CLASS – IX	Summer Holidays Homework

ENGLISH

General Instructions:
- Students need to prepare the project on the topic assigned to their roll-number group.
- The project is to be prepared as per the instructions detailed below.
- The "Creative Writing" section should be done by all the students in their respective subject notebooks.
- **Date of Submission:** 7 July, 2022

Roll Numbers.: 1-10

On an A3 size sheet, give a pictorial representation depicting any of the prose/poems of your choice from the following:

1. How I Taught my Grandmother to Read
2. A Dog Named Duke
3. The Brook
4. Road Not Taken

Roll Numbers.: 11-20

You love to travel a lot but Covid restrictions have put a halt to your dream of being a wanderlust. Imagine yourself to be a computer programmer and design a magazine cover illustrating all your favourite destinations. Do it on an A-3/A-4 size sheet.

Roll Numbers: 21-30

Design a school newspaper highlighting the major attractions of your school. Include the basic overview of the school structure and its goals. Do it on a Pastel Sheet or Cartridge sheet. The newspaper content should be handwritten/drawn. You may include the following sections:

- Infrastructure
- Academic Goals
- Sports
- Major attractions
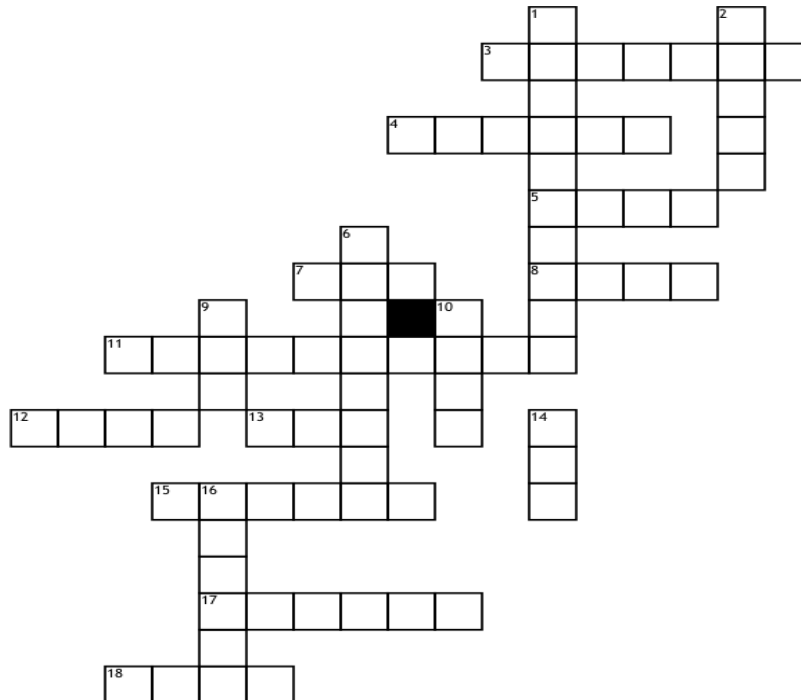- House Achievements
- School Assembly

Roll No.: 31 onwards

Make a crossword/puzzle creating hints on any of the following Grammar topics on an A-3/A-4 size sheet. You may take a hint from one such crossword given below:

1. Verbs
2. Adverbs
3. Conjunctions

4. Determiners

5. Modals

Amazing Adverbs And Voracious Verbs

Across

3. An adverb for happy

4. This word has the same meaning as lightly

5. The word means single

7. What do Bunnies do to stay active?

8. Hopping with one leg and on to the next

11. Another word for prettily

12. Making a loud sound with your mouth after you eat or drink something

13. A word for lightly running

15. The same meanng as forever

17. The word has the same meaning as barely

18. The oppisite of run

Down

1. Another word for careful

2. The oppisite of wake

6. The oppisite of hatefuly

9. The oppisite of drink

10. Another word for hop

14. The oppisite of walk

16. Another word for softly

Creative Writing

1. **Movie Time**: Write a movie review of any of your favourite movies you watched during summer break in your English Writing Skills Register.

