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## Class VI

### Hindi

कक्षा छठवीं विषय -- हिन्दी

- (1) पाठ्यपुस्तक वसंत भाग -1 के पाठ क्रमांक 1 से लेकर पाठ क्रमांक 10 तक सभी पाठों का उच्चारण करते हुए वाचन (पढ़ना) करना । बाल राम कथा के पाठ क्रमांक 1 अवधपुरी में राम से लेकर सोने का हिरण तक सभी पाठों को उच्चारण पूर्वक एवं मौन वाचन (पढ़ना) करना ।
- (2) कविता वह चिड़िया जो, चाँद से थोड़ी सी गप्पें एवं साथी हाथ बढ़ाना का सस्वर वाचन करना एवं कंठस्थ करके कक्षा में सुनाना । कोई एक कविता चार्ट पेपर पर सुंदर लिखावट में लिखना एवं कविता से संबंधित चित्र भी बनाना ।
- (3) प्रतिदिन कम से कम पाँच पंक्तियों का सुलेख एवं कम से कम पाँच पंक्तियों का श्रुतलेखन (सुनकर लिखना) का अभ्यास करना ।
- (4) मेरा विद्यालय, पक्षी की अभिलाषा, मित्रता का महत्व एवं एकता में बल है विषयों पर अनुच्छेद लिखिए ।

### English

#### CLASS – 6 [A, B, C]

1. Complete the “Learner’s Diary” that will be circulated by the class teacher.
2. Write at least 20 singular and plural of nouns.
3. Write all parts of speech with its definition and example.
4. Write a **Paragraph** on  
A. “How I spent my summer vacation”.  
B. Importance of yoga and games in your life.

**Note:** - Do your **writing work [Q. No. 2 to 4]** of this homework in **English Notebook** only by writing the heading “**Holiday Homework Summer Vacation 23-24.**”

### Mathematics

#### VI MATHS

**A.LAB ACTIVITIES:** Do given activities in activity copy using color papers

1. Make chart of INDIAN AND INTERNATIONAL NUMBER SYSTEM.

Collect population of any 10 countries and write in words in both INDIAN as well as INTERNATIONAL NUMBER SYSTEM.

**B. PROJECT :** Make a Chart/PPT on “INDIAN MATHEMATICIAN ” , paste their picture and write their contribution in field of math. (any 5)

**C. ASSIGNMENT:**

\* Learn Table from 2 to 20.

\*Solve all examples of CH 1 and CH 2 in fair notebook and “TRY THESE” in book only.

### Science

**Science Holiday homework Class -6th (A+B+C)**

- Q1. Write the name and paste the picture of 10 food items and mention which nutrients are present in it.
- Q2. What is malnutrition? Describe the diseases caused by malnutrition.
- Q3. Do any one project which is mention on page no.(17 old) (10new).
- Q4. Observe the things that are used by you. Classify or sort the things on the basis of their uses.
- Q5. Paste the picture of different things which are transparent, translucent and opaque.
- Q6. Make a chart on cardsheet on your favourite science topic.

### Social Science

VI Subject- So. Science

1. Write questions and answers of the history chapter- 1(What, Where ,How and When )
2. Write the difference between Stars and Planets.
3. Write short notes on:  
(a) Constellation (b) Galaxy (c) Asteroids (d) Meteoroids
4. How did Samir Ek and Samir Do were different from each other ? Explain it.

5. Write questions and answers of the civics chapter- 1 (Understanding Diversity)

6. What do you mean by domestication

7. Draw an outlet map of India and locate the following:

(i) Bhimbetaka Caves (ii) Kurnool Caves (iii) Ajanta Caves

**Sanskrit**

वर्ष -2023-24

कक्षा- षष्ठी (6)

विषय- संस्कृतम्

1. संस्कृतभाषायाः 13 स्वर, 33 व्यञ्जन वर्णान् च क्रमानुसार स्व-अभ्यासपुस्तिकायां लिखत।

(संस्कृत भाषा के 13 स्वर और 33 व्यंजन वर्णों को क्रम अनुसार अपनी अभ्यास पुस्तिका में लिखो)

2. संस्कृत छात्रप्रतिज्ञायाः प्रार्थनायाः च वाचनस्य पुनः पुनः अभ्यासं कुरुत।

(संस्कृत छात्रप्रतिज्ञा और प्रार्थना को पुनः पुनः बोलने का अभ्यास करें और याद करें)

3. निम्नलिखित क्रियापदानां द्विवचन बहुवचनरूपं च लिखत -

(निम्नलिखित क्रियापदों के द्विवचन और बहुवचनरूप लिखिए)

एकवचनम्	द्विवचनम्	बहुवचनम्
अस्ति	.....	.....
करोति	.....	.....
खेलति	.....	.....
सीव्यति	.....	.....
धावति	.....	.....
हसति	.....	.....

4. संस्कृते त्रीणि लिङ्गानि, त्रयः पुरूषाः, त्रीणि वचनानि च कानि सन्ति, लिखत।

(संस्कृत के 3 लिंग 3 पुरुष और 3 वचन कौन-कौन से हैं लिखिए)

5. कर्तृपदैः सह क्रियापदानि योजयित्वा 9 सरलसंस्कृत वाक्यानां रचनां कुरुत।

(कर्तृपदों के साथ क्रियापदों को मिलाकर के 9 सरलसंस्कृत वाक्यों की रचना करो)

**कर्तृपदानि**

1. सः - ..... 2. तौ - ..... 3. ते - .....  
4. त्वं - ..... 5. युवां - ..... 6. यूयं - .....  
7. अहं - ..... 8. आवां - ..... 9. वयं - .....

**क्रियापदानि**

लिखामि, पठति, धावथः गच्छामः चलतः,  
पश्यावः, क्रीडन्ति, आगच्छसि, कुरुथ

## Class VII

### Hindi

सातवीं विषय - हिन्दी

- (1) पाठ्यपुस्तक वसंत भाग - 2 से पाठकमांक 1 हम पंछी उन्मुक्त गगन के से लेकर पाठ कमांक 10 अपूर्व अनुभव तक सभी पाठों का उच्चारण करते हुए वाचन (पढ़ना) करना एवं बाल महाभारत के पाठ 1 देवव्रत से लेकर पाठ 14 शकुनि का प्रवेश तक सभी पाठों का ध्यानपूर्वक मौन वाचन (पढ़ना) करना
- (2) कविता हम पंछी उन्मुक्त गगन के कठपुतली, शाम एक किसान एवं रहीम के दोहे कविता का सस्वर वाचन करना एवं कंठस्थ करके कक्षा में सुनाना । कोई एक कविता चार्ट पेपर पर सुंदर लिखावट में लिखना एवं कविता से संबंधित चित्र भी बनाना ।
- (3) प्रतिदिन कम से कम पाँच पंक्तियों का सुलेख एवं कम से कम पाँच पंक्तियों का श्रुतलेखन (सुनकर लिखना ) का अभ्यास करना ।
- (4) पत्र लेखन- मित्र को जन्मदिन की बधाई देने के लिए पत्र, पुस्तक विक्रेता को पुस्तकें मँगवाने हेतु पत्र, विद्यालय में पेयजल की समस्या से अवगत कराते हुए प्राचार्य को प्रार्थना पत्र लिखिए ।
- (5) अनुच्छेद लेखन - मेरा प्रिय त्योहार, पुस्तकालय का महत्व, प्रदूषण की समस्या एवं स्वतंत्रता का महत्व ।

### English

#### 7 [A, B, C]

1. Complete the "Learner's Diary" that will be circulated by the class teacher.
2. Write at least 30 verbs and its three forms.
3. Write all parts of speech with its definition and example.
4. Write a Paragraph on-

(1) Visit to a Historical Place.

