SUMMER HOLIDAY HOMEWORK (2024- 2025)

CLASS – X A

S.NO	SUBJECT	HOMEWORK QUESTIONS
1	**English**	1.Footprints Without Feet- Read the lesson and prepare a project to describe the silly behaviour of a rich woman who is foolishly indulgent perhaps because she is lonely. Do you think such people are nearly silly, or can their actions cause harm to others.(Write your scrip in a separate file,paste pictures and colour it, word limit - 100 to 120 words.) 2.Prepare a Project on Nelson Mandela.(Whole life History) 3. Positive attitude in life can make the world a better place to live in.Do you agree or disagree with reference to the poem 'Dust of Snow' and 'Fire and Ice' Express your views in 100 to 120 words.
2	**Hindi**	<u>पाठ्य पुस्तक और पूरक पाठ्य पुस्तक</u> 1.शिक्षा जैसे महत्त्वपूर्ण मसले पर बड़े भाई साहब के विचारों को स्पष्ट कीजिए। 2.लेखक को अपने भाई के रौद्र रूप के दर्शन क्यों हो जाया करते थे? 3.बड़े भाई साहब ने लेखक का घमंड दूर करने के लिए क्या उपाय अपनाया? 4.भाई साहब भले ही फेल होकर एक कक्षा में दो-तीन साल लगाते थे पर उनकी सहज बुद्धि बड़ी तेज़ थी। स्पष्ट कीजिए। 5.भाई साहब के फेल होने और खुद के अव्वल आने पर लेखक के मन में क्या-क्या विचार आए? 6. कबीर मन का आपा खोकर दूसरों से बातचीत करने के लिए कहते हैं । यह ' मन का आपा खोना' क्या है आपके विचार से यह कितना आवश्यक है और क्यों ? 7. निंदक के संबंध में आपको लोगों के विचारों और कबीर के विचार में क्या भिन्नता नजर आती है? इनमें से आपको किसका विचार ज्यादा अच्छा लगता है और क्यों? 8. मनुष्यता एवं भक्ति की राह में आप पुस्तकीय ज्ञान को कितना उपयोगी या अनुपयोगी समझते हैं और क्यों ? स्पष्ट कीजिए। 9जनवरी, 1931 को सुभाषचंद्र का एक नया रूप एवं सशक्त नेतृत्व देखने को मिला। स्पष्ट कीजिए। 10.वृजलाल गोयनका कौन थे? झंडा दिवस को सफल बनाने में उनकी भूमिका पर प्रकाश डालिए। <u>लेखन कार्य</u>

		10.आपके विद्यालय में आयोजित 'वन महोत्सव' पर वृक्षारोपण से संबंधित कार्यक्रमों में मुख्य अतिथि के रूप में पर्यावरण मंत्री भारत सरकार को आमंत्रित करते हुए प्रधानाचार्य की ओर से पत्र लिखिए। 11. रेल यात्रा में सामान चोरी हो जाने की सूचना देते हुए पुलिस अधीक्षक को पत्र लिखिए। 12.प्लास्टिक की चीजों से हो रही हानि के बारे में किसी समाचार पत्र के संपादक को पत्र लिखकर अपने सुझाव दीजिए। परियोजना कार्य अपना पोर्टफोलियो बनाइए। इसमें आपका परिचय, आपका परिवार, आपकी उपलब्धियां,आपका प्रिय कवि अथवा लेखक तथा इसी पसंदीदा विषय पर आपका आलेख आदि।
3	**Mathematics**	**Q.1 Find the L.C.M and H.C.F. of 864 and 2520 by applying the fundamental theorem of arithmetic method i.e. using the prime factorisation method.** **Q.2 During a sale, colour pencils were being sold in packs of 24 each and crayons in packs of 32 each. If you want full packs of both and the same number of pencils and crayons, how many of each would you need to buy?** **Q.3 Explain why 7 × 11 × 13 + 13 and 7 × 6 × 5 × 4 × 3 × 2 × 1 + 5 are composite numbers.** **Q.4 Check whether 6_n can end with the digit 0 for any natural number n.** **Q.5 Find a quadratic polynomial each with the given numbers as the sum and product of its zeroes, respectively.** **(i) 1/4 , -1** **(ii) 1, 1** **Q.6 Aftab tells his daughter, "Seven years ago, I was seven times as old as you were then. Also, three years from now, I shall be three times as old as you will be." (Isn't this interesting?) Represent this situation algebraically and graphically.** **Q.7 The cost of 2 kg of apples and 1kg of grapes on a day was found to be Rs.160. After a month, the cost of 4 kg of apples and 2 kg of grapes is Rs.300. Represent the situation algebraically and geometrically.**