2. **Dialogue Writing**: Create a dialogue between two friends upon any of the following topics:
   - Friendship
   - Life goals
   - School
   - Movies
   - Social Websites

3. **Paragraph Writing:** Write a paragraph in about 100-120 words on any of the following topics:

- A Friendly Clown
- Gregory- My Pet Cat
- The House of my Dreams
- My Hometown
- My Grandmother

4. **Critical Appreciation:** Give a critical appreciation of all the poems done so far.
5. **Write the character sketch of the following:**
   - Grandmother: How I Taught My Grandmother to Read
   - Charles Hooper: A Dog Named Duke

विषय – हिंदी

GENERAL INSTRUCTIONS
- The project is to be prepared as per the instructions detailed below.
- जमा कराने की तिथि - 8 July,2022

1. सिक्किम जहाँ सिक्का कुदरत की खूबसूरती का चलता है। 'सिक्किम ' शब्द लिम्बु भाषा के शब्दों ' सु ' (सुंदर) तथा 'ख्यिम " (घर) को जोड़कर बना है। सिक्किम प्राकृतिक सौन्दर्य से परिपूर्ण भारत का अत्यंत ही मनोहारी राज्य है। हिमालय की गोद में बसा प्राकृतिक सुषमा से मंडित सिक्किम भारत का बाईसवाँ राज्य है।सिक्किम की **रक्षा देवी** के नाम से प्रसिद्ध दुनिया की तीसरी सबसे बड़ी चोटी "**कंचनजंघा**" इसके सौन्दर्य को और भी निखारती है।

सिक्किम राज्य की पारम्परिक वेशभूषा , खानपान , त्योहार , भाषा , रहन – सहन की जानकारी प्राप्त कीजिए तथा स्क्रैप फ़ाइल में चित्र सहित सम्पूर्ण जानकारी देते हुए आकर्षक परियोजना तैयार कीजिए।

2. पठित पाठों के अतिरिक्त 15 नवीन शब्दों का प्रयोग करते हुए दो नवयुवकों के मध्य देश में विद्यमान किसी भी दो गंभीर समस्याओं के संबंध में विचार प्रकट करते हुए 15 से 20 संवाद लिखिए।

3.आप और आपके क्षेत्र के बच्चे बढ़ती गंदगी के कारण हो रहीं बीमारियों के विषय में चिंतित थे।इसी कारण आपने और आपके मोहल्ले के बच्चों ने सफ़ाई

अभियान चलाकर पूरे मोहल्ले को साफ-सुथरा बना दिया।इस विषय में संपूर्ण जानकारी देते हुए (120) शब्दों में अपने नानी जी को पत्र लिखिए।

4. दिए गए चित्र को ध्यान से देखकर अपने मन में उभरे विचारों को अपनी भाषा में (100) शब्दों में प्रस्तुत कीजिए:
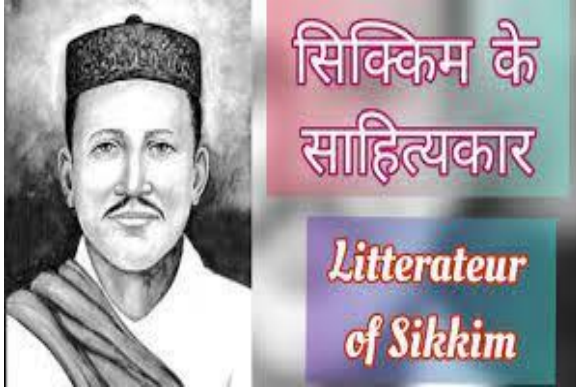

संस्कृत

1. सिक्किम के किन्हीं 2 प्रसिद्ध लेखकों का पद परिचय व उनकी कृतियों / रचनाओं का वर्णन संस्कृत भाषा में चित्र सहित A - 3 साइज़ शीट पर करें I

सिक्किम के साहित्यकार

Litterateur of Sikkim

2. संस्कृत समाचार पत्र सुधर्मा /सजल सन्देशः को पढ़ते हुए अपने स्वयं के समाचार पत्र का निर्माण चार्ट पेपर के द्वारा करें

3. गुण संधिः, वृद्धि संधिः तथा दीर्घ संधिः के केवल नियमों को **A** -3 साइज़ शीट पर लिखें **I**

FRENCH

General Instructions:
- All students to make an A3 size advertisement similar to the topics given in Q1.
- Assignment to be done in the French Register.
- **Date of Submission**: 4 July, 2022

Q1: Publicité: Make an attractive advertisement in French on any product like soap, pen, mobile etc. on A3 size sheet. Use your creativity to enhance its beauty by adding colours and pictures.