(2) Importance of yoga and games in your life.

**Note:** - Do your writing work [Q. No. 2 to 4] of this homework in English Notebook only by writing the heading "Holiday Homework Summer Vacation 23-24."

### Mathematics

#### VII MATHS

**A.LAB ACTIVITIES:** Do given activities in activity copy using graph/color papers

1. To verify DISTRIBUTIVE PROPERTY of whole numbers.
2. To find fractions equivalent to a given fraction.

**B. PROJECT :** Make a PPT or Chart to represent

"PROPERTIES OF INTEGERS" (closure, commutative, Associative, Distributive Property) Explain each with suitable examples.

OR

Make a model of NUMBER LINE.

**C. ASSIGNMENT:** \* Learn Table from 2 to 20.

\*Solve all examples of CH 1 and CH 2 in fair notebook and "TRY THESE" in book only.

### Science

**CLASS-VII(A+B+C)**

**Q1.** Draw a neat and well labelled diagram of heart and explain the working mechanism of circulatory system.

**Q2.** What is land breeze and sea breeze? Explain with diagram

**Q3.** What is cyclone ?With the help of newspaper cuttings collect information how cyclones effect different part of the world.

**Q4.** What is physical and chemical changes? Give any 5 examples of each.

**Q5.** Write a short note on global warming. Think and write about its effect on nature.

**Q6.Project work: Prepare any one topic of your choice from your NCERT textbook on which you have to give presentation after vacations.(presentation should be of 5-10 minutes +written work on your topic)**

**Q7.Do complete your learner diary**

## **Social Science**

**Holiday Home work 2023-24**

VII Subject – Social Science

1. On a map of world, mark 5 countries of your choice in the continents of North America, South America, Africa, Europe and Asia.
2. Draw a Pond Ecosystem and write about an ecosystem.
3. Imagine an ideal environment where you would love to live. Draw the picture of your ideal environment.
4. In a political map of India show the following:
  - a. River Narmada
  - b. River Tapi
  - c. Rashtrakutas
  - d. Cholas
  - e.Chahamanas (See page no. 9, 16)
5. Collect the information about 'Delhi Sultans 'and Mughal Rulers' write their names and paste their picture on a chart paper ?
6. ❖ Project Report :  
(Refer : Geography : Ch 8 – Human Interactions The Tropical and The Sub Tropical Regions,  
To collect information on : location, Climate, Flora, Fauna, Life of People for each of the following category : Amazon basin, Ganga Brahmaputra basin.
7. Write a short note on following monuments:Qutub minar ,Taj Mahal ,Golden temple, Humayun tomb .
8. Complete your notebook with the following chapters:  
Ch. 1st history  
Ch.1st Geography  
Ch.1st Civics
9. Do complete your learner diary.
10. Do complete MDP given by class teacher

## **Sanskrit**

वर्ष -2023-24

कक्षा- सप्तमी (7)

विषय- संस्कृतम्

1. निम्नलिखितपदानां पदपरिचयं लिखत-

पदम् -	विभक्ति	वचनम्
1. यथा- पृथिव्यां	सप्तमी	एकवचनम्
i. मूढैः -	.....	.....
ii. रविः -	.....	.....
iii. तपसि -	.....	.....
iv. सद्भिः -	.....	.....
v. विद्यायाः -	.....	.....
vi. क्षमया -	.....	.....

2.किम् शब्दस्य रूपाणि त्रिषु लिङ्गेषु लिखत ।

(किम् शब्द के रूप तीनों लिंगों में लिखिए)

3.प्रथमपाठस्य श्लोकान् स्मृत्वा स्वअभ्यास पुस्तिकायां लिखत ।

(प्रथम पाठ के श्लोकों को याद करके अपनी अभ्यास पुस्तिका में लिखिए)

4 .संस्कृत भाषायाः महत्त्वं पञ्चवाक्येषु लिखत ।

(संस्कृत भाषा के महत्त्व के विषय में पांच वाक्य लिखिए)

## Class VIII

### Hindi

#### कक्षा- आठवीं विषय - हिन्दी

- (1) पाठ्यपुस्तक वसंत भाग-3 से पाठकमांक 1 ध्वनि से लेकर पाठ कमांक 10 कामचोर तक सभी पाठों का उच्चारण करते हुए वाचन (पढ़ना) करना एवं भारत की खोज पुस्तक के पाठ अहमदनगर का किला, तलाश एवं सिन्धु घाटी की सभ्यता तक सभी पाठों का ध्यानपूर्वक मौन वाचन ( पढ़ना) करना
- (2) कविता ध्वनि, हम दीवानों की हस्ती, भगवान के डाकिए एवं अभी यह सबसे कठिन समय नहीं कविता का सस्वर वाचन करना एवं कंठस्थ करके कक्षा में सुनाना । कोई एक कविता चार्ट पेपर पर सुंदर लिखावट में लिखना एवं कविता से संबंधित चित्र भी बनाना ।
- (3) प्रतिदिन कम से कम पाँच पंक्तियों का सुलेख एवं कम से कम पाँच पंक्तियों का श्रुतलेखन (सुनकर लिखना ) का अभ्यास करना ।
- (4) अनुच्छेद लेखन. विज्ञान के वरदान त्योहारों का महत्व, डाकिया समाचार पत्र मेरी प्रिय पुस्तक ।
- (5) पत्र लेखन- खोई हुई वस्तु की सूचना देने के लिए विद्यालय के सूचना पटल हेतु सूचना-पत्र, विद्यालय में खेल सामग्री उपलब्ध कराने हेतु प्राचार्य को प्रार्थना पत्र, कक्षा का वर्ग परिवर्तन कराने हेतु प्राचार्य को प्रार्थना पत्र लिखिए ।

### English

#### 8 [A, B, C]

1. Complete the "Learner's Diary" that will be circulated by the class teacher.
2. Write a letter to your Principal to take permission to visit Educational tour to Sanchi with your class.
3. Write a notice for your School Notice Board to inform the students about Inter House Indigenous Sports.
4. Write a **Descriptive Paragraph** on any great person of India whom you like the most.

**Note:** - Do your **writing work [Q. No. 2 to 4]** of this homework in **English Notebook** only by writing the heading "**Holiday Homework Summer Vacation 23-24.**"

### Mathematics

#### VIII MATHS

**A.LAB ACTIVITIES:** Do given activities in activity copy using graph/colour papers and geometry box

1. To verify DISTRIBUTIVE PROPERTY of whole numbers.
2. To find fractions equivalent to a given fraction.

**B. PROJECT :** Make a PPT or Chart to represent "PROPERTIES OF RATIONAL NUMBERS" (closure, commutative, Associative, Distributive Property ) Explain each with suitable examples and arrange in a table as given in your textbook.

OR

Make a GEOBOARD to explain different geometrical ideas.

**C. ASSIGNMENT:**

\* Learn Table from 2 to 20 .

\*Write and Learn squares of 1-20 and cubes of 1-10

\*Solve all examples of CH 1 and CH 2 in fair notebook and "TRY THESE" in book only.

### Science

#### VIII (A+B+C)

Q1.Prepare an account of atleast 5 scientist who got Nobel prize in medicine for their notable work.

Q2 What are cereal crops? Quote 5 examples mentioning their importance.

Q3.Prepare a table mentioning disease causing microorganisms,their mode of transmission, symptoms and preventive measures to be taken.

Q4.How many national parks are there in Madhya Pradesh .Write their name,place of location and also mention the name of the animal for which the national park is famous.

Q5.Write a short note on testtube babies.Name the scientist who proposed this method.

