


**CLASS - IX**
**SUMMER HOLIDAY HOMEWORK**
**GENERAL INSTRUCTIONS:**

- Handwriting should be neat and legible.
- The holiday homework would be graded.
- The work should be original and not copied from internet.
- The assignments should be submitted to the respective teachers as per the submission dates mentioned below.


**ENGLISH / SCIENCE**

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**SUBMISSION DATE: 7th July**

PREPARE A REPORT ON THE DEMOCRATIC FUNCTIONING OF THE UNITED NATIONS INCLUDING THE FOLLOWING POINTS:

1. UN as a Global association of Nations.
2. UN as guardian of International law, security, economic development and social equity.

(DISASTER MANAGEMENT)

Prepare a manual of around 10-12 pages (excluding pictures, graphs) in a separate folder discussing the ways to control and precautions to be taken for Disaster Management on the following themes:

ROLL NO.	THEME
1-9	EARTHQUAKE
10-18	TSUNAMI
19-27	FLOOD
28-36	DROUGHT

**HINDI**

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कवि रहीम के जीवन पर आधारित आकर्षक परियोजना बनाइए जिसमें निम्नलिखित बिंदुओं का समावेश हो: –

- जन्मस्थान
- जीवनकाल 'जन्म- मृत्यु'
- भाषागत विशेषता
- दोहों का संकलन दोहे अर्थ सहित

सूचना – परियोजना कार्य में रचनात्मकता का विशेष ध्यान रखें

**MATHEMATICS**

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**SUBMISSION DATE: 8th July**

Make the following projects according to your roll nos. mentioned:

**Project - 1 Exploring Fibonacci numbers. (1 – 12)**

1. Fibonacci numbers are a sequence of numbers i.e. 1,1,2,3, 5, 8, 13, 21, 34 .... The first number of the sequence is 1, the second number is 1, and next term is equal to the sum of the previous two numbers of the sequence itself.

2. Write the next 20 terms of the sequence generated by it.

3. History of the mathematician who gave this concept.

4. Explore in nature the things that correspond to Fibonacci numbers with pictures. For example: When counting the number of petals of a flower, it is most probable that they will correspond to one of the Fibonacci Numbers. It is seen that:

- a) White calla lily has one petal
- b) Euphorbia has two petals
- c) Trillium has three petals



d) Columbine have 5 petals Explore more such examples with pictures from internet. (give atleast 8 examples)

### Project-2 Exploring Pascal Triangle (take upto 10 row) (13 – 24)

1. Definition
2. History
3. How to construct it
4. Mention about the properties
  - a) The sum of the numbers in any row is  $2n$ , when  $n$  is the number of the row.
  - b) Property related to prime number.
  - c) Hockey stick pattern

### Project - 3 Exploring Mathematics around us. (25 – 35)

1. Mention about 5 platonic solids and its properties
2. History
3. Procedure of making platonic solids
4. Verify Euler's theorem for each of the solids

## SCIENCE

**SUBMISSION DATE: 11th July**

To prepare a working model on the allotted topic. A chart explaining the working of the exhibit is also to be submitted.

GPS	Model/projects
1	Water purification system
2	Tyndall effect
3	Energy from waste



4	Models of green building/environment building which harvest energy, water and materials
5	Artificial rain
6	Global concerns
7	Model of “Incredible Edible Cell”
8	Model depicting the “Adverse effects of Packaged, Ultra-Processed Food”
9.	Environmental issues related with human activities such as agriculture, energy, fishing, forests, mining
10.	Environmental issues with energy conservation, renewable energy, efficient energy use

**COMPUTER SCIENCE**

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**SUBMISSION DATE: 11th July**

Create a Power Point Presentation OR movie on the topic-“Open Source Software and Need for Software Licensing”

**SANSKRIT**

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**SUBMISSION DATE: 6th July**

उच्चारण स्थानों पर चित्र सहित एक प्रोजेक्ट तैयार करें।

**FRENCH**

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**SUBMISSION DATE: 6th July**

Make a Travel brochure on any important city of France.

# Happy Holidays!