

**HOLIDAY HOMEWORK CLASS XI
SESSION 2025-26**

1. BIOLOGY:

Write the 10 scientific name and common name for each of the following-

- a. Fruits name
 - b. Pulses name
 - c. Birds name
 - d. Mammals name
 - e. Reptiles name
 - f. Ornamentals plants
 - g. Gymnosperm name
 - h. Eatable fresh water fishes
 - I. Eatable marine water fishes
 - J. Aquarium fishes
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2. MATHEMATICS:

Conduct a survey on student preference and analyze the data using set theory concepts.

Survey to be held on following topics

Favorite Subject

Sports

Hobbies

3. COMPUTER SCIENCE

Topic: Boolean Algebra

Instructions:

Solve all questions in your notebook.

Show step-by-step simplifications wherever required.

Diagrams (like logic gates) must be neatly drawn and labeled.

Section A: Theory and Laws (Short Answer Type)

1. Define the following terms:

- a) Boolean variable
- b) Logic gate
- c) Duality Principle

2. Write down the truth table for the following laws of Boolean algebra:

- a) Commutative Law
- b) Associative Law
- c) Distributive Law
- d) Identity Law
- e) Complement Law
- f) De Morgan's Theorems

Section B: Expression Simplification (Application Based)

3. Draw logic circuit for the following :

- a) $A + A \cdot B$
- b) $A \cdot (A + B)$
- c) $(A + B) \cdot (A + C)$
- d) $A \cdot B + A \cdot B'$
- e) $A + A' \cdot B$

4. INFORMATICS PRACTICES

Topic: Python Programming – Series Problems

Instructions:

Solve all 10 programs in your notebook.

Use proper variable names and indentation.

Dry run the logic before coding.

Execute each program on a Python IDE or online compiler.

Series-Based Questions (Write Python Programs for the Following)

1. $S = 1 + 2 + 3 + \dots + n$

(Input n and print the sum)

2. $S = 1^2 + 2^2 + 3^2 + \dots + n^2$

(Input n and print the sum of squares)

3. $S = 1 + 1/2 + 1/3 + 1/4 + \dots + 1/n$

(Input n and print the harmonic series sum)

4. $S = 1 + 3 + 5 + \dots + (2n-1)$

(Sum of first n odd numbers)

5. $S = 2 + 4 + 6 + \dots + 2n$

(Sum of first n even numbers)

6. $S = 1 - 2 + 3 - 4 + 5 - 6 + \dots \pm n$

(Alternating series with + and - signs)

7. $S = 1/2 + 2/3 + 3/4 + \dots + n/(n+1)$

(Input n and calculate the sum)

8. $S = 1 + 1/3 + 1/5 + \dots + 1/(2n-1)$

(Input n and sum of inverse odd numbers)

Bonus Questions :

9. $S = 1/1! + 1/2! + 1/3! + \dots + 1/n!$

(Input n and sum of inverse factorials)

10. $S = x + x^2/2! + x^3/3! + \dots + x^n/n!$

(Input values of x and n, compute the sum – exponential series approximation)