Q2: Make a 'Travel Brochure' of Sikkim. Write about famous tourist attractions, culture, religion, climate, activities, food, hotels etc. Paste or draw necessary pictures along with it. Make it beautiful and creative on A3 size sheet in a trifold style.

ASSIGNMENT:

I. Répondez aux questions
1) Que prenez-vous pour votre petit déjeuner?
2) Que faites-vous le week-end?
3) Comment s'appelle ton frère?
4) Les français, que mangent-ils?
   a) au petit déjeuner
   b) au déjeuner
   c) au goûter
   d) au diner
5) Qu'est-ce que c'est l'entrée?
6) Nommez quelques objets du sac de Denis.
7) Nommez quelques journaux français.
8) Quelle est la capitale du Sénégal?
9) Quelle est la nationalité de:
   a) Marie Curie
   b) Tintin
   c) Napoléon
   d) David Bechham
10) Quel âge as-tu?
11) Décrivez la ville de Paris. (70 mots)
12) Comment vous avez fêté votre anniversaire? (70 mots)

II. Regardez la photo donnée ci-dessous et décrivez la personne en 30-35 mots.
(jeune, belle, souriante, cheveux longs, grands yeux, front)

GENERAL INSTRUCTIONS

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MATHEMATICS

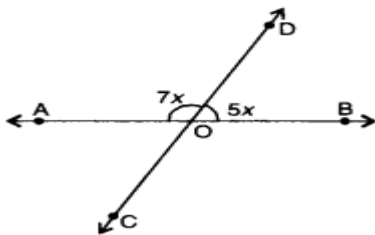hematics holidays homework has two sections:
- Sections A is an assignment; Assignment to be done in the Math register.
- Section B is a project which needs to be done in an activity file.
- **Date of Submission:** 6 July, 2022

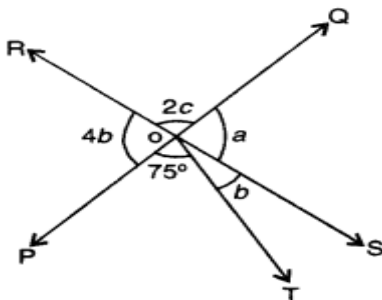A. Do the following in the Math register:

Q1. How many triangles can be drawn having its angles as 45°, 64° and 72°? Give reason for your answer.

Q2. Find the area of the isosceles triangle if the perimeter is 11 cm and the base is 5 cm.

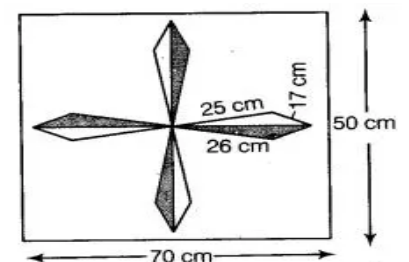Q3. In the given figure, lines AB and CD intersect at O. Find the value of x.

Q4. In the given figure, two straight lines PQ and RS intersect each other at O. If ∠POT = 75°, find the values of a, b, c.
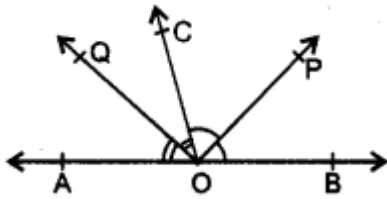

Q5. Find the cost of levelling the ground in the form of a triangle having the sides 51 m, 37 m and 20 m at the rate of Rs. 3 per m^2.

