costs including transportation costs, accommodation expenses, entrance fees for attractions, and meal budgets.
- Inclusions & Exclusions

Task 3: They can use presentation software to design their travel blueprint, incorporating text, images, maps, photographs and graphics.

Task 4: Students will share the PPT or Canva presentation via MS Teams and upload it to the assignment section.

III. Cover page: English Portfolio

Make an artistic cover page for your English Portfolio.

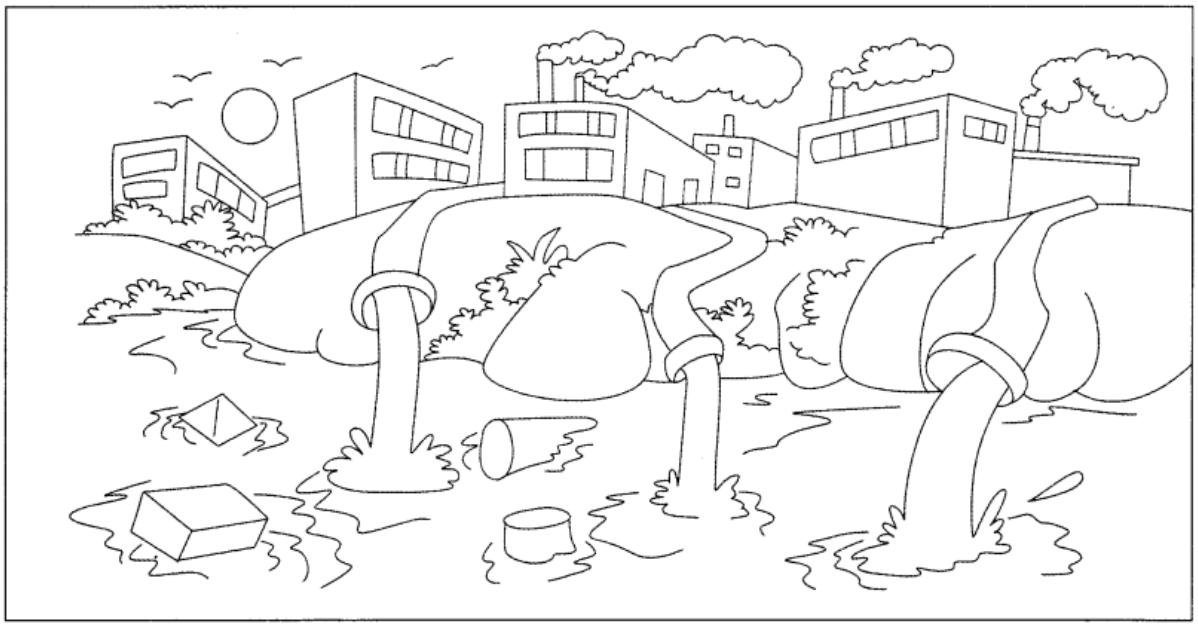
IV. Words & Expressions Workbook – I (Self Practice)

Complete all the exercises - Units 1 to 6 in the Words and Expressions Workbook – I prescribed in the CBSE curriculum.



हिंदी

1. **दिए गए चित्र का वर्णन (A4 साइज़ शीट) पर कीजिए|**



2. चुनाव २०२४ – २०२५ को लेकर दो मतदाताओं के बीच हुई बातचीत को (A4 साइज़ पर) संवाद के रूप में लिखिए|
3. पर्वतारोही बचेंद्री पाल के चित्र सहित (A4 साइज़ शीट पर) एक अनुच्छेद लिखिए|
4. अनुशासन का महत्व बताते हुए (A4 साइज़ शीट पर) छोटे भाई को पत्र लिखिए|
5. प्रेमचंद द्वारा रचित उपन्यास कफ़न पढ़कर समाज में उस समय की नारी की स्थिति के बारे में लिखिए|
6. **हरियाणा और तेलंगाना – खाद्य संस्कृति (खानपान की संस्कृति) का तुलनात्मक अध्ययन A4 साइज़ शीट पर चित्र सहित लिखें**

   - मुख्य भोजन
   - लोकप्रिय व्यंजन
   - मिठाइयाँ
   - खानपान की विशेषता

MATHS

PART A - Write the following activities in your Practical file.

