

ENGLISH

General Instructions:

- Roll number-wise topics have been assigned for students.
- 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

Using a cardboard or ivory sheet, design a cartoon of your choice to illustrate any of following grammar topics:

- a) Reported Speech
- b) Active & Passive Voice
- c) Determiners
- d) Tenses

You may include the basic definition, rules, examples, etc., illustrating it with beautiful pictures giving it a 3-D effect.

Roll Numbers.: 11-20

Write a brief description of all the literary devices taught along with an example of each on a Pastel Sheet. Supplement it with beautiful pictures/drawings.

Roll Numbers: 21-30

Imagine yourself to be a poet and write a poem on any of the following topics of your choice:

- a) Life
- b) Career Opportunities
- c) Parental Support
- d) Friendship
- e) Nature

Try to make it presentable using your calligraphic skills and creativity. Write it on a pastel A3 sheet.

Roll No.: 31 onwards

Read a story of your own choice and present its evolution on the flash cards giving a complete overview of the plot, characters, setting and twists.

Creative Writing

1. There is a lot of celebration in the name of various days including Mother's Day, Father's Day, Friend-ship Day etc. Do you really believe in the essence of such days? How far these days validate a relation? Write your experience in a paragraph of about 100-120 words in your English Grammar Register.
2. If you are given a chance to write one act play on your friends' life and their regime, what will it be? Write its script elaborating a situation, conflict and finally resolving it by the end. Write it in your English Grammar Register.
3. You are the Physical Education Instructor at St. Jesus and Mary School, Agra. You had placed an order for sports goods with Student Sports Enterprises. When the items arrived, you found that some of them were defective. Write a letter to the Manager, Student Sports Enterprises, asking him to replace the defective items.
4. You are Raman/Reena of 240, Shahid Nagar, Agra. Write a letter to M/s Raju Sales Corporation complaining about the poor performance of the washing machine purchased from their showroom, mentioning clearly the specific problem you are facing and the action you want. Give all the relevant details.
5. The recent reports in the press about the growing incidence of bullying in schools, has greatly disturbed you. Write a letter to the editor of 'The Times of India' newspaper expressing your views on this problem and suggesting ways to solve it. Sign yourself as Mohan/Monica of Class IX of Sachdeva Global School, New Delhi.
6. A 'Public Park' is the heart of a residential area. Children play, elders go for a walk and even ladies do yoga and other exercises there. But unfortunately, the park in your area has become a place for stray animals and anti-social elements. Write a letter to the Editor of The Hindu, KG Marg New Delhi, to draw attention of the civic authorities towards it.

FRENCH

General Instructions:

- Students to make an A3 size poster on the topic given in Q1 (as per the instructions given below).
- Creative mentioned in Q2 to be done on A4 size sheets by all students.
- Assignment questions to be done in the French notes register by all students.
- **Date of Submission:**
- 4 July, 2022

Q1: Affiche: On an A3 size sheet make a beautiful poster in French on the topics given below:

Roll no- 1 to 5

Bienfait du yoga

Roll no- 6 to 10

Manger sainement, rester en bonne santé

Roll no- 11 to 15

Les avantages de l'éducation des filles

Q2: Make a project on the festivals of Sikkim. Identify 8 different festivals of Sikkim. Write a short description of each festival along with illustrative images of the same on separate A4 size sheets (one sheet for one festival description). The presentation should be creative and beautiful.

Assignment:

Répondez aux questions.

- 1) Si on n'a pas le moyen de payer les frais de ses études dans les universités, que peut-on faire ?
- 2) Quelles sont les responsabilités d'une secrétaire ?
- 3) Que peut-on faire après avoir obtenu le diplôme de Baccalauréat ?
- 4) Que faut-il avoir quand on cherche un boulot ?
- 5) Donnez des conseils à votre ami car il est au chômage ?
- 6) Décrivez le système d'éducation français.
- 7) Décrivez vos projets d'avenir.

विषय - हिंदी

GENERAL INSTRUCTIONS

खंड-अ

- Roll number-wise topics have been assigned to students.
- Students need to prepare the project on topic assigned to their roll-number group.
- The project is to be prepared as per the instructions detailed below.

खंड-ब

- Questions of this section are to be done by all the students in your Hindi notes register.