Q6. The perimeter of a triangular field is 420 m and its sides are in the ratio 6:7:8. Find the area of the triangular field.
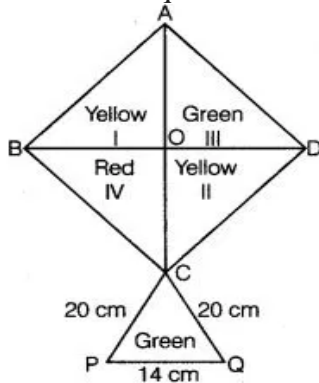
Q7. A design is made on a rectangular tile of dimensions 50 cm x 17 cm as shown in figure. The design shows 8 triangles, each of sides 26 cm, 17 cm and 25 cm. Find the total area of the design and the remaining area of the tiles.
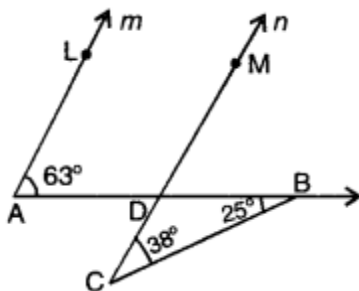

Q8. In the given figure, OP bisects ∠BOC and OQ bisects ∠AOC.
Prove that ∠POQ = 90°

Q9. How much paper of each shade is needed to make a kite given in figure, in which ABCD is a square with diagonal 44 cm.

Q10. In the given figure, prove that m || n.

B. PROJECT (To be done in the Math activity file)
Look around yourself and find the area of any 2 real life triangular objects using Heron's formula. The object chosen should be such that its sides can be measured. Paste the real photograph of the object chosen on the blank side of the page, opposite to the calculations.
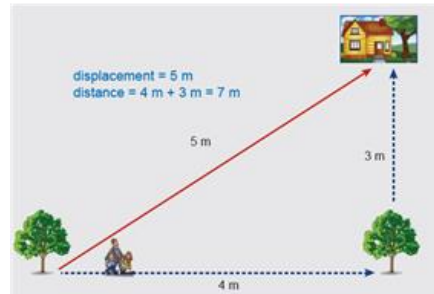
SCIENCE

GENERAL INSTRUCTIONS
- Physics and Chemistry Assignment to be done in the respective subject registers.
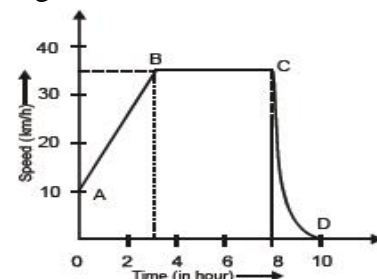- **Date of Submission:** 8 July, 2022

PHYSICS

1. Differentiate between distance and displacement. Give two examples where distance is not zero while displacement is zero.

2. Identify the distance travelled and the displacement in the two figures given below:

3. Fill in the blanks:
   a) A particle moving with uniform velocity will have _____ acceleration.
   b) The arithmetic mean of velocity is called _____
   c) If the speed of an object is _____, it said to be decelerating or has negative acceleration.
   d) For an object traveling linearly, its average speed and average velocity will be _____
   e) A car starts at rest and travels a distance 20 m in 1 sec. The car average speed of the car is _____

4. Give an example where the object's velocity and acceleration are in opposite directions.

5. Find the final velocity of the ball that is dropped from the second floor, if the ball takes 18 seconds before hitting the ground.

6. A car travels from stop A to stop B with a speed of 30 km/h and then returns back to A with a speed of 50 km/h. Find
   a) displacement of the car.
   b) distance travelled by the car.
   c) average speed of the car.

7. Velocity-time graph for the motion of an object in a straight path is a straight line parallel to the time axis.
   a) Identify the nature of motion of the body.
   b) Find the acceleration of the body.
   c) Draw the shape of distance-time graph for this type of motion.

8. A car is travelling at 20 km/h, it speeds upto 60 km/h in 6 seconds. What is its acceleration?

9. Calculate the deceleration for a car travelling at 5 m/s if brought to rest within 10 sec.

10. The graph given alongside shows how the speed of a car changes with time.
   a) What is the initial speed of the car?
   b) What is the maximum speed attained by the car?
   c) Which part of the graph shows zero acceleration?
   d) Which part of the graph shows varying retardation?
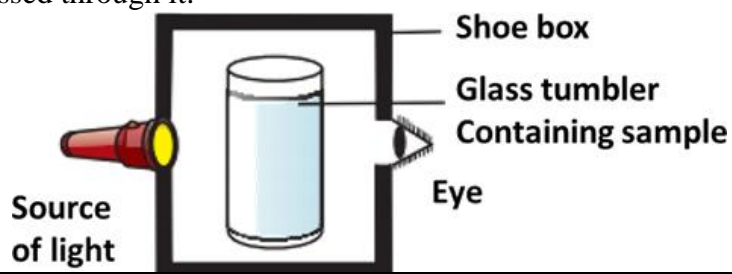   e) Find the distance travelled in first 8 hours.