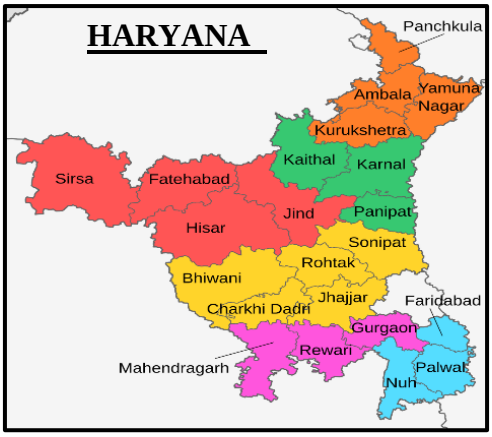
1. Make a square root spiral by paper folding method.
2. Verify experimentally the identity $(a^3 – b^3) = (a - b) (a^2 + ab + b^2)$
3. Verify experimentally that the sum of the length of any two sides of a triangle is always greater than the length of the third side.
4. Verify experimentally that angles formed in the same segment of a circle are equal.

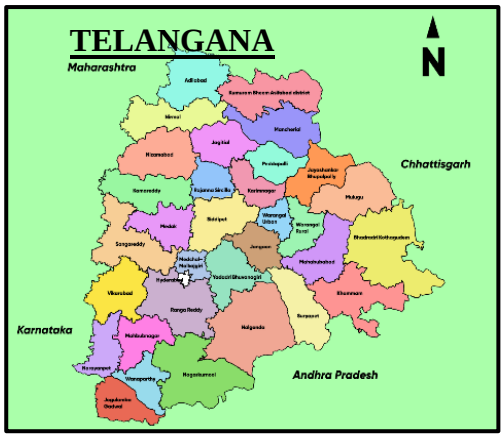
PART B - Attempt the following projects.

General Guidelines:

- Your project needs to have a cover page, introduction, content and conclusion.
- Clearly mention parts/ sections of your summer holiday homework.
- Do proper online survey, wherever required.

1. Choose five most populated districts of Telangana and Haryana. Draw a double bar graph comparing the literacy rates of these districts.





2. The Fields Medal has for a long time been regarded as the most prestigious award in the field of mathematics and is often described as the Nobel Prize of Mathematics. It is awarded every four years to researchers under 40.
   Research about its origin, design, value, conditions and the Indians who have won the Medal.



PART C

1. Prepare a mind map on A4 size sheet as per the following:

Roll Number	Chapter
1 - 19	Chap -1 Number System
20 - 38	Chap – 2 Polynomials

2. Design a cover page for your Math Portfolio.
3. Do all examples of Chapters 1, 2 and 10.
4. Do 20 questions daily of chapters 1, 2 and 10 from NCERT Exemplar and other reference books.

