



SUMMER HOLIDAY HOMEWORK (2022- 2023)

CLASS –X

SUBJECTS	HOMEWORK QUESTIONS
ENGLISH	<ol style="list-style-type: none">1. Draft an invitation card for the exhibition of Bamboo wooden craft items.2. Write an article on any ONE of the following topics. {Word Limit 200—250}<ul style="list-style-type: none">· Importance of Communication SkillImportance of National Scholarships for StudentsThe Impact of Advertisements on the Younger Generation .3. Prepare a speech on “Role of Students In National Development” {Word Limit 200-250)
HINDI	<p><u>पाठ्य पुस्तक और पूरक पाठ्य पुस्तक</u></p> <ol style="list-style-type: none">1. शिक्षा जैसे महत्वपूर्ण मामले 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।

	<p>5. भाई साहब के फेल होने और खुद के अक्ल आने पर लेखक के मन में क्या-क्या विचार आए?</p> <p>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?</p> <p>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?</p> <p>8. मनुष्यता एवं भक्ति की राह में आप पुस्तकीय ज्ञान को कितना उपयोगी या अनुपयोगी समझते हैं और क्यों? स्पष्ट कीजिए।</p> <p>9. हरि काका के प्रति उनके भाइयों के व्यवहार में समय-समय पर क्या परिवर्तन आए और क्यों?</p> <p>10. हरिहर काका कहानी इस कटु सत्य को उजागर करती है? स्पष्ट कीजिए।</p> <p>11. महंत ने हरिहर काका के साथ दो अलग-अलग प्रकार का व्यवहार किस प्रकार और क्यों किया?</p> <p><u>व्याकरण</u></p> <p>12. निम्नलिखित शाक्यों में से पदबंध छांटिए और पदबंध का भेद भी बताइए -</p> <p>i. बढ़चढ़ कर बातें करने वाले तुम आज क्यों नहीं बोलते ?</p> <p>ii. दशरथ के पुत्र राम ने रावण का वध किया।</p> <p>iii. सब उसे किताब का कीड़ा कहते हैं।</p> <p>iv. माँ बच्चे को दूध पिला रही है।</p> <p>v. महेन्द्र धीरे-धीरे जा रहा है।</p> <p>vi. गीत गाती हुई स्त्रियाँ फसल काट रही हैं।</p> <p>vii. आये हुए मेहमानों में से कुछ शाकाहारी हैं।</p> <p>viii. मैं पढ़ सकता हूँ।</p> <p><u>लेखन कार्य</u></p> <p>12. 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।</p> <p>13. रेल यात्रा में सामान चोरी हो जाने की सूचना देते हुए पुलिस अधीक्षक को पत्र लिखिए।</p> <p>14. प्लास्टिक की चीजों से हो रही हानि के बारे में किसी समाचार पत्र के संपादक को पत्र लिखकर अपने सुझाव दीजिए।</p>
<p>MATHEMATICS</p>	<p>Q.1 Write the HCF of the smallest composite number and the smallest prime number.</p> <p>Q.2 For what value of n, $2^n \times 5^n$ ends with 5?</p> <p>Q.3 Find the largest number which divides 70 and 125 leaving remainders 5 and 8 respectively.</p> <p>Q.4 Check whether 15^n can end with digit zero for any natural number n.</p>

	<p>Q.5 State whether $1.23333\dots + \frac{3}{4}$ is rational number or not.</p> <p>Q.6 For what value of k, -2 is a zero of the polynomial $3x^2 + 4x + 2k$?</p> <p>Q.7 If one zero of $x^2 - 3x + k$ is reciprocal to the other then find the value of k.</p> <p>Q.8 Form a quadratic polynomial whose one zero is 8 and the product of zeroes is -56.</p> <p>Q.9 Form a quadratic polynomial whose zeroes are in the ratio 2:3 and their sum is 15.</p> <p>Q.10 If α and β are the zeroes of the quadratic polynomial $f(x) = ax^2 + bx + c$ then evaluate</p>
<p>SCIENCE</p>	<p>BIOLOGY:</p> <ol style="list-style-type: none"> 1. Prepare a puzzle games on the following chapter- Life Processes 2. Draw the mind map of the following topic • Nutrition in Humans <ul style="list-style-type: none"> • Respiration in Humans 3. Draw the following diagram well labelled and neat in classwork copy <ul style="list-style-type: none"> • Heart • Excretory System <p>Q1. Why do herbivores have longer, small intestine than carnivores?</p> <p>Q2. Write the balanced chemical equation for the process of photosynthesis. How photosynthesis occurs in desert plants?</p> <p>Q3. In single celled organisms diffusion is sufficient to meet all their requirements of food, exchange of gases or removal of wastes but it is not in case of multicellular organisms. Explain the reason for this difference. Q4. Draw a neat labeled diagram of human alimentary canal.</p> <p>Q5. Explain the process of nutrition in Amoeba.</p>

Q6. How do guard cells regulate the opening and closing of the stomata? Q7. Explain exchange of gasses in humans.
Q8. State the role of the following in human digestive system: (a) Digestive enzymes (b) Hydrochloric acid (HCl) (c) Villi

Q9. Draw a diagram of human respiratory system and label the following: (a) Part where air is filtered by fine hairs and mucus (b) Part which terminates in balloon like structures (c) Part which separates chest cavity from abdominal cavity (d) Part where exchange of gases takes place.

Q10. Draw a neat labeled diagram of opened and closed stomata.

PHYSICS :

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 brought near the mirror at 10cm 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 same size of 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 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 focal length of 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 16cm from a concave mirror, which produces 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 5cm 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 15cm 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 30cm 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 $\frac{1}{2}$. Where should the object be placed to get a magnification of $\frac{1}{3}$?