CHEMISTRY

1. A solution contains 60 g of sugar in 480 g of water. Calculate the concentration of solution in terms of mass by mass percentage of the solution.
2. Define a solution. If 10 ml of H_2SO_4 is dissolved in 90 ml of water, calculate the concentration of solution.(v/v)
3. Sudha tested the solubility of four salts X, Y, Z and T at different temperatures and collected the following data. (Solubility refers to the amount in grams dissolved in 100 g of water to give a saturated solution.)

Salt dissolved	Temperature in Kelvin				
	290 K	313 K	323K	343K	353K
	Solubility				
X	22	34	40	93	109
Y	43	43	46	50	50
Z	27	30	34	37	40
T	25	38	42	54	64

Answer the following questions from the table:
   a) Which salt has the highest and lowest solubility at 323 K?
   b) A student prepared a saturated solution of X at 323 K and then added 25 g of water to it. What mass of X must be added to again make the solution saturated?
   c) The solubility of which salt is least affected by increase in temperature?
   d) What mass of 'T' would be required to make saturated solution in 200 g of water at 290K?
4. Properties of a compound are different from its constituents, while a mixture shows the properties of its constituent elements. Justify this statement taking the example of iron and sulphur.
5. When can we say that a solution is saturated? How can you change a saturated solution to an unsaturated solution without adding any more solvent to it? Explain in brief.
6. What volume of ethyl alcohol and water must be mixed together to prepare 250 ml of 60% by volume of alcohol in water?
7. Differentiate between emulsion and aerosol.
8. You cannot have a colloidal solution with gas in the dispersed phase and dispersion medium. Justify the above statement.
9. During an experiment the students were asked to prepare a 10% (Mass/Mass) solution of sugar in water. Ramesh dissolved 10g of sugar in 100g of water while Sarika prepared it by dissolving 10g of sugar in water to make 100g of the solution.
   a) Are the two solutions of the same concentration?
   b) Calculate the mass of sodium sulphate required to prepare its 20% (mass percent) solution in 100g of water.
10. A group of students took an old shoe box and covered it with a black paper from all sides. They fixed a source of light (a torch) at one end of the box by making a hole in it and made another hole on the other side to view the light. They placed a milk sample in a beaker/tumbler in the box as shown in the given Fig. They were amazed to see that milk in the tumbler was illuminated. They tried the same activity by taking a salt solution but found that light simply passed through it.

a) Explain why the milk sample was illuminated. Name the phenomenon involved.
b) Same results were not observed with a salt solution. Explain.
c) Can you suggest two more solutions which would show the same effect as shown by the milk solution?

BIOLOGY

1) Students are required to make a multimedia presentation on **ANY ONE** of the given topics related to **IMPROVEMENT IN FOOD RESOURCES**.
   a) Crop Variety Improvement
   b) Crop Production Management
   c) Bee -Keeping
   d) Cattle Farming
   e) Poultry Farming
   f) Fish Production

The presentation must conform to the following guidelines:
   a) The presentation should be made using Microsoft Power Point.
   b) It should comprise of text, graphics, animation and sound.
   c) The presentation time should not exceed 10mins with approximately 10- 15 slides.
   d) A final slide should include the reference section/bibliography that lists all of the sources of information you used.

2) It will be assessed on the basis of: -
   a) Content and relevance to the topic
   b) Presentation of the content
   c) Communication skills- while presenting the slides.

NOTE: All the students have to speak on the topic in coordination with the PPT.

SOCIAL SCIENCE

GENERAL INSTRUCTIONS
- Roll no-wise topics have been assigned for students.
- The project report to be prepared as per the instructions detailed below.
- Section B has to be done in the Economics Register.
- **Date of Submission:** 6 July, 2022

Project on -Disaster Management

Roll Numbers.: 1-11

Enlist Disaster Management mitigation techniques that should be there in a school to deal with any natural calamity.

Roll Numbers.: 12-22
Preparation of Disaster Resilient Structures of buildings (Especially schools).

Roll Numbers.: 23-33
Prepare a pocket guide on First Aid for your school.