PHYSICS

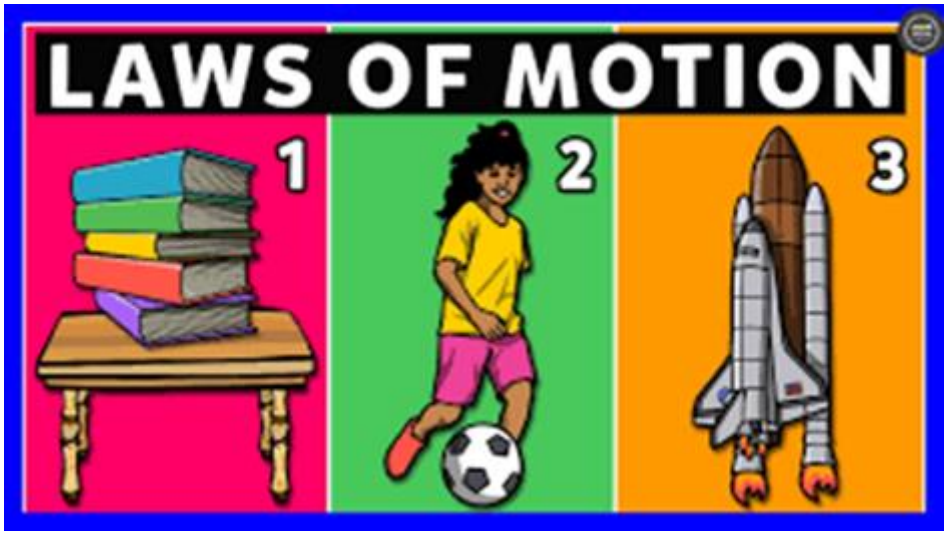
1. Draw a well labeled diagram of the human ear on an A3 size sheet.

2. **Physics Hall of fame Activity**

   (i) Students will design a digital or paper poster (A 3 size sheet) on any one physicist.

   (ii) It will include an image of the physicist, his major work, and describe how it changed the world.

3. Newton's laws of motion are three physical laws that describe the relationship between the motion of an object and the forces acting on it. These laws provide the basis for Newtonian mechanics.



Explain Newton's three Laws of Motion in detail giving some examples of each law. Write in A4 size sheets.

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



5. Prepare a working model describing any one type (Gravitational, Electric, Magnetic, Nuclear, Friction, Tension force, spring force etc.) of force.

Instructions-

- Design a simple working model using easily available, safe materials.
- The model must clearly demonstrate the concept of the selected force.
- Keep your model compact, neat, and easy to transport.
- Use safe, non-hazardous materials only.
- Be ready to explain the working of your model in 2–3 minutes.
- The model and presentation will be assessed based on: Concept clarity, Model functionality, Creativity and originality, Explanation and presentation skills.

Reference link- https://youtu.be/MlMOMhUxv6c?feature=shared

CHEMISTRY

A: Make a project file on either of the following:

I. Compare in Tabular form the properties of Solids, Liquids and Gases with respect to
a) Shape b) Volume c) Compressibility d) Diffusion e. Fluidity or rigidity.

II. To conduct the following activities and paste the pictures taken in school uniform in the report (includes Aim of Activity, Material required, Observation and Result). Use the materials which are safe and easily available at home· The activity should clearly demonstrate the concept of the selected.

(i) Particles of matter have spaces between them.
(ii) To show the different compressibility of solids, liquids, and gases.
(iii) Effect of temperature change on states of matter.
Reference: NCERT Grade IX Science Textbook