Date of Submission:

- जमा कराने की तिथि - 08.07.2022

खंड-अ

'सिक्किम' भारत के उत्तर - पूर्वी हिस्से में स्थित सबसे प्रसिद्ध पर्यटन स्थलों में से एक है। यह भारत का एक छोटा और खूबसूरत राज्य है, जिसकी राजधानी 'गंगटोक' है। सिक्किम की सीमा भूटान, नेपाल और तिब्बत के साथ लगती है। सिक्किम अपनी अद्भुत सुंदरता, प्राचीन मठ, खूबसूरत झरने, पहाड़ियाँ और



घने जंगल के कारण पूरी दुनिया से पर्यटकों को अपनी ओर आकर्षित करता है ।

'सिक्किम' राज्य की आभासी यात्रा कीजिए और अनुक्रमांक के अनुसार दिए गए परियोजना कार्य को आकर्षक तथा रचनात्मक रूप में तैयार कीजिए:-

अनुक्रमांक 01 - 10

सिक्किम राज्य की प्राकृतिक सुंदरता तथा दिल्ली पर आधारित एक - एक स्वरचित एवं सचित्र कविता (कुल दो कविताएं) लिखिए।

अनुक्रमांक 11 - 20

'पारसमणि दंगल' सिक्किम के युवा पत्रकार और साहित्यकार हैं। इनके जन्म, शिक्षा - दीक्षा, व्यवसाय, पुरस्कार तथा सम्मान, इनके द्वारा लिखी कविता आदि की जानकारी प्राप्त करें तथा एक आकर्षक परियोजना चित्र सहित तैयार करें।

अनुक्रमांक 21 - 30

सिक्किम के पर्यटन स्थलों पर आधारित आकर्षक और चित्र सहित एक विवरणिका (brochure) तैयार करें।

अनुक्रमांक 31 से अंत तक

सिक्किम में मनाए जाने वाले प्रमुख त्योहारों के बारे में जानकारी प्राप्त कीजिए और चित्र सहित आकर्षक परियोजना ए-4 शीट पर तैयार कीजिए।

खंड-ब

निम्नलिखित ग्रीष्मावकाश कार्य हिंदी उत्तर पुस्तिका में साफ़ एवं सुन्दर लेख में लिखिए -

1. 'आज़ादी का अमृत महोत्सव' विषय पर संकेत बिंदुओं की सहायता से लगभग 150 शब्दों में एक अनुच्छेद लिखिए -
 - अमृत महोत्सव के पीछे धारणा
 - सरकारी गैर सरकारी स्तर पर विभिन्न गतिविधियाँ
 - इससे लाभ
2. देश के विभिन्न राज्यों में बढ़ते प्रदूषण पर चिंता प्रकट करते हुए हिंदी दैनिक समाचार पत्र के संपादक को लगभग 120 शब्दों में पत्र लिखिए।
3. 'सत्संग का प्रभाव ' विषय पर 120 शब्दों में लघुकथा लिखिए तथा कहानी से मिली सीख भी लिखिए।

MATHEMATICS

GENERAL INSTRUCTIONS

- Mathematics holidays homework has two sections:
 - Section 1 is Model making; Students to check their class roll numbers when making models.
 - Section 2 is an assignment; Assignment to be done in the Math notes register.
- **Date of Submission:**
 - 5 July, 2022 (both section 1 and Section 2)

Section 1:

1. Design a Kaleidoscope (Roll no. 1-10)
2. Pythagoras Theorem (Roll no. 11-20)
3. Math in everyday life (Roll no. 21-30)
4. Design a clinometer (Roll no. 31 onwards)

Section 2:

- Q1. If one zero of the quadratic polynomial $x^2 + 3x + k$ is 2, then find the value of k .
- Q2. If α and $1/\alpha$ are the zeroes of the quadratic polynomial $2x^2 - x + 8k$, then find k .
- Q3. Determine the value of x if $\tan 3x = \sin 30^\circ + \sin 45^\circ \cos 45^\circ$.
- Q4. Does the following pair of equations represent a pair of coincident lines? Justify your answer.
 $x/2 + y + 2/5 = 0$
 $4x + 8y + 5/16 = 0$.
- Q5. Evaluate $\sin^2 30^\circ \cos^2 45^\circ + 4 \tan^2 30^\circ + \frac{1}{2} \sin^2 90^\circ - 2 \cos^2 90^\circ + \frac{1}{24}$.
- Q6. Two numbers are in the ratio 5:6. If 8 is subtracted from each of the numbers, the ratio becomes 4 : 5. Then find the numbers.
- Q7. If α & β are the zeroes of the polynomial $2x^2 - 4x + 5$, then find the value of $1/\alpha^2 + 1/\beta^2$
- Q8. Find x and y for the given pair of linear equations.
 $37x + 43y = 123$, $43x + 37y = 117$
- Q9. If $\sin \theta + \sin^2 \theta = 1$, Prove that : $\cos^2 \theta + \cos^4 \theta = 1$
- Q10. If α and β are the zeroes of the polynomial $p(x) = 2x^2 + 5x + k$, satisfying the relation, $\alpha^2 + \beta^2 + \alpha\beta = 21/4$ then find the value of k .
- Q11. Prove that $\frac{\cos A}{1 - \tan A} + \frac{\sin A}{1 - \cot A} = \sin A + \cos A$
- Q12. If a and b are zeroes of the polynomial $p(x) = 2x^2 - 5x + 7$, find a polynomial whose zeroes are $2a + 3$ and $2b + 3$.
- Q13. If $7 \sin^2 A + 3 \cos^2 A = 4$, show that $\tan A = 1/\sqrt{3}$
- Q14. Prove that $1/\operatorname{cosec} A + \cot A - 1/\sin A = 1/\sin A - 1/\operatorname{cosec} A - \cot A$
- Q15. Determine the value of m and n so that the following pair of linear equations have infinite number of solutions.
 $(2m - 1)x + 3y = 5$;
 $3x + (n - 1)y = 2$

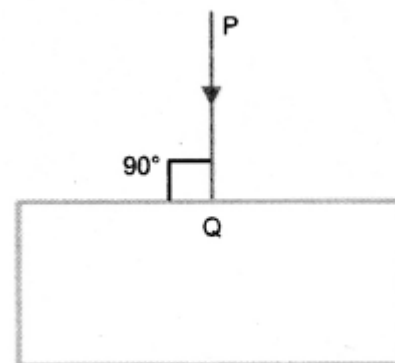
SCIENCE

GENERAL INSTRUCTIONS

- Physics and Chemistry Assignment have to be done in the respective subject registers.
- **Date of Submission:**
 - 6 July, 2022 (both the assignments and the presentation)

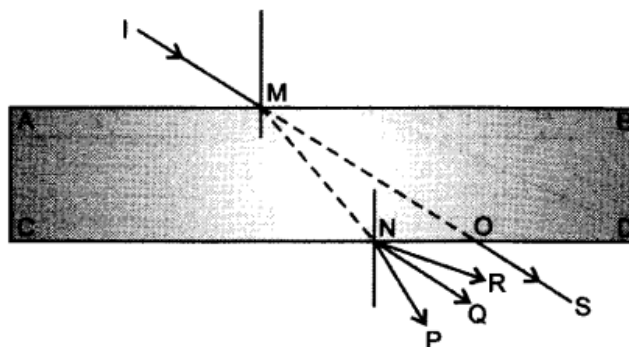
PHYSICS

1. No matter how far you stand from a mirror, your image always appears erect and diminished. Identify the type of mirror.
2. What is the magnification of the images formed by plane mirrors and why?
3. What kind of mirrors are used in big shopping stores to keep a watch on customer activities?
4. If the refractive index of water for light going from air to water is 1.33, what will be the refractive index of air for light going from water to air?
5. Why is the absolute refractive index of a medium always greater than one?
6. The refractive index of glass is 1.5. What is the meaning of this statement in relation to speed of light?
7. A ray of light PQ is incident on a glass slab as shown. Write the values of angle of incidence and angle of refraction for this ray of light.



8. On applying cartesian sign conventions for spherical lenses, the image distance obtained is negative. State the significance of the negative sign.
9. Name the type of mirror used in a solar furnace. How is high temperature achieved by this device?
10. The magnification produced by a mirror is -1.5. What does it signify about the image formed?
11. How can you identify the three types of mirrors without touching?
12. For the same angle of incidence 45° , the angle of refraction in two transparent media: I and II is 20° and 30° respectively. Out of I and II, which medium is optically denser and why?

13. If a light ray IM is incident on the surface AB as shown, identify the correct emergent ray.



a) How is refractive index of any medium 'A' with respect to a medium 'B' related to the speed of propagation of light in two media A and B? State the name of this constant when one medium is vacuum or air.

b) The refractive indices of glass and water with respect to vacuum are $\frac{3}{2}$ and $\frac{4}{3}$ respectively. If the speed of light in glass is 2×10^8 m/s, find the speed of light in (i) vacuum, (ii) water.