Q6.Project work: Prepare any one topic of your choice from your NCERT textbook on which you have to give presentation after vacations.(presentation should be of 5-10 minutes +written work on your topic)

Q7.Do complete your learner diary.

# Social Science

## VIII Subject – Social science

### 1. MAP WORK-

(A) On an outline map of India mark the following dam and also draw the rivers across which they have built- Damodar Valley ,Bhakra Nangal,Hirakund ,Nagarjunasagar ,Sardar Sarovar.

(B) Mark all important rivers in India River map.

(C) World map: mark all continents and oceans in the world map.

2. Write a short note on the National Archives of India.

3. Write about our Fundamental Rights and moral duties on a chart paper?

4. Draw a flow chart on the Indian Parliamentary System.

5. Make a useful item out of old and discarded material?

6. What is the role of women in other mass movements in independent India?

7. Make a PPT -Roll No.1 to 15 (Any chapter of Civics) Roll No. 16 to 30 (Any chapter of of Geography) Roll no. 31 to 45 ( Any chapter of History).

8. Complete your notebook with the following chapters:

a) Ch.1 history b) Ch.1 Geography c) Ch. 1 civics

9. Do complete your learner diary. 9. Do complete MDP given by class teacher

## Sanskrit

वर्ष -2023-24

कक्षा- अष्टमी (8)

विषय- संस्कृतम्

1.प्रथमपाठस्य श्लोकान् स्मृत्वा स्वअभ्यास पुस्तिकायां लिखत।

(प्रथम पाठ के श्लोकों को याद करके अपनी अभ्यास पुस्तिका में लिखिए)

1. निम्नलिखितपदानां पदपरिचयं लिखत-

(निम्नलिखितपदों का पदपरिचयं लिखिए )

पदम् -	विभक्ति	वचनम्
यथा- गुणज्ञेषु	सप्तमी	बहुवचनम्
नद्यः -	.....	.....
पशूनाम् -	.....	.....
व्यसनिनः -	.....	.....
दुर्जनानाम् -	.....	.....
वायसाः -	.....	.....
महीरुहाः-	.....	.....
वह्निना-	.....	.....

3. विद्यार्थी जीवन -विषये पञ्च वाक्यानि लिखत ।

(विद्यार्थी जीवन के विषय में पांच वाक्य लिखिए)

4.संस्कृत भाषायाः पञ्च नीतिश्लोकान् लिखत।

(संस्कृत भाषा के कोई पांच नीतिश्लोक लिखिए)

5. अस्मद् शब्दस्य रूपाणि, खाद् धातोः रूपाणि च पञ्चषु लकारेषु लिखत ।

(अस्मद् शब्द के रूप और खाद् धातु के रूप पांचों लकारों में लिखिए)

## Class IX

### Hindi

#### कक्षा नवमी विषय हिन्दी

- (1) संस्कृत उपसर्ग अति, अव, अनु, अप, अभि, अव, आ, उत् उप, दुस्, दुर्, निस्, निर्, परा, परि, प्र प्रति, वि सम् और सु की सहायता से पाँच पाँच शब्द निर्माण कीजिए ।
- (2) कृत प्रत्यय एवं तद्धित प्रत्यय क्या हैं ? दोनों के दस दस उदाहरण लिखकर समझाइए ।
- (3) समास, समस्तपद समास विग्रह का अर्थ स्पष्ट करते हुए समास के भेद एवं पाँच पाँच उदाहरण लिखिए
- (4) दैनिक समाचार पत्रों में प्रकाशित होने वाली वर्गपहेली पढ़िए, भरिए एवं कम से कम पाँच वर्ग पहेली पूर्ण रूप से भरकर लाइए ।
- (5) अनुच्छेद लिखिए - सच्चा मित्र, अनुशासन, भारत के राष्ट्रीय पर्व, राष्ट्र हमारा सबसे न्यारा तथा लोकतंत्र एवं चुनाव ।

### English

#### 9 [A, B, C]

1. Write a short story in 200-250 words, with the help of the cues given below. Give a suitable title to the story. Satish was standing on the balcony watching the last rays of the Sun. Loud and angry voices in the street below distracted his attention. He ran down the stairs to see what had happened ... ..
  2. Write a short descriptive paragraph on the famous Indian scientist Sir CV Raman in 100-150 words on the basis of the following inputs. Born on 7 November 1888 in Madras—Physician by profession—worked in the field of light scattering—the discovery is known as ‘Raman Effect’—won Nobel Prize in 1930 for his discovery—elected ‘Fellow of the Royal Society’ in 1924—in 1954 India honoured him with its highest civilian award ‘Bharat Ratna’—breathed his last on 21 November 1970..
  3. Write at least 20 idiom and phrases and use them in your sentence.
  4. Write an article on “Save Nature Save Mankind” and “Health is Wealth”.
- Note:** - Do your **writing work** of this homework in **English Notebook** only.

### Mathematics

#### IX MATHS

**A.LAB ACTIVITIES:** Do given activities in activity copy using graph/colour papers and geometry box

1. Constructing the “square root spiral”.
2. To verify the algebraic identity :  $(a+b+c)^2 = a^2 + b^2 + c^2 + 2ab + 2bc + 2ca$   
Take size of sides  $a=3\text{cm}$  ,  $b=2\text{cm}$  ,  $c=1\text{cm}$

**B. PROJECT :** Make a PPT or Chart to represent  
“10 BASIC ALGEBRAIC IDENTITIES ”with their verification.

OR

Laws of Exponents for Real Number with a suitable example of each.

#### **C. ASSIGNMENT:**

- \* Learn Table from 2 to 20 by heart.
- \* Write and Learn square & square roots 1-30 and cube & cube roots 1-20
- \*Solve all examples of CH 1 and CH 2 in fair notebook.

### Science

#### IX A,B,C Physics Holiday Home Work

1. Solve all examples of Chapter 8 (upto speed and velocity)
2. Complete lab activities/practical
3. Read and write summary of chapter

### Social Science

#### IX

1. GEOGRAPHY :CHAPTER 1 – INDIA - SIZE AND LOCATION



Note: Answers of the following questions to be attempted in the respective notebooks.

(i) Give the Latitudinal and longitudinal extent of ( a) India b) Madhya Pradesh.

(ii) In a political and Physical map of India mark and label the following:

\*India-States with Capitals,

Tropic of Cancer, Standard Meridian

\* Southernmost, northern most, eastern most and western most point of India (Location and Labelling) \*Mountain Ranges- The Karakoram, The Zaskar, Shivalik, Aravali, Vindhyas, Satpura, Western Ghats, Eastern Ghats. Peaks- K2, Kanchenjunga, Anai Mudi,

\***Passes**- Nathula, Shipkila, Bomdila.

\***Plateaus**- Deccan Plateau, Malwa Plateau, Chhota Nagpur plateau.

\* **Coastal Plains**: Konkan, Malabar Coast, Coromandal Coast and Northern Circar.

\* In a political map of France show Following place 1.Bordeaux 2.Nantes 3.Paris 4. Marseilles

2. Find out more about anyone of the revolutionary figures you have read about in the chapter "French Revolution" Write a short biography of this person.

3.**Make a project file** on 'Democracy v/s Dictatorship' . Do case study of any 6 countries?

4. learn additional questions from each chapter which you have done. (Syllabus of month of April)

5.**Project work** : Ch 4 (Climate)

Collect photographs typical rural houses and clothing of people from different regions of India. Examine whether they reflect any relationship with the climatic condition and relief of the area.

**OR**

Find out which songs dance festivals and special food preparations are associated with certain seasons in your region.Do they have some commonality with other regions of India.

6 .**Make a flow chart** on Fundamental Rights and Explain the rights.(Take help chapter 5th Democratic Rights).

7. Explain any five anti-poverty programs undertaken by the government. (Take help chapter 3 Economic).

## Class X

### Hindi

कक्षा दसवीं विषय - हिन्दी

- (1) रचना के आधार पर वाक्य भेद लिखिए एवं वाक्यों का परस्पर रूपांतर करते हुए पाँच-पाँच उदाहरण लिखिए ।
- (2) पत्र लेखन- विद्यालय में आयोजित वार्षिक उत्सव का संक्षिप्त विवरण समाचार पत्र में प्रकाशित कराने हेतु संपादक को पत्र लिखिए। विद्यालय पर्याप्त खेल सामग्री उपलब्ध करवाने हेतु विद्यालय के प्राचार्य को पत्र लिखिए । गली मुहल्ले की सड़कों एवं नालियों की सफाई व्यवस्था की ओर ध्यान दिलाते हुए नगरपालिका अध्यक्ष को पत्र लिखिए ।
- (3) अलंकार एवं उनके भेद स्पष्ट करते हुए उपमा, उत्प्रेक्षा, रूपक, अतिशयोक्ति एवं मानवीकरण अलंकारों के पाँच पाँच उदाहरण लिखिए ।
- (4) अनुच्छेद लिखिए -सच्चा मित्र, अनुशासन, भारत के राष्ट्रीय पर्व, राष्ट्र हमारा सबसे न्यारा तथा लोकतंत्र एवं चुनाव ।

### English

10 [A, B, C]

1. Write a letter to the Editor of The Times Newspaper, highlighting increasing technological addiction among the youth.
2. You are Sanjeet of 122, Arjun Nagar, New Delhi. A number of scooters and cars are parked in your locality without any order, causing blockage of the streets. Write a letter to the local Secretary of the Resident's Association complaining against this problem.
3. You are Mansi / Manas of 308, Vikas Nagar Nainital, a student of class 10 and after the board exams, you want to learn paragliding. Write a letter to the Director of High Fly flying club seeking details of the course, fee, duration and other requirements.
4. Anya attended a workshop on 'Public Speaking' and prepared the following notes:
  1. Practice- " practice makes perfect"
  2. Be prepared
  3. Keep it simple- include most important details
  4. Rehearse but do not memorize
  5. Think positive
6. Write a paragraph for Anya which she has to write for her school magazine in about 100 – 120 words

**Note:** - Do your **writing work** of this homework in **English Notebook** only.

### Mathematics

#### X MATHS

**A.LAB ACTIVITIES:** Do given activities in activity copy using graph/color papers and geometry box

1. To draw the graph Quadratic polynomial and observe
  - (i) The shape of the curve when the coefficient of  $x^2$  is positive
  - (ii) The shape of the curve when the coefficient of  $x^2$  is negative
  - (iii) It's number of zeros.
2. To verify the condition of consistency/ inconsistency for a pair of linear equation in two variables by graphical method.

**B. PROJECT :** Geometry in real Life

\* In this project we try to find situations in daily life where geometrical notions can be effectively used.

**C. ASSIGNMENT:** \* Solve all Examples) from ch-1,2 and 3

\* Search last 10 years board paper and prepare and solve your own question bank from ch-1,2 &3

### Science

#### X (Biology)

Answer the following :-

1. What is the role of acid in our
2. Stomach?
3. Where does digestion of fat take place in our body?

4. Why does herbivore have longer, small intestine than carnivore?
5. What are the final products of carbohydrates, proteins and fats after their digestion?
6. What are villi? Why are they important?
7. Write three events which occur during the process of photosynthesis.
8. Explain the role of bile juice in digesting food.
9. Give reasons of the following-
  - (a) Why is diffusion not sufficient to meet the oxygen requirements of all the cells in Multicellular organisms?
  - (b) How do desert plants perform photosynthesis if their stomata remain closed during the day?
10. Describe the process of nutrition in Amoeba with the help of diagram.
11. Draw a well-labelled diagram of human alimentary canal, and label its various parts.
12. Prepare a chart as a tool of campaign for "International year of millets 2023".

SUMMER VACATION HOME WORK-2023  
SUBJECT – CHEMISTRY

Q1. Write the names and formulas of compounds given in your text book from chapter 1 to 3. Identify them into acids, bases and salts and learn them.

Q2. Write all balanced chemical equations given in your text book from chapter 1 to 3 and learn them.

Q3. Write types of chemical reactions with example.

Q4. Make a working model for electrolysis of water.

Q5. Learn following table

CATION	NAME	ANION	NAME
H <sup>+</sup>	HYDROGEN	F <sup>-</sup>	FLUORIDE
Li <sup>+</sup>	LITHIUM	Cl <sup>-</sup>	CHLORIDE
Na <sup>+</sup>	SODIUM	Br <sup>-</sup>	BROMIDE
K <sup>+</sup>	POTASSIUM	I <sup>-</sup>	IODIDE
Ag <sup>+</sup>	SILVER	H <sup>-</sup>	HYDRIDE
Cu <sup>+</sup>	CUPROUS OR COPPER(I)	HCO <sub>3</sub> <sup>-</sup>	BICARBONATE OR HYDROGEN CARBONATE
NH <sub>4</sub> <sup>+</sup>	AMMONIUM	HSO <sub>4</sub> <sup>-</sup>	BISULPHATE OR HYDROGEN SULPHATE
Cu <sup>+2</sup>	CUPRIC OR COPPER(II)	NO <sub>2</sub> <sup>-</sup>	NITRITE
Zn <sup>+2</sup>	ZINC	NO <sub>3</sub> <sup>-</sup>	NITRATE
Mg <sup>+2</sup>	MAGNESIUM	OH <sup>-</sup>	HYDROXIDE
Ca <sup>+2</sup>	CALCIUM	O <sup>-2</sup>	OXIDE
Fe <sup>+2</sup>	FERROUS OR IRON(II)	S <sup>-2</sup>	SULPHIDE
Pb <sup>+2</sup>	LEAD OR PLUMBUM	SO <sub>4</sub> <sup>-2</sup>	SULPHATE
Sn <sup>+2</sup>	TIN OR STANOUS	SO <sub>3</sub> <sup>-2</sup>	SULPHITE
Mn <sup>+2</sup>	MAGNESE	CO <sub>3</sub> <sup>-2</sup>	CARBONATE
Hg <sup>+2</sup>	MURCURIC	P <sup>-3</sup>	PHOSPHIDE
Fe <sup>+3</sup>	FERRIC OR IRON(III)	PO <sub>4</sub> <sup>-3</sup>	PHOSPHATE
Al <sup>+3</sup>	ALUMINIUM	N <sup>-3</sup>	NITRIDE

**Social Science**

**X**

1. learn and write additional questions from each chapter which you have done in the month of April.

2. Prepare a project file with following details: 1) The total length of the project report should not be more than 7 and 8 written pages of A-4 size sheet. Projects [Choose any one topic]

**Consumer Awareness:** The content must cover the following:

- Meaning of Consumer Awareness
- Forms of Consumer Exploitation / Malpractices
- Factors causing exploitation of the Consumers
- Enactment of COPRA 1986 and its benefits
- Role of WTO in protection of Consumers
- Rights and Duties of the Consumers
- Consumer Protection Measures

**OR**

**Social Issues** Prepare a project on any three of the following social evils still prevailing in our society; highlighting the reasons, effects and suggest solutions to get them eliminated from our country.

- Poverty
- Illiteracy
- Corruption
- Gender Inequality
- Inflation, hoarding and panic buying during pandemic crisis
- Domestic violence against women and child abuse

The students must write about following key matter:

- a. Social issues in Indian Society
- b. Reforms initiated to combat the social issues
- c. Role of Popular leaders and movements.