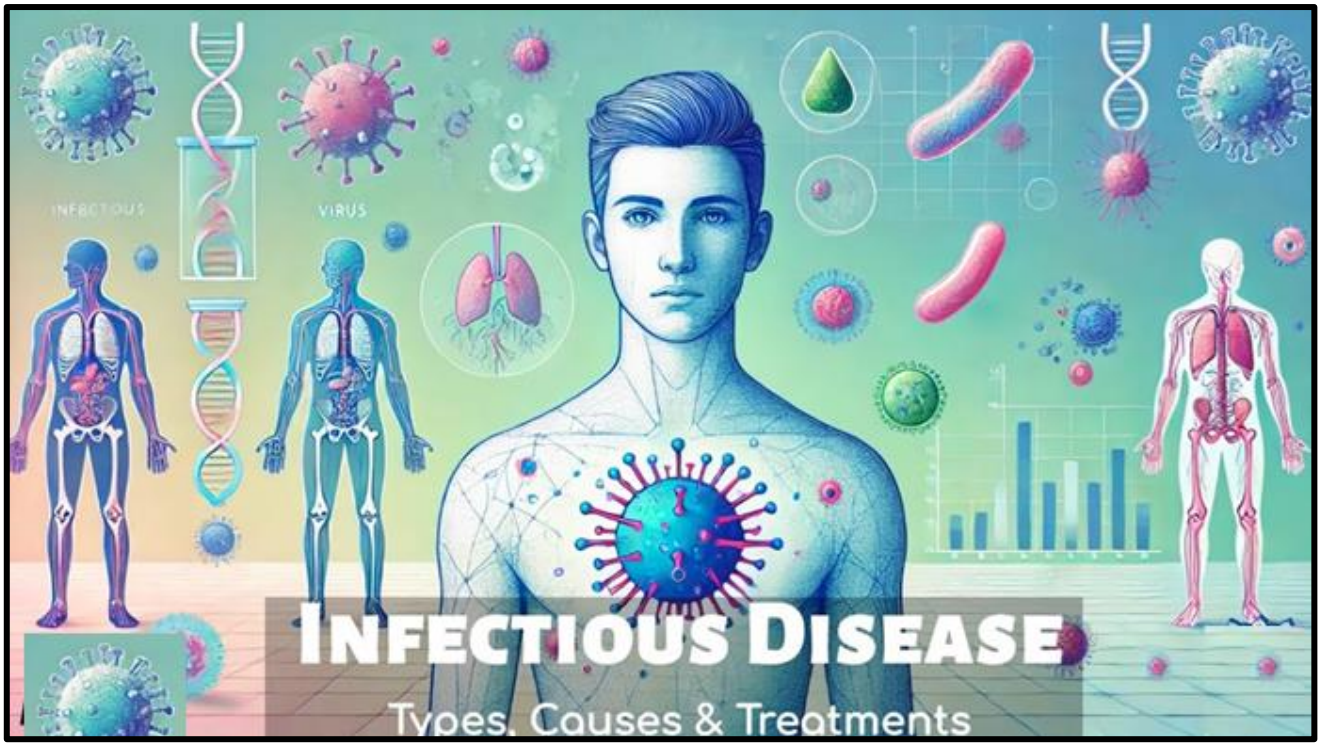
B: Art and State Integrated activity
Telangana has rich heritage, culture and beautiful locations, providing perfect inspiration for chemists. Write a short article about the types of mineral resources found in Telangana on an A4 size colored sheet and paste relevant pictures.

Note: All figures will have a figure caption.

BIOLOGY

Activity 1
This activity is based on Health and Diseases. This activity will be incorporated in the portfolio and marked as per the directives received from CBSE.

Infectious diseases are illnesses caused by harmful microorganisms such as viruses, bacteria, fungi, and protozoa, which can spread from one person to another through various modes of transmission. These diseases have affected human health for centuries and continue to pose serious public health challenges across the world. Understanding how infectious diseases spread, their symptoms, methods of control, and ways to prevent them is essential for maintaining good health and preventing outbreaks. Through this holiday homework, students will explore different types of infectious diseases, with a focus on those caused by viruses and bacteria. The aim is to help students develop awareness about hygiene, vaccination, and other preventive measures that play a key role in combating these diseases in everyday life. In this activity, we wish you to make a detailed report on the topics as per the roll numbers mentioned below on ruled A4 sheets:



<u>Diseases caused by Virus</u> (Odd Roll Numbers):
Explore and write a detailed report on each of the following viral diseases:

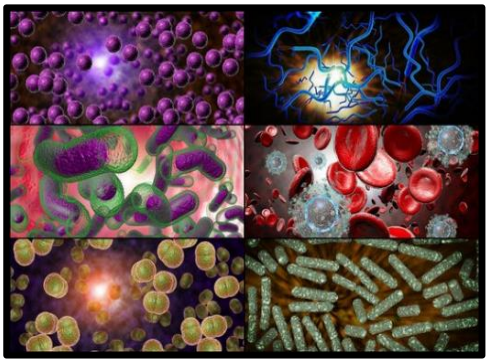


- AIDS
- Hepatitis
- Polio
- Influenza
- Rabies.