Roll Numbers.: 34-45
Role of govt. /Non-govt. functionaries in your locality in Disaster Management

Prepare a detailed project in **Social Science Activity-File** on the above-mentioned topic according to following headings:
Project should be developed and presented in this order
• **COVER PAGE**- showing project title, school's name, student's name, class and section and academic session(year)
• **CONTENTS**- List of contents with page number (approx...15 pages)
• **PROJECT OVERVIEW**: Purpose, aim, methodology and experience while doing the project
• **MAIN BODY**- Chapters with relevant headings.
• **CONCLUSION**- Summary and conclusions based on findings.
• **BIBLIOGRAPHY**- should have the title, pages referred, author, publisher, year of publication and if a website, the name of the website with a specific link which has been used.

NOTE: Only eco-friendly material to be used for SOCIAL SCIENCE PROJECT.

SECTION B (Assignment)

Q-1 What was the immediate cause that angered the French people so much so that they stormed and destroyed the Bastille and started the Revolution?
Q-2 What were the consequences of the uprising led by the Jacobins in 1792?
Q-3 Why did Olympe de Gouges protest against the Constitution and the Declaration of Rights of Man and Citizen? Mention some of the basic rights set forth in her Declaration of the Rights of Woman and Citizen which came in 1791.
Q-4 Compare the features of Democratic and non-democratic governments.
Q-5 Government has not made any provision for drinking water in some villages in remote areas. The villagers of a particular remote area decided to pay some money to the government officials to get water to their villages. Was this a democratic method?
Q-6 Chinese Government blocked free flow of information on the internet by placing restrictions on popular websites like 'Google' and 'Yahoo'. The image of tanks and an unarmed student reminds the reader of another major event in recent Chinese history. Find out about that event.
Q-7 Explain why Ahmedabad and Kolkata are able to see the noon sun exactly overhead in a year but not Delhi.
Q-8 How is India's geographical location favorable for international trade?
Q-9 In what way is Kareem's capital and labour different from Mishrilal?

Q-10 Why are farm laborers like Dala and Ramkali poor?

ARTIFICIAL INTELLIGENCE

ROLL NO (1-15)

In present times, technology must be implemented in an economically feasible way to strengthen various fields like Agriculture, Textile, Manufacturing, Construction, Medical, Tourism, Offline Education etc. Keeping this in mind, the student must pick ANY ONE such field and present their idea in an investor-pitch-style presentation/video on how AI can help solve their problem. The proposal should be economically viable.

Students are required to make a presentation (maximum 10 slides) or video (maximum two minutes), showcasing their product/service. The presentation/video should include the following:

a) One slide describing the issue and two or more slides for the solutions and various features of the product/service.
b) One slide should mention how AI would help in solving the problem.
c) A prototype/application preview showcasing the working of the product/service is a must.

ROLL NO (15-30)

Make a creative model on 'Smart Home-My Dream Home' (preferably working model)
Smart homes use smart devices (from light-bulbs to alarms and more) that connect to a network over Wi-Fi. Explain the smart devices that you would like to incorporate in your dream home. A picture on 'Smart Home' is given below for reference:

ROLL NO (30 onwards)

Make a 10 slide presentation on the following- "My dream job and AI".
The presentation to include the following:
a) Area/domain of the job

b) Why would such a job be required?- Mention in the next 20 years how many such jobs would be required?
c) Nature of the job
d) Educational qualifications/skills required for the job

Make the presentation point-wise. Students need to present their presentation in a video with the presentation running in the background. Maximum length of the video should not be more than 2-3 mins.

ART

General Instructions:
- Students need to complete the given questions in their Sketch Files.
- Jute Bag is to be designed as per the given instructions.
- **Date of Submission:** 7 July, 2022

1. Do the following in your sketch file:
   a. Paper Machie Craft- Animal Mask
      (Refer Pg No - 65 of your '**Art & Craft Me**' Book)
   b. Still Life Colour
      (Refer Pg No - 20 of your '**Art & Craft Me**' Book)
   c. Still Life- Pencil Shading
      (Refer Pg No - 22 of your '**Art & Craft Me**' Book)

2. Design a Jute Bag on any theme of your choice. Make it attractive using different colours. Some examples of the same are given below for reference: