

## CLASS -I/Summer Vacation Homework 2023-2024

### हिन्दी

- प्रश्न.1 पाँच फलों के चित्र चार्ट पर चिपकाकर उनके नाम लिखिए।  
प्रश्न.2 अपने पसंदीदा जानवर अथवा पक्षी का चित्र बनाते हुए उनके मध्य में स्वर लिखिए।  
प्रश्न.3 बादल का चित्र बनाकर उसमें बिना मात्रा के 5 शब्द लिखिए।  
प्रश्न.4 पतंग का चित्र बनाकर उसमें 'आ' ( ा ) की मात्रा के पाँच शब्द लिखिए।

नोट:- यह कार्य गृहकार्य कॉपी में करना है।

### English

- Q.1 Paste/Draw 5 pictures of junk food and healthy food with their names .  
Q.2. Write and paste/draw any five nouns, adjectives, verb each .  
Q.3.. Write 10 nouns with their opposite gender.  
Q. 4. Write five words of each which has -  
1. silent k  
2. silent d  
Q.5. - Learn poem on page number 16.  
Q.6. Learn any one short story  
1. Thirsty crow  
2. Greedy dog  
3. Hungry for  
4. The lion and the Mouse  
Q.7. . Do one page of writing in English writing book daily.  
Note – Do all the work in HW copy

### Mathematics

1. Draw the Abacus representing the following numbers on it :  
09, 17, 23, 35, 46, 51, 60, 74, 88, 92  
Note:- Draw separate abacus for each number. Work should be done in a creative manner.  
2. Make a clock on disposal plate.  
3. Learn multiplication tables upto 10.

❖ All the questions should be done in Maths HW Notebook.

### EVS

- Q.1 Draw or paste any five body parts on a A-4 size sheet.  
Q.2 Draw five sense organs and write their functions.  
Q.3 Write and learn 5 sentences on myself .  
Q.4 Draw and colour any four food items which you like to eat/drink during summer season.  
Write their names also.  
(NOTE - Do que. 2,3,4 in HW notebook).

### Computer

(In Home Work copy)

- Q1. Paste and Name 3 pictures of machines which work on Human Power.  
Q2. Paste and Name 3 pictures of machines which work on Electricity.  
Q3. Paste and Name 3 pictures of machines which work on Fuel.  
Q4. Paste and Name 3 pictures of Man-Made things.  
Q5. Paste and Name 3 pictures of Natural things.

## CLASS-II/Summer Vacation Homework 2023-2024

### हिन्दी

प्रश्न.1 पाँच पशु-पक्षियों के चित्रों को चार्ट पर चिपकाकर उनकी बोलियों के बारे में लिखिए।

प्रश्न.2 सब्जियों के चित्र चिपकाकर कोई पाँच नाम लिखिए।

प्रश्न.3 भाषा के दो रूपों के चित्र चार्ट पर चिपकाकर उन पर एक-एक वाक्य लिखिए।

प्रश्न.4 भाषा के चार कौशल (सुनना, बोलना, लिखना, पढ़ना) का चित्र चिपकाकर उनके नाम लिखिए।

नोट:- यह कार्य फाईल बनाकर करना है।

### English

Q.1. Write any five good habits and paste related pictures .

Q.2.. Write 10 adjectives with their opposites.

Q.3. Paste pictures of any four sports with their famous player.

Q.4. Write five words of each which has -

1. silent 'l'
2. silent 'h'

Q.5. Write five words which ends with

1. ous
2. ure

Q.6. Learn poem on page number 20 .

Q.7 Learn any one short story

1. Thirsty crow
2. Greedy dog
3. Hungry for
4. The lion and the Mouse

Q.11. Do one page of writing in English writing book daily.

Note – Do all the work in HW copy

### Mathematics

1. Paste dummy currency notes and write the following points below each note:

- Value of the note.
- Colour of the note.
- Name of the monument printed on the note.
- City where the monument is located.

**Note:** Use only new currency notes.

2. Write counting from 1 to 999.

3. Learn multiplication tables upto 15.

❖ **All the questions should be done in Mathematics HW Notebook.**

### EVS

1. Draw five sense organs and write their functions .

2. Make a family tree .Write two lines about your family.

3. How do you enjoy your free time at home? Write two sentences.

4. Name and draw any five things which you see in park and colour them.

Note- Do in HW copy.

### Computer

(In Home Work copy)

Q1. Show the differences between the Computer and Human by pasting pictures? (Computer V/s Human)

Q2. Show the uses of the Computer in our life by pasting pictures?

Q3. Draw or Paste picture of Desktop computer and explain in brief.

Q4. Draw or Paste picture of Laptop and Tablet computer and write about them.

