## *Mathematics :*
Do following chapters from NCERT book
Ch 1 Relations and Functions
Ch 2 Inverse Trigonometric Functions
Ch 3 Matrices & Determinants
Ch 4 Continuity and Differentiability
In separate register

## *Chemistry project:*
*Write a project report on any one of the topics mentioned below:*
*a) Study of the presence of oxalate ions in guava fruit at different stages of ripening.*
*b) Study of quantity of casein present in different samples of milk.*
*c) Preparation of soybean milk and its comparison with the natural milk with respect to curd formation, effect of temperature, etc.*
*d) Study of the effect of Potassium Bisulphate as food preservative under various conditions (temperature, concentration, time, etc.)*
*e) Study of digestion of starch by salivary amylase and effect of pH and temperature on it.*
*f) Comparative study of the rate of fermentation of following materials: wheat flour, gram flour, potato juice, carrot juice, etc.*
*g) Extraction of essential oils present in Saunf (aniseed), Ajwain (carom), Illaichi (cardamom).*
*h) Study of common food adulterants in fat, oil, butter, sugar, turmeric power, chili powder and pepper.*

*The project needs to include the following headings and sub-headings:*
  A) *Index*
  B) *Certificate*
  C) *Acknowledgement*
  D) *Introduction*
  E) *Matter ( body of project)*
  F) *Facts, Conclusions etc.*
  G) *Results and Impact*
  H) *Bibliography*
*Page limit: 30 ( excluding,  Index, Certificate, Acknowledgement and Bibliography) .*

## *Computer Science*
### Chapters – Revision tour and Function-
1- Write a function to accept two numbers and return the gcd value of given numbers.
2- Write a function to accept a number and return the sum of its factors.
3- Write a void function to accept a number and print this is composite or prime number.
4- Write a void function to accept a list of 6 subject marks out of 100. Now print the percentage, total marks, highest marks and lowest marks.
5- Write a function to accept a string and print number of spaces, vowels, consonants, digits, special characters in given string.

6- Write a function to accept a string and return 1 if it is palindrome word otherwise return 0 if not palindrome. A palindrome word is same from left and right side as NITIN.
7- Write a Python program to input 10 numbers to store in the list and print the third largest number. For example, if the entered numbers in the list are List are 36, 25, 14, - 951, 75, - 85, 654, 88, 9521, 657, then output will be The third largest number is : 654.
8- Take a list of 10 elements. Split it into middle and store the elements in two different lists. E.g.- INITIAL list : 5 10 6 12 3 25 66 44 1 90
After splitting : [5 10 6 12 3] [25 66 44 1 90]
9- Write a program to input a line of text and creates a new line of text where each word of input line is reversed.
10- Write a program to check if a tuple contains any duplicate element.

## *Physics project:*

*Write a project report on any one of the topics mentioned below:*
1. *Studying the factors affecting the internal resistance and emf of a cell*
2. *Charging and discharging of capacitor*
3. *Gauss theorem*
4. *Study of electric field distribution around the charged bodies of different shapes*
5. *Wireless power transmission*

*The project needs to include the following headings and sub-headings:*
I) *Index*
J) *Certificate*
K) *Acknowledgement*
L) *Introduction*
M) *Matter ( body of project)*
N) *Facts, Conclusions etc.*
O) *Results and Impact*
P) *Bibliography*

*Page limit: 20-25 ( excluding,  Index, Certificate, Acknowledgement and Bibliography) .*

## *Biology project:*

*Write a project report on any one of the topics mentioned below:*
6. *Embryonic Development in Humans*
7. *Antibiotics and Resistance*
8. *Human Genome project*
9. *Reverse Transcription*
10. *Gene Therapy*
11. *Lifestyle Disorders*
12. *Study Of The Genetic Markers In The Human Population*
13. *Stem cell Regeneration*
14. *Study on Probiotics and their preparation.*
10. *Chromosomal Abnormalities in Humans*
15. *Cancer*
16. *Auto immune disorders*
17. *Ecology and its interaction  OR*
14. *Reproductive health and Management*

*The project needs to include the following headings and sub-headings:*
Q) *Index*

R) Certificate
S) Acknowledgement
T) Introduction
U) Matter ( body of project)
V) Facts, Conclusions etc.
W) Results and Impact
X) Bibliography

*Page limit: 40 ( excluding, Index, Certificate, Acknowledgement and Bibliography) .*

# *English :*

## 1. Literature
Books: Flamingo & Vistas
Tasks:
- Read the following chapters:
  - Flamingo:
    - "The Last Lesson"
    - "Lost Spring"
    - "Deep Water"
  - Vistas:
    - "The Third Level"
    - "The Tiger King"
- For each chapter:
  - Write a summary in 150–200 words.
  - Answer 2 short answer questions (30–40 words each).
  - Write one value-based question (80–100 words).

## 2. Writing Skills Practice
Complete the following tasks in your notebook:
1. Notice Writing – Any 1 topic (school event / competition)
2. Formal Letter – Choose 1:
   - To the editor on rising pollution
   - To a company asking for product details
3. Article Writing (200 words):
   - "Impact of Social Media on Youth" OR
   - "Online Education – Boon or Bane?"
4. Report Writing:
   - Write a report on "Annual Day Celebration in Your School

## 3. ASL (Assessment of Speaking and Listening)
**Speaking Task:**
Prepare a 2-minute speech on any one:
- Artificial Intelligence in Education
- Importance of Reading in Digital Age
- Unemployment and Youth

**Listening Task:**
- Listen to an English news report or podcast (10–15 minutes).
- Write down the main points you understood (in about 100–150 words).

## 5. Book Review / Extended Reading
Choose one novel or non-fiction book from the CBSE recommended reading list (or age-appropriate bestsellers like The Alchemist, To Sir with Love, Wings of Fire, etc.)

Write a Book Review (300–350 words) including:

- Title & author
- Main plot/characters
- Themes/lessons learned
- What you liked/disliked
- Recommendation

## *Hindi :*

ग्रीष्मकालीन अवकाश कार्य    २०२५-२६

कक्षा- १२

१- "आज की पत्रकारिता के विविध आयामों के बावजूद क्या मीडिया की निष्पक्षता और विश्वसनीयता पर उठते प्रश्न चिन्ह उचित हैं?"

२- महादेवी वर्मा के व्यक्तित्व और कृतित्व का परिचय देते हुए स्पष्ट कीजिए कि वे भक्तिन की प्रखर तर्कशक्ति से अछूती नहीं थी।

नोट: समस्त लेखन कार्य की चित्रात्मक फाइल परियोजना तैयार करें।