For each disease, give introduction, describe the **mode of transmission** (how the virus spreads from one person or animal to another), the **common symptoms** that appear in infected individuals, the **methods of control** (such as treatment options or isolation), and the **ways to prevent** the disease.

<u>Diseases caused by Bacteria</u> (Even Roll Numbers):
Explore and write a detailed report on each of the following bacterial diseases:

- Tuberculosis
- Diarrhoea
- Typhoid
- Cholera
- Peptic ulcer



For each disease, give introduction, describe the **mode of transmission** (how the virus spreads from one person or animal to another), the **common symptoms** that appear in infected individuals, the **methods of control** (such as treatment options or isolation), and the **ways to prevent** the disease.

Note:

i) Make a file of your choice with A4 size sheets only (sheets can be colourful or plain).

ii) Use illustrative pictures (printout or drawing) and data where ever necessary to make the project informative.

iii) 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:

i) Plant and Animal cells

ii) Mitosis and Meiosis

SOCIAL SCIENCE



DISASTER MANAGEMENT

1. (Compulsory Project) Disaster management

Dear Students

You have to prepare a compulsory project on disaster management. Make a file of your choice with A4 size sheets only. Sheets can be colorful or plain. Presentation should be good. You are recommended to paste pictures related to the topic or you can draw also. The project should include the following:

***Cover page (Name, Class/Sec,)**

i. ***Acknowledgments (Thanksgiving to those who helped you in understanding the concept of the project).***
ii. ***Index***
iii. ***What is Disaster management?***
iv. ***Types of Disasters (2 types with further division and their meanings)***
v. ***Take up any one disaster (of your choice)***
   - Write about it.
   - Implementation ideas (How the government is working about it?)
   - Mitigation (steps to reduce it)
   - Preparedness (How can we be ready to face it? What should be done in case that disaster happens?)
   - Conclusion (your views)
   - Bibliography (all the sources of information where you gathered the information from? example: books, internet links etc.)

Note: - Certificate (will be provided)
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	2
b	Competencies exhibited and Presentation	2
c	Viva	1

2. You are required to prepare a **simple integrated geography project** on: **Title: "Comparing Physical Features of Haryana and Telangana: A Geographic Study"**



Objective: To explore and compare the landforms, climate, rivers, soils, vegetation, and how these physical features impact agriculture and lifestyle in **Haryana** and **Telangana**.

Guidelines for the Project:
1. Start with an introduction: Mention the location, size, and importance of both states.
2. Present the physical features of Haryana and Telangana under clear headings:
- Landforms
- Climate
- Soil
- Rivers
- Natural vegetation
- Agriculture and land use

3. Create a comparison table showing the similarities and differences between the two states.
Example

Feature	**Haryana**	**Telangana**
Landform	Plains & Hills	Plateau & Hills
Climate	Semi-arid	Tropical, semi-arid
Soil Type	Alluvial	Red, Black cotton soil
Major Rivers	Yamuna, Ghaggar	Godavari, Krishna
Vegetation	Dry deciduous	Dry deciduous

4. Add maps and diagrams:

- Physical map
- River map
- Soil map (You can draw or paste printed maps)

5. Conclude by summarizing what you learned from the comparison.
6. Keep your project neat, colourful, and well-organized.
7. 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	2
b	Competencies exhibited and Presentation	2
c	Use of maps/diagrams	1

ECONOMICS

Interview 5 individuals in your community, like farm laborers or construction workers, to gather information about their wages, working conditions, health facilities available, educational levels and other social and economic realities.