**OR**

**Sustainable Development** The students must write about following key matter:

- a. Need of development.
- b. Importance of development
- c. Policies initiated to adopt measures for Sustainable Growth

### **3. Map work:**

**Locate and label the following on the political map of India:-**

(i)Major soil Types

**(ii) Water Resources : Dams** - Salal,Bhakra Nangal,Teheri,Rana Pratap Sagar,Sardar Sarover ,Hirakud, Nagarjuna Sagar,Tungabhadra.

**(iii)Major area of rice and wheat**

Largest /Major producer state of Sugercane ,tea,Coffee ,Rubber ,cotton and Jute

**(iv)Indian National Congress Sessions :-**

\*Calcutta (sept.1920 ) \*Nagpur (December 1920) \*Madras (1927) \*Lahore (1929)

**(v)Important Centres of Indian National Movement**

\*Champaran \*Kheda \* Ahmedabad \* Chauri Chaura \*Dandi \*Amritsar

**(vi) Software Technology Parks :-**

Noida, Gandhinagar,Mumbai,Pune,Hydrabad,Bengaluru,Chennai, Thiruvananthapuram.

**(vii)Power plant :**

a.**Thermal** –Namrup,Ramagundam,Singrauli

b.**Nuclear** –Narora,Tarapur,Kakrapara,Kalpakkam

**(viii) Major Ports and International Airport** (That is given in syllabus)

**(vix) Iron Ore mines, Coal mines and Oil Fields** ( That is given in syllabus)

**4.**Write a note on Mahatma Gandhi Ji and How Gandhi ji shaped our Independence:

5 major freedom movements initiated by Mahatma Gandhi

**5.**On the basis of reading chapter 2<sup>nd</sup> of History 'The nationalism of India "make at least 20 additional questions covering the whole chapter and solve them in the fair notebook of History .(10 very short ,6 short answers and 4 long answers.

**6.**On the basis of reading chapter 1<sup>st</sup> of political science .Make at least 20 additional questions covering the whole chapter and solve them in the fair notebook .(10 very short Answers,6 short answers and 4 long answers.

## Class XII

### Hindi

ग्रीष्म कालीन अवकाश हेतु गृहकार्य 2023 कक्षा बारहवीं विषय: हिन्दी

भक्तिन पाठ के आधार पर भारतीय ग्रामीण समाज में लड़के-लड़कियों में किये जाने वाले भेदभाव का उल्लेख कीजिए |

• भक्तिन की पाक कला के बारे में टिप्पणी कीजिए |

भक्तिन पाठ में लेखिका ने समाज की किन समस्याओं का उल्लेख किया है? आरोह (पद्य)

कविता दिन जल्दी जल्दी ढलता है एक गीत का सारांश और प्रतिपाद्य लिखिए । - वितान (सिल्वर वैडिंग)

• अपने घर और विद्यालय के आस-पास हो रहे उन बदलावों के बारे में लिखें जो सुविधाजनक और आधुनिक होते हुए भी बुजुर्गों को अच्छे नहीं लगते। अच्छा न लगने के क्या कारण हो सकते हैं ?

यशोधर बाबू की पत्नी समय के साथ ढल सकने में सफल होती है, लेकिन यशोधर बाबू असफल रहते हैं, ऐसा क्यों ?

यशोधर बाबू के बच्चों की कौन-सी बातें प्रशंसनीय हैं और कौन-सा पक्ष आपत्तिजनक है?

### English

#### Class XII (ENGLISH CORE)

##### NOTE: WRITE ALL THE ASSIGNMENTS IN FAIR NOTEBOOK (CW/HW) ONLY

1. You are Rani/Raj, secretary of the Health Club of your school. You have found out that after the lunch break the school playground and verandas are littered with wrappers, paper/polythene bags etc. write a notice in not more than fifty words advising the students to refrain from this practice.

2. An NGO has approached your school to offer book grants to needy students. As Head girl of Oxford Public School, Patna, write a notice in about 50 words asking students who are in need to put their requests into the box kept outside the Principal's office.

3. You are Rahul, the Head boy of Creative Public School, Delhi. Recently your school hosted the Annual day celebrations 2023. Write a report of this event for your school newsletter in about 120-150 words.

4. You are Nitin/Natasha a student of Class XII at K.P.N. Public School Faridabad. A student is required to cope with lot of pressure in today's competitive environment. Write a letter to the editor of a national daily highlighting the increasing stress faced by students and suggest ways to combat the same.

5. It is the habit of media to sensationalize the news to gain attention and to raise their viewership. The private affairs of the celebrities and unnecessary issues are generally highlighted. Write a letter to the Editor of The Hindu, Chennai raising this issue in 125-150 words.

6. Teenagers today are getting hooked on to the latest gadgets. Write an article on 'The advantages of technology versus its adverse effects'. 'You are Sharan/Shalini' Use the input given below: (150 words)

Gadgets : mobiles, ipods, computers, Greater affluence : easy availability, Impact on health : sedentary lifestyle, obesity, eating habits; Impact on academic performance, Social impact : absence of social interaction, Improved communication : global vision, easy connectivity, faster information exchange. Helpful in online classes.

7. READING PROJECT – 'The Canterville Ghost' by Oscar Wilde (Read the book during summer vacations. Assessment of reading will be done after the vacations.)

8. Read the passage given carefully:

(1) Suspense was over when my high school results finally came out. But I was upset. I had not done as well as I had expected. My Father tried to console me. "Why are you worried? You have done very well my dear." "No, I have not Baba," I protested, controlling my tears, and wondering if I had disappointed him. "It does not really matter," he assured me. "Do you know what I got when I finished high school?" I looked into Baba's face and waited for the answer to his own question. "You know," he told me "I have never told you this. I got just a third division. But, look at me, I have done quite well." Baba got a third division! I was almost in shock, but the thought of my having done a lot better than that made me realize that I had no reason to complain. I certainly felt better! "Everything is under control!" said Baba, smiling. That was his favourite phrase. Posted in Kolkata, my father was then a senior official in the Indian Railway Service, and an expert in goods traffic operations. He was soon to become a director with the Railway Board. By the time he retired in 1981, he was general manager of the Central Railways. By the time Baba passed away in November 2000, his name had found place in several hearts as well. He was open, easy to know, and full of life. We were extremely close, but I had so much more to learn about him from many things I came to know after his death.

(2) In September 2000, he was in hospital for treatment of cancer and given just two months to live. When he found out, his reaction was an extremely rational one. He asked me to fetch files from his cupboard, so that he could explain the details of my mother's pension. He also dictated his will from his hospital bed. "Everything is under control!" After Baba's death, Satish, our old family retainer, was inconsolable. We tried to cheer him up. "Your Baba had scolded me only once in all these years!" he cried. Satish pointed to the watch on his left hand. "I had been coming late for work and everyone in the family was complaining about it," said Satish. "Then, one day, your Baba gave me this watch and told me, 'Now that you

have a watch, you can't be late'. " That was the scolding Satish received. On the fourth day after Baba's death, my sister and I had to perform a ceremony. Since several relatives were expected, we decided to order lunch from a caterer in our locality, reputed for his home cooked food. But, when we went to pay to owner, we got a surprise. He refused to accept any money! "When I wanted to start my catering business, it was your father who lent me money," he told us. It seems Baba never asked for it back. Now, after four or five years, the caterer wanted to repay that debt. Ofcourse, we made him accept the full payment for the fine food and service. "It was Baba's gift and it ought to remain so," I told him.

(3) Some days later, there was yet another piece of information as we were preparing for the main ceremony. Vikram, my brother drove me to the local market. On recognizing our car, the parking assistant, in his twenties, came running towards us and asked why he had not seen its owner for long.