## CLASS-III/Summer Vacation Homework 2023-2024

### हिन्दी

प्रश्न.1 प्राकृतिक दृश्य का चित्र बनाकर रंग भरिए तथा उस पर 10 वाक्य लिखिए।

प्रश्न.2 पाँच पशुओं व 5 पक्षियों के चित्र चिपकाकर उनकी बोलियाँ लिखिए।

प्रश्न.3 अपनी माँ का छाया चित्र (फोटो) चिपकाकर उन पर 10 पंक्तियाँ लिखिए।

प्रश्न.4 संज्ञा के भेदों को चित्र द्वारा समझाइए।

नोट:- यह गृहकार्य कॉपी में करें।

### English

- 1 Paste or draw 10 Pictures of Nouns and write their names and types.
2. Paste or draw 10 pictures of verbs and write their name.
3. Using your creativity make a card for your father for “ Father’s Day”.
4. Write a paragraph about your family .
5. Learn a poem on page no 30.
6. Learn a story of the title “Thirsty Crow.”
7. Write 10 words starting with vowels and paste their picture.
8. Write 10 words with their opposites and paste their picture also.
9. Write 10 words starting with consonants and paste their pictures.
10. Do one page daily of your cursive writing book.

### Mathematics

1. List the dates of all the national festivals and holy festivals of the year 2023 month wise. Also draw a small picture representing the festival in the following format : -

Date	Festival	Picture
14.01 2023	Makar Sankranti	

2. Represent the following numbers in Roman numerals with the help of matchsticks – 3 , 5 , 10 , 16 , 22 35, 39 , 41, 44 , 50

3. Learn multiplication tables upto 20

❖ All question should be done in Mathematics H.W. notebook.

### Science

1. Paste or draw any five natural living and natural non-living things
2. Differentiate between living and nonliving things. (5points)
3. Make the picture of any one animal by using dry leaves and stick on ( A4 size sheet)
4. Learn chapter 1

Note – Do Q 1, 2 in science HW copy

### S. St

1. Draw compass and write its uses.
2. Write names of the eight planets in solar system in correct order.
3. Draw five things which we can see in the sky and colour them.
4. Mark and label the seven continents and five oceans on the world's political map.
5. Draw and colour any five things which you like to eat in summer season.
6. Learn chapter. 1,2 and 3

Note- Do all questions in S. St. H.W. copy

### Sanskrit

1. निम्नलिखित स्थानों के नाम अपनी उत्तरपुस्तिका में संस्कृत में लिखिए व चित्र भी बनाइये-  
(i) मंदिर (ii) उपवन
2. दो फलों के नाम संस्कृत में अपनी उत्तरपुस्तिका में लिखिए व चित्र भी बनाए ।
3. चार्ट (A4) पर वृक्ष बनाते हुए संस्कृत के सभी ह्रस्व स्वर लिखिए।
4. तीनों लिंगों की परिभाषा याद करके अपनी उत्तर पुस्तिका में लिखें व प्रत्येक लिंग के दो-दो उदाहरण लिखिए।

### Computer

1. Paste or draw pictures of any three storage device and explain them.
2. Paste or draw icons of any three application softwares and write use of each.
3. Paste or draw icons of any four of system softwares.

Note: - Do in H.W. note book.

## CLASS IV/Summer Vacation Homework 2023-2024

### हिन्दी

प्रश्न.1 'प्यासा कौआ' शीर्षक से सम्बन्धित कहानी का चित्र चिपकाकर लिखिए।

प्रश्न.2 दैनिक समाचार पत्र से प्रतिदिन एक मुख्य समाचार कटिंग काटकर गृहकार्य कॉपी में चिपकाइए।

प्रश्न.3 कोई चार प्रकार की दालें लेकर उनके पैकेट बनाकर कॉपी में चिपकाकर नाम लिखिए।

प्रश्न.4 हिन्दी महीनों के नाम गोला बनाकर प्रदर्शित कीजिए।

नोट:- यह गृहकार्य कॉपी में करना है।

### English

1 Write a paragraph on your favourite festival and paste the picture also

2. Write 10 Gender with their opposites and paste pictures also.

3. Using your creativity make a card for your mother for ' Mother's Day'.

4. Write a paragraph on My Best friend .

5. Learn poem " A Happy Child" .



6. Learn story of the title "Lion And The Mouse"

7. Write 10 words starting with vowels and paste their pictures.

8. Write 10 words with their opposites and paste their pictures also.

9. Write 10 words starting with consonants and paste their pictures.

10. Do one page daily of your cursive writing book.

### Maths

1. Prepare a model of an analog clock (12- hours) using cardboard and colourful sheet.

2. Draw a leaf and the butterfly and then draw lines of symmetry with colourful pencils.

3. Learn tables 2 to 20.

4. Show Roman Numerals I to X (1 to 10) with the help of colourful thread.

Note:-Do question number 2 and 4 in your HW. note book.

### Science

Q.1 Make a table of different plants that store extra food in leaves , roots, stem and flowers.

Q.2 Paste the pictures of the plants which do not have chlorophyll. write two lines about each.