Guidelines for the Project:

1. Create a table containing a list of workers (names, type of job, salary, etc.).
2. Conclude by summarizing what you learned from the comparison.
3. Keep your project neat, colourful, and well-organized.

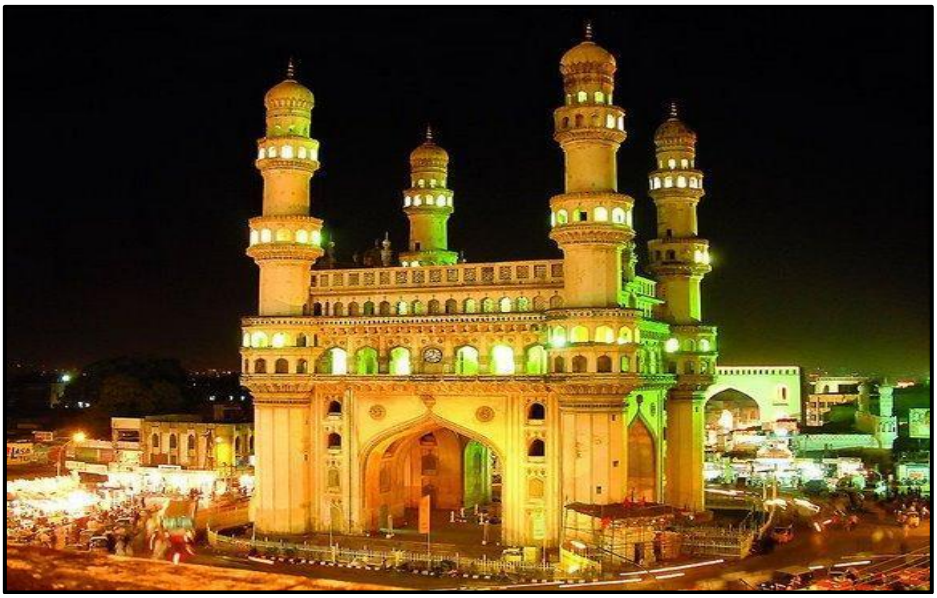
Rubrics

Sl.No	Aspects	Marks
a	Content accuracy, originality and collaborative skills	2
b	Competencies exhibited and Presentation	2
c	Handwriting	1