We had to break the news to him and to our utter surprise, he started crying. We were really surprised by this reaction from a stranger – until the man told us that Baba used to pay his daughter's school fees and buy her books. It seems, it was on my father's advice that he had even started sending the child to school. More than three years after Baba's death, as we were looking into Baba's personal things, we came across an old file with Baba's certificates and I found among them, his high school diploma from 1937, the one he told me about 30 years earlier, about the third division that had made no difference in his life or career. It had made me see beyond mere marks and first classes as the main road to success. But there was one more fact. Baba had actually got a first division, a rare achievement in his day. Today, years after his passing, when I think of Baba, I see a man who was able to sympathise with others so easily and touch their lives in such a special way.

**On the basis of your reading of the passage, attempt the questions.**

- (i) What revelation did father make after narrator's high school result?
- (ii) I was almost in shock. Rewrite the given sentence without changing the meaning of the underlined word.
- (iii) What was Baba's favourite phrase?
- (iv) Describe narrator's father's professional accomplishments.
- (v) To which disease did narrator's father succumb?
- (vi) Complete the given sentence to describe how the narrator felt after her result. The high school result was finally out and I felt .
- (vii) After Baba's death, Satish, our old family retainer, was inconsolable. What is the meaning of the underlined word?
- (viii) What was the caterer's reaction on hearing about Baba's death?
- (ix) What surprising factor came out after three years of Baba's death?

**NOTE:**

1. All questions are compulsory.
2. No students should either copy other's assignments or give others to copy them. If found, both the students (borrower and helper) will have to write the assignments 5 times.
3. Students can complete the assignments at their own pace and convenience well before the end of the vacations.
4. The assignments will be checked when the school reopens after the vacations and grades will be awarded accordingly.

## Mathematics

### 12 PREVIOUS YEAR QP

#### CH-1 RELATIONS AND FUNCTIONS

Q.1) Show that the function  $f$  in  $A = \mathbb{R} - \left\{ \frac{2}{3} \right\}$  defined as  $f(x) = \frac{4x+3}{6x-4}$  is one-one and onto.

Q.2)

Show that the relation  $R$  in the set  $A = \{1, 2, 3, 4, 5\}$  given by  $R = \{(a, b) : |a - b| \text{ is divisible by } 2\}$  is an equivalence relation. Write all the equivalence classes of  $R$ .

Q.3)

Show that the relation  $R$  on  $\mathbb{R}$  defined as  $R = \{(a, b) : a \leq b\}$ , is reflexive, and transitive but not symmetric.

Q.4)

Prove that the function  $f : \mathbb{N} \rightarrow \mathbb{N}$ , defined by  $f(x) = x^2 + x + 1$  is one-one but not onto.

Q.5)

Check whether the relation  $R$  defined on the set  $A = \{1, 2, 3, 4, 5, 6\}$  as  $R = \{(a, b) : b = a + 1\}$  is reflexive, symmetric or transitive.



Q.6)

Show that the relation  $R$  on the set  $Z$  of all integers, given by  $R = \{(a, b) : 2 \text{ divides } (a - b)\}$  is an equivalence relation.

Q.7)

Show that the relation  $S$  in the set  $A = \{x \in Z : 0 \leq x \leq 12\}$  given by  $S = \{(a, b) : a, b \in Z, |a - b| \text{ is divisible by } 3\}$  is an equivalence relation.

Q.8)

Prove that the relation  $R$  in the set  $A = \{1, 2, 3, 4, 5, 6, 7\}$  given by  $R = \{(a, b) : |a - b| \text{ is even}\}$  is an equivalence relation.

Q.9)

Let  $N$  be the set of natural numbers and  $R$  be the relation on  $N \times N$  defined by  $(a, b) R (c, d)$  iff  $ad = bc$  for all  $a, b, c, d \in N$ . Show that  $R$  is an equivalence relation.

Q.10)

Check whether the relation  $R$  in the set  $N$  of natural numbers given by

$$R = \{(a, b) : a \text{ is divisor of } b\}$$

is reflexive, symmetric or transitive. Also determine whether  $R$  is an equivalence relation.

Q.11)

Show that the function  $f : (-\infty, 0) \rightarrow (-1, 0)$  defined by  $f(x) = \frac{x}{1 + |x|}$ ,

$x \in (-\infty, 0)$  is one-one and onto.

Q.12)

Prove that the relation  $R$  on  $Z$ , defined by  $R = \{(x, y) : (x - y) \text{ is divisible by } 5\}$  is an equivalence relation.

Q.13)

Write the smallest reflexive relation on set  $A = \{a, b, c\}$ .

Q.14)

Show that the function  $f : R - \{-1\} \rightarrow R - \{1\}$  given by  $f(x) = \frac{x}{x+1}$  is bijective.

Q.15)

A function  $f : A \rightarrow B$  defined as  $f(x) = 2x$  is both one-one and onto. If  $A = \{1, 2, 3, 4\}$ , then find the set  $B$ .

Q.16)

A relation  $R$  is defined on a set of real numbers  $\mathbb{R}$  as

$$R = \{(x, y) : x \cdot y \text{ is an irrational number}\}.$$

Check whether  $R$  is reflexive, symmetric and transitive or not.

Q.17)

Show that a function  $f : \mathbb{R} \rightarrow \mathbb{R}$  defined as  $f(x) = \frac{5x-3}{4}$  is both one-one and onto.

Q.18)

Prove that a function  $f : [0, \infty) \rightarrow [-5, \infty)$  defined as  $f(x) = 4x^2 + 4x - 5$  is both one-one and onto.



Q.19)

If  $N$  denotes the set of all natural numbers and  $R$  is the relation on  $N \times N$  defined by  $(a, b) R (c, d)$ , if  $ad(b + c) = bc(a + d)$ . Show that  $R$  is an equivalence relation.

Q.20)

Let  $f : \mathbb{R} - \left\{ -\frac{4}{3} \right\} \rightarrow \mathbb{R}$  be a function defined as  $f(x) = \frac{4x}{3x+4}$ . Show that  $f$  is a one-one function. Also, check whether  $f$  is an onto function or not.

## 12 PREVIOUS YEAR QP

### CH-1 INVERSE TRIGONOMETRIC FUNCTIONS

Q.1)

Write the principal value of  $\tan^{-1}(1) + \cos^{-1}\left(-\frac{1}{2}\right)$ .

Q.2)

Write the value of  $\tan\left(2 \tan^{-1}\frac{1}{5}\right)$ .

Q.3)

The principal value of  $\tan^{-1}\left(\tan \frac{3\pi}{5}\right)$

Q.4)

The principal value of  $\cot^{-1}(-\sqrt{3})$  is

Q.5)

Express  $\tan^{-1}\left(\frac{\cos x}{1 - \sin x}\right)$ ,  $-\frac{3\pi}{2} < x < \frac{\pi}{2}$  in the simplest form.

Q.6)

The value of  $\sin^{-1}\left(\cos \frac{3\pi}{5}\right)$  is

Q.7)

Find the value of  $\sin^{-1}\left[\sin\left(-\frac{17\pi}{8}\right)\right]$ .

Q.8)

Evaluate :

$$\sin^{-1}\left(\sin \frac{3\pi}{4}\right) + \cos^{-1}\left(\cos \frac{3\pi}{4}\right) + \tan^{-1}(1)$$

Q.9)

Draw the graph of  $\cos^{-1} x$ , where  $x \in [-1, 0]$ . Also, write its range.

Q.10)

Evaluate :  $3 \sin^{-1}\left(\frac{1}{\sqrt{2}}\right) + 2 \cos^{-1}\left(\frac{\sqrt{3}}{2}\right) + \cos^{-1}(0)$

Q.11)

Draw the graph of  $f(x) = \sin^{-1} x$ ,  $x \in \left[-\frac{1}{\sqrt{2}}, \frac{1}{\sqrt{2}}\right]$ . Also, write range

Q.12)

Find the domain of  $y = \sin^{-1}(x^2 - 4)$ .