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 15cm is $\frac{1}{3}$. What is the distance of the object from the focus of the mirror?

24. On what factors focal length and power of lens depend?

25. (i) If a convex lens is immersed in water then what does it affect on its focal length?

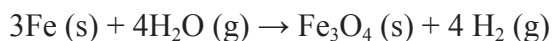
(ii) A lens X has focal length 18 cm and lens Y has power $-2.5D$, find the focal length of Y and power and total focal length of combination of both lenses.

CHEMISTRY

MULTIPLE CHOICE QUESTIONS :

1. Which of the following is a displacement reaction?

2. Which of the following statements about the given reaction are correct?



(i) Iron metal is getting oxidised

(ii) Water is getting reduced

(iii) Water is acting as reducing agent

(iv) Water is acting as oxidising agent

(a) (i), (ii) and (iii)

(b) (iii) and (iv)

(c) (i), (ii) and (iv)

(d) (ii) and (iv)

3. A substance 'X' is used in white-washing and is obtained by heating limestone in the absence of air. Identify 'X'.

(a) CaOCl_2

(b) Ca(OH)_2

(c) CaO

(d) CaCO_3

4. When Ag is exposed to air it gets a black coating of

(a) AgNO_3

(b) Ag_2S

(c) Ag_2O

(d) Ag_2CO_3

5. Which of the following gases can be used for storage

(a) Carbon dioxide or Oxygen

(b) Nitrogen or Oxygen

(c) Carbon dioxide or Helium

(d) Helium or Nitrogen

6. What happens when a solution of an acid is mixed with a solution of a base in a test tube?

(i) Temperature of the solution decreases

(ii) Temperature of the solution increases

(iii) Temperature of the solution remains the same

(iv) Salt formation takes place

(a) (i) and (iv)

(b) (i) and (iii)

(c) (ii) only

(d) (ii) and (iv)

7. In terms of acidic strength, which one of the following is in the correct increasing order?

(a) Water < Acetic acid < Hydrochloric acid

(b) Water < Hydrochloric acid < Acetic acid

(c) Acetic acid < Water < Hydrochloric acid

(d) Hydrochloric acid < Water < Acetic acid

8. Tomato is a natural source of which acid?

(a) Acetic acid

(b) Citric acid

(c) Tartaric acid

(d) Oxalic acid

9. Brine is an

(a) aqueous solution of sodium hydroxide

(b) aqueous solution of sodium carbonate

(c) aqueous solution of sodium chloride

(d) aqueous solution of sodium bicarbonate

10. $\text{Na}_2\text{CO}_3 \cdot 10\text{H}_2\text{O}$ is

(a) washing soda

(b) baking soda

(c) bleaching powder

(d) tartaric acid

ANSWER THE FOLLOWING QUESTIONS:

1. How does the food become rancid?

2. 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 the balanced chemical equation.

	<p>3.Name two salts that are used in black and white photography.</p> <p>4.When carbon dioxide is passed through lime water, it turns milky, why?</p> <p>5.A teacher took a few crystals of sugar in a dry test tube and heated the test tube over a flame. The colour of sugar turned black. Explain why?</p> <p>6.During summer season, a milkman usually adds a small amount of baking soda to fresh milk. Give reason.</p> <p>7. What is the difference between slaked lime and lime water?</p> <p>8. Acidic and basic solutions in water conduct electricity. Why?</p> <p>9.While diluting the acid ,why is it recommended to add water to acid but not water to acid?</p> <p>10.Explain giving reasons:</p> <p>(i) Tartaric acid is a component of baking powder used in making cakes.</p>
<p>SOCIAL SCIENCE</p>	<p>1. Prepare a project file on any one of the following topics-</p> <ul style="list-style-type: none"> i. Consumer awareness ii. Social Issues iii. Sustainable Development <p>Note: <u>Guidelines for project work.</u></p> <ul style="list-style-type: none"> a. Use A-4 size file paper b. Use Blue/Black ink to write your project. c. The project work should not be less than 15 pages.

	<p>d. Include a case study as well.</p> <p>e. The file must be well presented and only relevant information must be included.</p> <p>f. Project submission date : 30th June 2022.</p> <p>2. Following are some questions of Ch. 1 History. The answers has to be written in the notebook.</p> <ul style="list-style-type: none"> ↳ What are the absolutist institutions? ↳ What were the consequences of the French revolution in 1789? ↳ How was the common national identity created among the French people after the revolution of 1789? ↳ Give some fundamental characteristics of Napoleonic code. ↳ What were the exploitative practices that occurred in the French areas conquered by Napoleon army? ↳ Describe the condition of the Eastern and Central Europe in the mid-eighteenth century. ↳ Explain some characteristics of aristocracy. ↳ Which new social groups came into being after the emergence of industrialization in Europe? Also, mention certain characteristics of this social group. ↳ What was the political status of women in the early-nineteenth-century Europe? ↳ What were the common beliefs of conservatives? ↳ State whether the conservative regimes that came into existence in 1815 were autocratic or not. ↳ What were the objectives of secret societies of European states which were formed after Treaty of Vienna Congress in 1815? ↳ Who was Giuseppe Mazzini? ↳ What is Romanticism? Also, state the significance of Romanticism in generating the nationalist sentiment. ↳ How did language playan important role in developing the nationalist sentiments?
<p>COMPUTER</p>	<ol style="list-style-type: none"> 1. What do you understand by database? Explain its types. 2. List down the different data types available in Open Office Base.

	<p>3. Explain the following with respect to databases:</p> <ul style="list-style-type: none">a. Formb. Reportc. Table <p>4. What do you mean by field properties in a database?</p>
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CLASS TEACHER

MANISH SAXENA