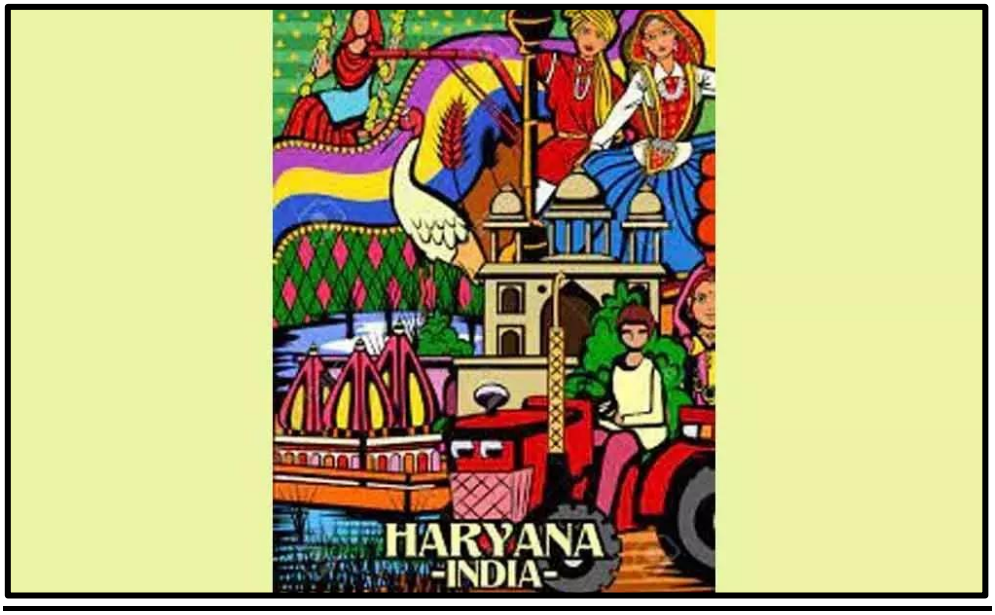
SANSKRIT

कर्मण्येवाधिकारस्ते मा फलेषु कदाचन।
मा कर्मफलहेतुर्भूर्मा ते सङ्गोऽस्त्वकर्मणि॥

1. हरियाणायाः पुण्यभूमौ श्रीकृष्णेन अर्जुनाय दत्तं भगवद्गीताया उपदेशं मध्ये चत्वारः श्लोकाः चित्रैः सह हिन्दीभाषया अर्थं च A3 पत्रे दर्शयन्तु।
2. हरियाणायाः च तेलङ्गाणायाः सांस्कृतिकं वैभवम्, पारम्परिक-विरासत्, उत्सवाः, पारम्परिक-वेषभूषा च संगीतस्य जानकारी संगृह्य चार्ट-पत्रे प्रदर्शयन्तु।
3. तेलङ्गाणाराज्यस्य प्रमुखानि आकर्षणानि यथा – हैदराबादनगरम्, चारमीनारम्, गोल्कोंडा-दुर्गः च। एतेषां मध्ये कस्यचित् एकस्य स्थलस्य चित्रं A3 पत्रे निर्माय, तस्य विषये संस्कृतभाषायां अनुच्छेदं लिखन्तु।



FRENCH



Task 1. Préparez une brochure de Voyage sur Haryana et Telangana. Vous pouvez inclure les points forts de ce voyage :

- les vêtements de Haryana et Telangana
- la danse de Haryana et Telangana
- la cuisine de Haryana et Telangana
- les monuments à voir

2. Révisez tout ce qu'on a fait dans la classe.
3. Complétez la leçon-1 et 2 dans le cahier d'exercices.
4. Écrivez une lettre à votre ami et décrivez comment vous passez vos vacances à la maison on A4 sheet.
5. Make a colourful poster about a famous French festival (e.g., Bastille Day) or city (e.g., Paris, Lyon) on A3 sheet. Write a short description in French.

ARTIFICIAL INTELLIGENCE

1. **To create a basic Machine Learning model using Teachable Machine** (https://teachablemachine.withgoogle.com/) or (https://machinelearningforkids.co.uk/) that can recognize:
   - Traditional hand gestures or dance postures

   OR
   - Patterns or symbols from the cultural arts of Haryana (e.g., Phulkari) and Telangana (e.g., Banjara embroidery)

   HINTS:

   Train the Model:
   - Use a webcam or upload images to train the model.
   - Capture or upload 10–20 images.
   - Try to include different angles/lighting for better accuracy.

   Test the Model:
   - Use your webcam or upload new images to see if the model can recognize them correctly.
   - Students can perform and train poses with webcam – fun and interactive!

   Submit: On MS Teams
   1. A short video clip showing the model in action.
   2. A write-up (5–6 lines) in PDF format describing:
      - What did you train the model on?
      - Any challenges faced
      - How does this connect to Haryana or Telangana's culture
2. **Design the cover page of the AI practical file on an A4 sheet.**
   - Include the logo and school name with the address (Sector-102, Gurugram) on top.
   - "Practical File" should be written in the middle, followed by the subject name and subject code (417) in the next line.
   - "Student Name, class, section, academic year (2025-26) at the end.

   Materials Needed:
   - Laptop with webcam
   - Internet access
   - Printed or digital images (Phulkari patterns, Banjara art)
   - Space for recording simple hand gestures or movements.
   - A4 Sheet for printing or designing the cover page.

"A little more persistence, a little more effort and what seemed hopeless failure may turn to glorious success."
—Elbert Hubbard