Evaluate :

Q.13)

$$\cos^{-1}\left[\cos\left(-\frac{7\pi}{3}\right)\right]$$

Q.14) Write the domain and range (principle value branch) of the following functions :

$$f(x) = \tan^{-1} x$$

Q.15)  $\sin \left[ \frac{\pi}{3} + \sin^{-1} \left( \frac{1}{2} \right) \right]$  is equal to

Find the value of  $\tan^{-1} \left[ 2 \cos \left( 2 \sin^{-1} \frac{1}{2} \right) \right] + \tan^{-1} 1$ .

Q.16) **Maths Holiday HW**

1. Solve previous year question of CH 1 and CH 2 given above
2. Do activity 1 and activity 3 given above

### Physics

**Numerical assignment sheet 1 to 5 of Electrostatics as shared in class groups.**

### Chemistry

SUBJECT –CHEMISTRY

PART I- SOLVE NCERT EXEMPLAR PROBLEMS(SHORT ANS TYPE AND NUMERICALS)

PART II SOLVE FOLLOWING NUMERICAL PROBLEMS

1. Calculate the mass percentage of benzene (C<sub>6</sub>H<sub>6</sub>) and carbon tetrachloride (CCl<sub>4</sub>), If 22 g of benzene is dissolved in 122g of carbon tetrachloride. [Ans. : C<sub>6</sub>H<sub>6</sub> = 15.3%, CCl<sub>4</sub> = 84.7%]
2. Calculate the molarity of a solution prepared by mixing 500 ml of 2.5 M urea solution and 500 mL of 2M urea solution. [Ans. : 2.25 m]
3. The mole fraction of CH<sub>3</sub>OH in an aqueous solution is 0.02 and density of solution 0.994 g cm<sup>-3</sup>. Determine the molality and molarity. [Ans. : 1.13m, 1.08m]
4. 200 mL of calcium chloride solution contains 3.011 × 10<sup>22</sup> Cl<sup>-</sup> ions. Calculate the molarity of the solution. Assume that calcium chloride is completely ionized. [Ans. : 0.125 M]
5. 6 × 10<sup>-3</sup> g oxygen is dissolved per kg of sea water. Calculate the ppm of oxygen in sea water. [Ans. : 6 ppm]
6. The solubility of oxygen in water is 1.35 × 10<sup>-3</sup> mol L<sup>-1</sup> at 20°C and 1 atm pressure. Calculate the concentration of oxygen at 20°C and 0.2 atm. pressure. [Ans. : 2.7 × 10<sup>-4</sup> mol L<sup>-1</sup> ]
7. Two liquids X and Y on mixing form an ideal solution. The vapour pressure of the solution containing 2 mol of X and 1 mol of Y is 550 mm Hg. But when 4 mol of X and 1 mole of Y are mixed, the vapour pressure of solution thus formed is 560 mm Hg. What will be the vapour pressure of pure X and pure Y at this temperature? [Ans. : X = 600 mm Hg; Y = 400 mm Hg]
8. An aqueous solution containing 3.12 g of barium chloride in 250 g of water is found to boil at 100.0832°C. Calculate the degree of dissociation of barium chloride. [Given molar mass BaCl<sub>2</sub> = 208 g mol<sup>-1</sup>, K<sub>b</sub> for water = 0.52 K/m] [Ans. : 83.3%]
9. The degree of dissociation of Ca(NO<sub>3</sub>)<sub>2</sub> in a dilute aqueous solution, containing 7.0 g of salt per 100 g of water at 100°C is 70%. If the vapour pressure of water at 100°C is 760 mm, calculate the vapour pressure of the solution. [Ans. : 745.3 mm of Hg]
10. 2g of C<sub>6</sub>H<sub>5</sub> COOH dissolved in 25g of benzene shows depression in freezing point equal to 1.62K. Molar freezing point depression constant for benzene is 4.9 K kg mol<sup>-1</sup>. What is the percentage association of acid if it forms a dimer in solution? [Ans. : 99.2%]
11. Calculate the amount of NaCl which must be added to one kg of water so that the freezing point is depressed by 3K. Given K<sub>f</sub> = 1.86 K kg mol<sup>-1</sup>, Atomic mass : Na = 23, Cl = 35.5). [Ans. : 47.2 g NaCl]
12. Three molecules of a solute, A associate in benzene to form species A<sub>3</sub>. Calculate the freezing point of 0.25 molal solution. The degree of association of solute A is found to be 0.8. The freezing point of benzene is 5.5°C and its K<sub>f</sub> value is 5.13 Km<sup>-1</sup>. [Ans. : 4.9°C]
13. A 5% solution of sucrose C<sub>12</sub>H<sub>22</sub>O<sub>11</sub>. is isotonic with 0.877% solution of urea. Calculate the molecular mass of urea. [Ans. : 59.99 g mol<sup>-1</sup> ]
14. Osmotic pressure of a 0.0103 molar solution of an electrolyte was found to be 0.75 atm at 27°C. Calculate Van't Hoff factor. [Ans. : i = 3] \*

15. The maximum allowable level of nitrates in drinking water as set by U.S. is 45 mg nitrate ions /dm<sup>3</sup>. Express this level in ppm? [Ans. : 45 ppm]
16. 75.2 g of Phenol (C<sub>6</sub>H<sub>5</sub>OH) is dissolved in 1 kg solvent of  $K_f = 14 \text{ K m}^{-1}$ , if the depression in freezing point is 7 K, then find the % of Phenol that dimerises. [Ans. : 75%] \*
17. An aqueous solution of glucose boils at 100.01°C. The molal boiling point elevation constant for water is 0.5 K kg mol<sup>-1</sup>. What is the number of glucose molecule in the solution containing 100 g of water. [Ans. :  $1.2 \times 10^{21}$  molecules]
18. A bottle of commercial H<sub>2</sub>SO<sub>4</sub> [density = 1.787 g/mL] is labelled as 86% by mass.
- (a) What is the molarity of the acid?
- (b) What volume of the acid has to be used to make 1 litre 0.2 M H<sub>2</sub>SO<sub>4</sub>?
- (c) What is the molality of the acid? [Ans. : 15.7 M, 12.74 mL, 62.86 m]

PART III-PREPARE SHORT ANS TYPE QUESTIONS FROM NCERT TEXT BOOK (CHAPTER 2)

## Biology

### XII (BIOLOGY)

1. Write down the answers of In-text questions and exercises given on the page No. 17, 18, 40 and 41.
2. Draw labelled diagrams given below:- Fig.-2.3, 2.5, 2.4 (d), 2.8, 2.13, 2.14
3. Solve the question paper of monthly test April
4. Complete the practical record of practical related to the chapters taught.

### Computer Science/Informatics Practices

CLASS XII	SUBJECT : COMPUTER SCIENCE	HOME WORK
Q1	Solve all Objective Type Questions, MCQ & solve Unsolved Questions of Review of Python Basics.	
Q2	Solve all Objective Type Questions, MCQ & solve Unsolved Questions of Functions.	
Q3	Solve all Objective Type Questions, MCQ & solve Unsolved Questions of Data File Handling (Topic Discussed).	
Q4	Complete your Notes up to Third Chapter.	
CLASS XII	SUBJECT : INFORMATICS PRACTICES	HOME WORK
Q1	Solve all Objective Type Questions, MCQ & solve Unsolved Questions of MYSQL.	
Q2	Write at least 30 Query based on the Relations of SQL .	
Q3	Complete your Notes of MYSQL and Revise looping and conditional statements.	
Q4	Revise Data types of Python.	