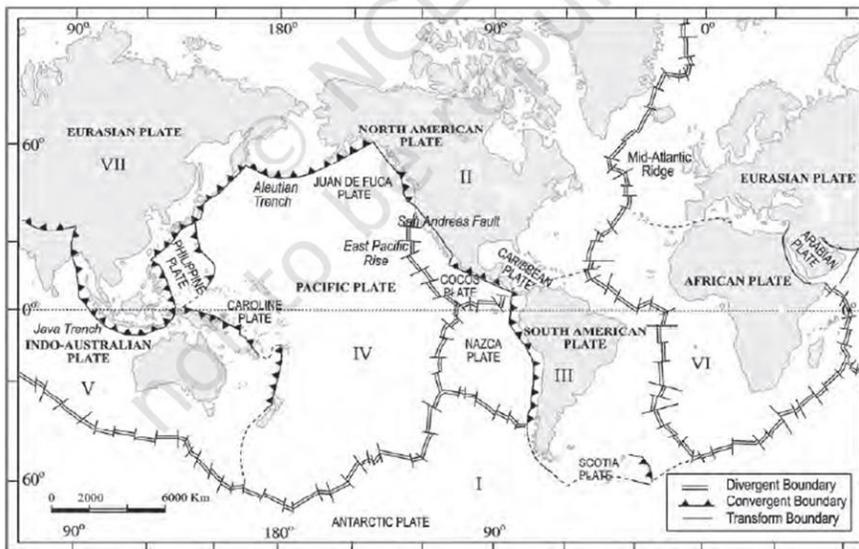
5. GEOGRAPHY

1. Prepare a handwritten project and **power point presentation** on **‘WORLD CLIMATE AND CLIMATE CHANGE’**.

2. Solve the following questions **from CH-4 Distribution of Oceans and Continents**.

- What do you mean by palaeomagnetism?
- Explain continental Drift Theory proposed by Alfred Wegener.
- According to Wegener which two forces were responsible for continental drift? Explain.
- What was the main basis of post drift theory?
- Briefly explain ocean floor configuration with the help of suitable diagram.
- Give a brief description of major earthquake and volcanic region.
- Explain sea floor spreading theory proposed by H. Hess.
- Define the term plate. What do you mean by plate tectonic theory?
- Explain 3 types of plate boundary.

3. Locate the important plates on the physical map of the world



4. Complete the remaining part of practical work of ch-1. (pdf has been already shared)

6. POLITICAL SCIENCE HOLIDAY HOMEWORK

Task 1: Case Study on Fundamental Rights

Out of any six Fundamental Rights enshrined in the Indian Constitution, choose any one and research a real-life case where this right was violated. Include the following in your write-up:

- Name and brief background of the case
- The Fundamental Right that was violated
- The decision of the Supreme Court and how justice was delivered
- Your own reflection on why this right is important in a democratic country like India

Presentation: Neatly handwritten or typed, with proper headings

Task 2: Creative Constitutional Framing

Topic: Drafting the Preamble of an Imaginary Nation

Instructions:

1. Imagine a new nation. You are its founding citizen and part of its Constitution Drafting Committee.
2. Give your country a **name**, describe it briefly (e.g., its geography, people, culture, or history).
3. Reflect on the **core values** and **form of government** your nation upholds (e.g., democracy, monarchy, technocracy, eco-state, digital republic, etc.).
4. Frame a **Preamble** that captures the soul of your country — its ideals, aspirations, and constitutional commitments.
5. Your Preamble should be poetic, powerful, and rooted in political imagination — reflecting ideas such as liberty, justice, equality, unity, sustainability, peace, or innovation.
6. You may accompany it with your country's **flag, national emblem**, or a symbolic **map** for presentation.

Presentation: Decorate or design your preamble in a creative format (poster/chart/presentation).

7. ENGLISH

Q1. Prepare a power-point presentation showcasing comparative study between Khuswant Singh and Vikram Seth. Below are the points you need to include in your presentation. (Minimum 6-7 slides mandatory)

1. Portfolio of both the authors.
2. Their famous books/writings.
3. Their writing styles.
4. Their genre.
5. Similarities between the two.

Q2. Make a research file of two/three pages on the life of the Egyptian Pharaoh, Tutankhamun. Invent necessary details. Present the research work in a group in the classroom.

8. PHYSICS:

Solve the problem of NCERT exercises of chapter units and measurement, motion in a straight line, motion in a plane.

Practice all the graphs for different types of motion.

Solve the questions of assignments and worksheets.

Go through all the notes, important questions provided during the class .

Find 5 examples of vectors addition and vector resolution around yourself.

9. ACCOUNTANCY AND BUSINESS STUDIES (XI)

1. project on basic Accounting terms

And double entry system

Business Studies

1. Project on entrepreneurship ;

(Background of two successful entrepreneurs)

10. PHYSICAL EDUCATION

Prepare a PowerPoint presentation on the Olympics?

Your ideal sports personalities and what qualities you inculcate in your life from them?

Any sports incident/stories around the globe which fascinates or inspires you the most?

Draw any 3 asanas from the book reference. Also mention it's benefits and contraindications?

11.CHEMISTRY:

Make project on the following topics. Use a separate notebook for the same. Do it in a moderate sized notebook.

1. Hess's law and thermochemistry.
2. Mohr salt experiment.
3. Catalytic decomposition.

12. PAINTING

Chapter-4

1. Discuss on prehistoric rock-paintings been found in India?
2. Explain the rock-painting 'A Roaring Animal of Bhimbetka'.
3. Explain the compositional aspect of the rock-painting 'Wizard's Dance' of Bhimbetka.

Chapter - 5

1. Explain the location of the main sites of Indus valley civilisation.
2. Which of the idols found in the Indus valley civilisation have historical importance the field of Art?
3. Describe the historical as well as artistic aspects of the idol 'Dancing Girl'.
4. What characteristics are available in the idol 'Male Torso, Harappa'?
5. Is the Mother Goddess an idol? Explain it with justification.
6. What kind of special characteristics have you observed in the seal of Unicorn Bul

Chapter 9

Indian National Flag

1. Describe the evolution of the Indian National Flag and its stages