		Q.8 Half the perimeter of a rectangular garden, whose length is 4 m more than its width, is 36 m. Find the dimensions of the garden. **Q.9** A fraction becomes 9/11 if 2 is added to both the numerator and the denominator. If 3 is added to both the numerator and the denominator, it becomes 5/6. Find the fraction. **Q.10** The taxi charges in a city consist of a fixed charge together with the charge for the distance covered. For a distance of 10 km, the charge paid is Rs 105 and for a journey of 15 km, the charge paid is Rs 155. What are the fixed charges and the charge per km? How much does a person have to pay for travelling a distance of 25 km? **Q.12** The sum of the digits of a two-digit number is 9. Also, nine times this number is twice the number obtained by reversing the order of the digits. Find the number. **Q.13** A lending library has a fixed charge for the first three days and an additional charge for each day thereafter. Saritha paid Rs.27 for a book kept for seven days, while Susy paid Rs.21 for a book she kept for five days. Find the fixed charge and the charge for each extra day. **Q.14** Meena went to a bank to withdraw Rs.2,000. She asked the cashier to give her Rs.50, and Rs.100 notes only. Meena got 25 notes in all. Find how many notes of Rs.50 and Rs.100 she received.
4	**Science**	**BIOLOGY :** 1. Complete Ch- Life Processes: Notes and NCERT Q/A. 2 .Prepare the chapter for PT-1 Exam 3. Project: The project should contain 5-6 pages including a cover page stating Name, Class, Roll no. Name of the Topic TOPIC:Survey and Research on The Global Impact of Heart Diseases Based on your research from multiple resources, you have to Prepare an assignment on heart diseases. This is to raise awareness among the people about protecting their hearts .

Find out the five most common Heart diseases which are the causes of severe illness and death worldwide. Paste pictures and fill the necessary information in a table. Format is given below:

S. N	Name of disease	Scope of the disease	Prevention	Treatment	Control and Elimination
1					
2					
3					
4					
5					

Note: Source of Information for the Assignment: It can be a Newspaper clipping, an article from a magazine or an Internet. You have to write the reference of the source of information you will use for your assignment.

PHYSICS :
1. Prepare chapter Light: Reflection and Refraction for PT-1
2. Prepare notes and solve numericals based on mirror formula, refractive index, lens formula, ray diagrams etc.

Answer the followings:
 1. Draw the ray diagram in each case to show the position and nature of the image formed when the object is placed:
(i) at the centre of curvature of a concave mirror (ii) between the pole P and focus F of a concave mirror (iii) in front of a convex mirror (iv) at 2F of a convex lens
2. An object 2 cm in size is placed 30 cm in front of a concave mirror of focal length 15 cm. At what distance from the \ mirror should a screen be placed in order to obtain a sharp image? What will be the nature and the size of the image formed? Draw a ray diagram to show the formation of the image in this case.
3. Explain why a ray of light passing through the centre of \ curvature of a concave mirror, gets reflected along the same path.
4. What is the nature of the image formed by a concave mirror if the magnification produced by the mirror is +3?
5.. Between which two points of a concave mirror should an object be placed to a magnification of -3?

| | | | 6. List four properties of the image formed by a convex mirror.
7. List four properties of the image formed by a concave mirror, when object is placed between focus and pole of the mirror.
8. When a bright object is bring near the mirror at 10 cm then its image is formed at 40cm from mirror, find focal length of mirror.
9. Using mirror formula, compute the position of an object placed in front of a concave mirror of focal length f so that Its image formed is of the same size as the object.
10. An object is placed at a distance of 15cm is slowly moved towards the pole of a convex mirror. What will be the size and the nature of image?
11. If a man's face is 25cm in front of a concave shaving mirror producing erect image 1.5 times the size of face, find the focal length of the mirror.
12. A concave mirror of focal length 20cm forms an image having twice the size of an object. For the virtual position of image, find the position of image?
13. An object is moved in front of a plane mirror at distance 0.25m, find the distance between object and image?
14. An object 2cm high is placed at a distance of 16 cm from a concave mirror, which produces a 3cm high inverted image. What is the focal length of the mirror? Also, find the position of the image.
15. An erect image 3 times the size of the object is obtained with a concave mirror of radius of curvature 36cm. What is the position of the object?
16. A 2.5cm candle is placed 12 cm away from a convex mirror of focal length 30cm. Give the location of the image and the magnification.
17. A concave mirror produces a real image 10mm tall, of an object 2.5mm tall placed at 5 cm from the mirror. Calculate focal length of the mirror and the position of the image.
18. An object is placed at a large distance in front of a convex mirror of radius of curvature 40cm. How far is the image behind the mirror?
19. An object is placed 15 cm from a convex mirror of radius of curvature 90cm. Calculate position of the image and its magnification.
20. The image formed by a convex mirror of focal length 30 cm is a quarter of the object. What is the distance of the object from the mirror?
21. When an object is placed at a distance of 60cm from a convex mirror, the magnification produced is 1/2. Where should the object be placed to get a magnification of 1/3?
22. An object is placed 18cm in front of a mirror. If the image is formed at 4cm to the right of the mirror. Calculate its focal length. Is the mirror convex or concave? What is the |

		nature of the image? What is the radius of curvature of the mirror?
		23. The linear magnification of a convex mirror of focal length 15 cm is 1/3. What is the distance of the object from the focus of the mirror?
		24. On what factors focal length and power of lens depends?
		25. (i) If a convex lens is immersed in water then what does it affect its focal length?
		(ii) A lens X has focal length 18 cm and lens Y has power -2.5D, find the focal length of Y and power and total focal length of combination of both lenses.

CHEMISTRY:

PROJECT WORK-

Prepare a project on any one topic in at least 4 Pages:

1.Rancidity and its methods of prevention.

2. Corrosion and its methods of preventions

3. Different types of chemical reactions with examples

SUBJECT ASSIGNMENT-

Chapter- 1 Chemical reactions and equations

Answer the following question-

1. A silver spoon is kept immersed in an aqueous solution of copper sulphate. What change would be observed in the spoon as well as in solution ? Justify your answer.

2. A solution of substance x is used for whitewashing.

  i) Name the substance x and write its formula.

  ii) Write the reaction of substance X with water.

3. Why is respiration considered as exothermic reaction? Explain.

4. Oil and fat containing food items are flushed with nitrogen? Why?

		5. Why do we store silver chloride in dark coloured bottles?
		
		Think and answer- .
		
		1.Why do fireflies glow at night?
		
		2. Why do we apply paint on iron articles?
		
		CRITICAL THINKING WORKSHEET –(Answer the following question with appropriate reason)
		
		1.The following reaction is an example of a $4NH_3(g) + 5O_2(g) \rightarrow 4NO(g) + 6H_2O(g)$
		  (i) displacement reaction
		  (ii) combination reaction
		  (iii) redox reaction
		  (iv) neutralisation reaction
		
		 (a) (i) and (iv)
		
		 (b) (ii) and (iii)
		
		 (c) (i) and (iii)
		
		 (d) (iii) and (iv)
		
		   2.Which type of chemical reaction is shown by this diagram? Write down chemical reaction also.

		 Delivery tube, Stand, Test tube, Dilute sulphuric acid, Zinc granules, Hydrogen gas bubbles, Burning of hydrogen gas with a pop sound, Candle, Soap bubble filled with hydrogen, Soap solution
5	**Social Science**	Q1 <u>**SUBJECT ENRICHMENT ACTIVITY (SEA)**</u> : Prepare a Project on any of the following topics: (a) Consumer Awareness (b) Social Issues (c) Sustainable Development NOTE: 1) The Project should be handwritten by students themselves. The Project should not exceed more than ten pages. 2) Prepare the Project on a file available at your home. Q2 Describe the process of unification of Germany 2. Describe the explosive conditions that prevailed in the Balkans after 1871 in Europe. Q3. Explain the resources on the basis of origin and exhaustibility. Q4. What are the main types of soil found in India? Which type of soil is the most widespread and important soil of India? Describe in detail about this soil type. Q 5. Write short note on agenda 21 Q 6. Describe horizontal and vertical power sharing in modern democracies. Q7. Explain the power sharing arrangement in Belgium. Q8. Prepare a concept map of the chapter RISE OF NATIONALISM IN EUROPE'
6	**Computer**	**Unit-1 Communication Skills**

		Q.1-What are the principles of effective communication? Q.2- Discuss the 7 Cs of effective communication. Q.3- Discuss different barriers of effective communication and measures to overcome them. Q.4- Elaborate different parts of speech with examples. Q.5- Differentiate between sentences and phrases. Q.6- Explain different types of sentences. Q.7- Explain different parts of sentences. Q.8- Describe Active and passive voice with examples. **Unit-2 Self Management Skills** Q.9- Why is stress management so important? Q.10- What is good stress and bad stress? Q.11-What are the stress management techniques? Q.12- To achieve your dream targets, write down goals, challenges and opportunities. Q.13- What is self-motivation? Why is self-motivation important? Q.14- What is S.M.A.R.T. goal setting? Q.15- Why is time management so important? Discuss the four steps of effective time management.

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