### Accountancy

Prepare the questions as per directions: -  
Chapter- Fundamentals OF partnership XII C

- TRUE/FALSE Roll No. -1-10  
 Fill in the blanks Roll No. -11-20  
 MCQ Roll No. -21-26  
 Application Based Roll No.-27-33

#### Chapter- Goodwill XII C

- TRUE/FALSE Roll No. 1-10  
 Fill in the blanks Roll No. 2-20  
 MCQ Roll No. -20-33  
 Accountancy holiday homework  
 \* Solving illustrations and practical questions- chapter "Fundamentals of Partnership"-  
 Topics:  
 Calculation of Interest on Capital and Drawings  
 P/L Appropriation A/c with Guarantee to a partner  
 Partners' Capital A/c  
 Past Adjustment  
 \* Solving all illustrations and practical questions- chapter "Valuation of Goodwill"-  
 \* Study the chapters from swayamprabha and prepare notes on the same.

### Business Studies

## Business Studies

- \* Learn and write all questions- Chapter "Nature and significance of Management"-
- \* Learn and write all questions- Chapter "Principles of Management"-
- \* Study the chapters from swayamprabha and prepare notes on the same.

Complete Business Project Work on the topic

Principles of Management

Marketing Management

## Economics

### XII

## Economics

1. Solve last five year's CBSE Question Papers.
2. Learn Question Answers of Unit-1 Macro Economics
3. Prepare notes for Unit-1 Macro Economics & Indian Economic Development

## History

### 12TH HISTORY

#### 1. PROJECT WORK

##### TOPICS:-

- TOWN PLANNING AND ARTIFACTS OF THE HARAPPAN CIVILIZATION
  - THROUGH THE TRAVELERS EYES
  - UNDERSTANDING THE BHAKTI-SUFI MOVEMENT IN INDIA
  - DEPICTION OF LIFE DURING MUGHAL PERIOD THROUGH PAINTINGS
  - HOW THE PARTITION IN 1947 WAS NOT JUST A DIVISION OF TERRITORY BUT ALSO A DIVISION OF HEARTS AND HOW IT AFFECTED THE COMMON PEOPLE
2. SOLVE QUESTION PAPERS OF PREVIOUS 5 YEARS

## Geography

### Holiday Home Work 2023-24

XII

Subject – Geography

#### 1. Map work(World).

- a. The largest country in each continent in terms of area.
- b. Areas of subsistence gathering.
- c. Major areas of nomadic herding of the world.
- d. Major areas of commercial livestock rearing.
- e. Major areas of extensive commercial grain farming.
- f. Major areas of mixed farming.
- g. Ruhr region, Silicon Valley, Appalachian region, Great lakes region.
- h. Terminal stations of Trans Siberian Railway, Trans Canadian Railway, Trans – Australian Railway.
- i. Major Sea Ports: North Cape, London, Hamburg, Vancouver, San Francisco, New Orleans, Rio-De-Janeiro, Colon, Valparaiso, Suez, Cape town, Yokohama, Shanghai, Hong Kong, Aden, Karachi, Kolkata, Perth, Sydney, Melbourne, Suez Canal, Panama Canal, Rhine Waterway, St. Lawrence Seaway.
- j. Major Airports: Tokyo, Beijing, Mumbai, Jeddah, Johannesburg, Nairobi, Moscow, Paris, Berlin, Rome, Chicago, New Orleans, Mexico City, Buenos Aires, Santiago, Darwin, Wellington, Sao Paulo.

#### 2. Map work(India) :

- a. State with highest level of urbanisation and lowest level of urbanisation.
- b. One state with highest level of HDI & One lowest level of HDI.
- c. State with higher level of population density & one state with lowest level of population density(2011).
- d. City with more than 10 million population - Greater Mumbai, Delhi, Kolkata, Chennai, Bengaluru.

#### 3. Leading producing states of the following crops:

- a. (A)Rice, (B) Wheat, (C) Cotton, (D) Jute, (E) Sugarcane, (F) Tea, (G) Coffee.
- b. Iron –ore mines: Mayurbhanj, Bailadila, Ratnagiri, Bellary.
- c. Manganese mines: Balaghat, Shimoga.
- d. Copper mines: Hazaribagh, Singhbhum, Khetri.
- e. Bauxite mines: Katnai, Bilaspur, Koraput.
- f. Coal mines: Jharia, Bokaro, Barauni.
- g. Oil Refineries: Mathura, Jamnagar.

- h. Iron & steel Plants: Bhadravati, Bhilai, Durgapur, Raurkela, Jamshedpur.
- i. Cotton Textile: Surat, Varanasi, Murshidabad, Sholapur, Coimbatore.
- j. Software technology Park: Gandhinagar, Srinagar, Mohali, Noida, Indore, Hyderabad.
- k. Major Industrial Regions.
- l. Important nodes on North – South, east – West Corridor & Golden Quadrilateral.
- m. Major Sea Ports: Kandla, Mumbai, Marmagao, Kochi, Mangalore, Tuticorin, Chennai, Vishakhapatnam, Paradwip, Haldia.
- n. International Air ports: Ahmedabad, Kolkata, Guwahati, Delhi, Amritsar, Thiruvananthapuram.

## Yoga All Classes

सभी विद्यार्थियों को सूचित किया जाता है कि **21** जून पर अन्तर्राष्ट्रीय योग दिवस मनाया जाता है जिसके उपलक्ष्य में प्रत्येक विद्यार्थी को योगासनो का अभ्यास करना जरूरी है

निम्नलिखित योग के अभ्यास को नियमित रूप से प्रत्येक विद्यार्थी करें :-

1. सूर्यनमस्कार
2. ध्यान + ॐ उच्चारण
3. ताड़ासन, त्रिकोणासन, वीरासन, चक्रासन, गरुडासन, नटराजासन, धनुरासन, भुजंगासन, उष्ट्रासन, शशांकासन
4. योग निद्रा

नोट :- सभी अभ्यासो को **30 -45** मिनट तक करें

### \*Computers: Coding\*

#### Class VI

1. Go through your shared e-book, Unit 1 (Introduction to Coding), & Unit 2 (Algorithms in Block Coding)
2. Complete the Copy with shared Class Notes if not already
3. Visit [makecode.com](http://makecode.com) Arcade section & Have fun with coding.

#### Class VII

1. Go through your shared e-book. Unit 1 & 2
2. Practice Python codes:
  - (a) Create a program to use all the python mathematical operators shown in class.
  - (b) Create a program to use all the python relational operators shown in class.
3. Install and Uninstall Python package on your Laptop/Desktop from Python.org

#### Class VIII

1. Go through your shared e-book. Unit 1 & 2
2. Practice Python Codes:

**(a) Create programs implementing**

**(i) Sequencing**

**\* Display your name, family member's names on separate lines**

**(ii) Selection/Conditional (If-else/If-elif)**

**\* Find Odd/Even, of any given number**

**(iii) Iteration (while)**

**\* Print multiplication table of any number upto 20 times.**

**Class IX Artificial Intelligence**

**1. Read the First Module Employability Skills**

**\* Communication Skills-I**

**\* Self-Management Skills-I**

**\* ICT Skills-I**

**\* Entrepreneurial Skills-I**

**\* Green Skills-I**

**2. Prepare Five Questions which arise after reading of first module.**

**Class X Artificial Intelligence**

**1. Read the First Module Employability Skills**

**\* Communication Skills-II**

**\* Self-Management Skills-II**

**\* ICT Skills-II**

**\* Entrepreneurial Skills-II**

**\* Green Skills-II**

**2. Prepare Five Questions which arise after reading of first module.**