14. The refractive indices of four media A, B, C and D are given in the following table:

Medium	A	B	C	D
Refractive Index	1.33	1.50	1.52	2.40

If light, travels from one medium to another, in which case the change in speed will be (i) minimum, (ii) maximum?

15. a) Under what condition will a glass lens placed in a transparent liquid become invisible?

b) Describe and illustrate with a diagram, how we should arrange two converging lenses so that a parallel beam of light entering one lens emerges as a parallel beam after passing through the second lens.

c) An object is placed at a distance of 3 cm from a concave lens of focal length 12 cm. Find the (i) position and (ii) nature of the image formed.

16. The refractive index of water is 1.33 and the speed of light in air is 3×10^8 ms⁻¹. Calculate the speed of light in water.

17. "The refractive index of carbon disulphide is 1.63." What is the meaning of this statement in relation to speed of light?

18. The speed of light in a transparent medium is 0.6 times that of its speed in vacuum. What is the refractive index of the medium?

19. In an experiment with a rectangular glass slab, a student observed that a ray of light incident at an angle of 55° with the normal on one face of the slab, after refraction strikes the opposite face of the slab before emerging out into air making an angle of 40° with the normal. Draw a labelled diagram to show the path of this ray. What value would you assign to the angle of refraction and angle of emergence?

20. An object 2 cm high is placed at a distance of 64 cm from a white screen. On placing a convex lens at a distance of 32 cm from the object it is found that a distinct image of the object is formed on the screen. What is the focal length of the convex lens and size of the

image formed on the screen? Draw a ray diagram to show the formation of the image in this position of the object with respect to the lens.

CHEMISTRY

- A student burnt a metal A found in the form of ribbon. The ribbon burnt with a dazzling flame and a white powder B was formed which was basic in nature. Identify A and B. Write a balanced chemical equation for the above mentioned reaction.
- A zinc rod is left for nearly 20 minutes in a copper sulphate solution. What change would you observe in the zinc rod?
- A, B and C are three elements which undergo chemical reactions in the following way.

$$A_2O_3 + 2B \rightarrow B_2O_3 + 2A$$

$$3CSO_4 + 2B \rightarrow B_2(SO_4)_3 + 3C$$

$$3CO + 2A \rightarrow A_2O_3 + 3C$$
 Answer the following:
 - Which element is most reactive? Justify.
 - Which element is least reactive? Justify.
- Which of the following reaction is possible? Explain giving a suitable reason.
 - $Cu(s) + ZnSO_4(aq) \rightarrow CuSO_4(aq) + Zn(s)$
 - $Fe(s) + ZnSO_4(aq) \rightarrow FeSO_4(aq) + Zn(s)$
 - $Zn(s) + MgSO_4(aq) \rightarrow ZnSO_4(aq) + Mg(s)$
- Write the balanced chemical equations for the following reactions:
 - Ammonium chloride and Potassium hydroxide on reaction gives potassium chloride, ammonia and water.
 - Calcium hydrogen carbonate on reaction with Sulphuric acid gives Calcium Sulphate, water and liberates carbon dioxide.
 - Copper (II) sulphate on treatment with potassium iodide precipitates cuprous iodide, liberates iodine gas and also forms potassium sulphate.
- Re-write the given chemical equations after balancing them.
 - $CO_2 + H_2O \rightarrow C_6H_{12}O_6 + O_2$
 - $SiCl_4 + H_2O \rightarrow H_4SiO_4 + HCl$
 - $Al + HCl \rightarrow AlCl_3 + H_2$
 - $C_7H_6O_2 + O_2 \rightarrow CO_2 + H_2O$
 - $Fe_2(SO_4)_3 + KOH \rightarrow K_2SO_4 + Fe(OH)_3$
 - $Ca_3(PO_4)_2 + SiO_2 \rightarrow P_4O_{10} + CaSiO_3$
 - $KClO_3 \rightarrow KClO_4 + KCl$
 - $Al_2(SO_4)_3 + Ca(OH)_2 \rightarrow Al(OH)_3 + CaSO_4$
 - $H_2SO_4 + HI \rightarrow H_2S + I_2 + H_2O$
- What type of chemical reaction takes place when _____
 - Limestone is heated?
 - A magnesium wire is burnt in air?
 - Electricity is passed through water?
 - Ammonia and hydrogen chloride are mixed?
 - Silver bromide is exposed to sunlight?
- A sample of water weed was placed in water and exposed to sunlight. Bubbles of a gas are seen on the surface of the leaves.
 - Name the gas evolved.
 - Write a balanced equation of reaction taking place.

9. Give balanced equations for the following:
- A reaction which gives out heat.
 - A reversible reaction.
 - A reaction with a solid and gas which produces heat.
10. 2g of ferrous sulphate crystals are heated in a dry boiling tube.
- List any two observations.
 - Name the type of chemical reaction taking place.
 - Write the chemical equation for the reaction.

BIOLOGY

- 1) Students are required to make a multimedia presentation on **ANY ONE** of the given topics related to **MANAGEMENT OF NATURAL RESOURCES**.
- Five Rs
 - Pollution of river Ganga
 - Importance of forests
 - Need to manage resources
 - Water harvesting
 - Fossil fuels and their conservation
- 2) The presentation must conform to the following guidelines:
- The presentation should be made using Microsoft Power Point.
 - It should comprise of text, graphics, animation and sound.
 - The presentation time is 10mins with approximately 10- 15 slides.
 - A final slide should include the reference section/bibliography that lists all of the sources of information you used.
- 3) It will be assessed on the basis of: -
- Content and relevance to the topic
 - Presentation of the content
 - Communication skills- while presenting the slides.

NOTE: All the students have to speak on the topic in coordination with the PPT for a maximum of 5 mins.

SOCIAL SCIENCE

GENERAL INSTRUCTIONS

- Roll number-wise topics have been assigned for students.
- Students need to prepare a project on **ANY ONE** topic assigned to their roll-number group.
- The project report to be prepared as per the instructions detailed below.
- Assignment Questions to be done in the Economics notes register by all students.
- **Date of Submission:**
- 7 July, 2022

Roll Numbers: 1-11

TOPIC: How can we ensure availability and sustainable management of water and sanitation for all?

OR

TOPIC: Encouraging consumer behaviour change around reducing food wastage in restaurants and cafes.

Roll Numbers: 12-22

TOPIC: Information overload: the society is overstressed with the amount of data.

OR

TOPIC: Global Unemployment Peak.

Roll Numbers: 23 onwards

TOPIC: Study of Consumer awareness on Crypto Currency in India.

OR

TOPIC: An investigation of awareness of women on consumer rights in the Urban and Rural Context.

Prepare a detailed project in **Social Science Activity-File** on the above-mentioned topic according to following headings:

The Project File should have the following (in the order mentioned)

1. **COVER PAGE**- showing project title, schools name, students name, class and section and academic session(2022-23)
2. **CONTENTS**- Table of contents with page number (approx...15 pages)
3. **PROJECT OVERVIEW**: Purpose, aim, methodology and experience while doing the project
4. **MAIN BODY**- Chapters with relevant headings.
5. **CONCLUSION**- Summary and conclusions based on findings.
6. **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 have been used.

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

Assignment

1. Why were the Balkan nations in trouble?
2. How did Napoleonic trade benefit the businessmen and small-scale producers?
3. What were the two main causes of resentment in Belgium in 1960? How was the conflict resolved?
4. How is a federal government better than a unitary government? Explain citing examples of Belgium and Sri Lanka.
5. Compare India and Sri Lanka on the basis of any indicators of the human development index in these countries.
6. 'The availability of resources is the only condition for the development of any region'. What is your opinion on the statement? Explain.
7. "India has enormous diversity in the availability of resources". Name four varied reasons to justify this statement.
8. Answer the following questions:
 - a. Which soils develop on crystalline igneous rocks?

- b. Why do these soils develop a reddish colour?
 - c. Name any two states where such a soil is found.
9. Which people work in an unorganised sector? Mention any two social values which you have learnt from the working conditions of unorganised sector.
10. “Income and employment will increase if the farmers are provided irrigation and marketing facilities”. Justify the statement.

ART

GENERAL INSTRUCTIONS

- Roll number-wise topics have been assigned for students.
- Folk art painting to be completed by all students in their respective sketch files.
- **Date of Submission:**
- 8 July, 2022

Roll Numbers: 1-12

KALEIDOSCOPE MAKING

Refer to page 76 (of Art Craft and Me) for instructions to make the kaleidoscope

Roll Numbers: 13-26

PHOTO FRAME (MOSIC EFFECT)

Refer to page 75 (of Art Craft and Me) for instructions to make the photo frame

Roll Numbers: 27 onwards

JUTE BAG DESIGNING

Paint a jute bag on any theme. Some pictures are shared below for illustrative purpose only.



Q 1. FOLK ART painting on PAGE NO – 69 (of Art Craft and Me)

All students to complete the above painting in their respective sketch files.