Q.3 Give difference between terrestrial and aquatic plants. Give 2-2 examples of each. Draw and write their names.

Q.4 Make a chart of process of photosynthesis on a white sheet.

(NOTE - Do que. 1,2,3 in HW notebook)

## S.St

1. Make a table and write all state of India along their capital.
  2. Draw any 2 national symbols of India and colour them.
  3. Paste the political map of India , mark and label the following-
    - (i) Arabian Sea
    - (ii) Bay of Bengal
    - (iii) Indian Ocean
    - (iv) Andman and Nicobar Island  
Lakshadweep Island
  4. Paste any 5 tourist places of Northern mountain and write their name.
  5. Solve crossword given on page number 28 in S.St. book.
- Note – Do question 1, 2, 3 and 4 in S.St. H.W. and learn ch.- 1,2 and 3

## Sanskrit

- 1.दो पशुओं के नाम अपनी उत्तर पुस्तिका में संस्कृत में लिखिए व चित्र भी बनाइये।
- 2.चार्ट (A4) पर वृक्ष बनाते हुए संस्कृत के सभी ह्रस्व व दीर्घ स्वर लिखिए।
- 3.पाँच फलों के नाम संस्कृत में अपनी उत्तर पुस्तिका में लिखिए व चित्र भी बनाइये।
- 4.पाँच अकारांत पुल्लिंग शब्दों के नाम संस्कृत भाषा में अपनी उत्तर पुस्तिका में लिखिए।

## Computer

1. Explain cloud computing with diagram.
2. Draw or paste three example of cloud storage .
3. Create a project on Gamification.

Note: - Do in H.W. note book.

## CLASS-V/Summer Vacation Homework 2023-2024

### हिन्दी

प्रश्न.1 शेर और चूहा शीर्षक से सम्बन्धित कहानी चित्र चिपकाकर लिखिए।

प्रश्न.2 दैनिक समाचार पत्र से प्रतिदिन एक मुख्य समाचार कटिंग काटकर गृहकार्य कॉपी में चिपकाइए।

प्रश्न.3 कोई पाँच प्रकार के अनाज लेकर उनके पैकेट बनाकर कॉपी में चिपकाकर नाम लिखिए?

प्रश्न.4 अंग्रेजी महीनों के नाम पेड़ बनाकर प्रदर्शित कीजिए।

नोट:- यह कार्य गृहकार्य कॉपी में करना है।

### ENGLISH

1. Paste the picture given on page 47 of your Reader's book and write 8 sentences about it

2. Write a paragraph on your favourite festival and paste picture also.

3. using your creativity make a Card for your friend for her birthday.

4. Make a dictionary of about 20-30 words.

5. Learn the poem "Wake Up"



#### LESSON - 8

### WAKE UP!

Wake up! Wake up!  
It's a lovely day.  
Oh! Please get up  
And come to play.  
The birds are singing in the trees,  
And you can hear the buzzing bees.  
Wake up! Wake up!  
It's a lovely day.  
Oh! Please get up  
And come and play.  
It's much too late to lie in bed,  
So hurry up, you sleepy head.  
Wash and dress  
And come on out -  
Everyone is up and about.  
The cow, the horses, the ducks  
And the sheep,  
The tiniest chicken  
Cheep-cheep-cheep  
Wake up!  
- C. Fletcher



6. Learn and write a story of the title "The Monkey and the capseller."

7. Write 10 words starting with vowels and paste their picture.

8. Write 10 words with their opposites and paste their picture also.

9. Write 10 words starting with consonants and paste their pictures.

10. Do one page daily of your cursive writing book

### MATHS

All work should be done in your HW note book.

1. Write Hindi -Numerals १ - २० by using different colourful thread.

2. Make a calendar of July -2023. Showing Day, Date and Month with your own innovative Idea.

3. Learn tables 2 to 25.

4. Make a Bill for 5-Grocery items for "MY MOM'S KITCHEN".

Bill S. No	Item Name	Rate per Item	Amount
1			
2			
3			
4			
5			
Total			

## SCIENCE

Q.1 Make a decorative item with the help of waste materials like plastic bottles , rappers of chocolates , cardboard etc.

Q.2 Make your own dustbin by using empty box, plastic can etc.

Q.3 Write any five cleanliness habits which make you and your environment healthy .

Q.4 Draw or paste any five cleaning equipments and write their names.

(NOTE - Do que. 3,4 in HW notebook).

### S.St.

1. Draw a "Family Tree " and paste photographs of your family members on it.
2. Paste pictures of nuclear family and joint family.
3. Write your name by using Braille Script.
4. Write any five reasons of migration.

### Sanskrit

1.निम्न पक्षियों के नाम संस्कृत भाषा में अपनी उत्तर पुस्तिका में लिखें व चित्र बनाते हुए उनकी वाणी भी स्पष्ट करे-

1.तोता 2.मोर 3.कौआ 4.कोयल

2.चार्ट (A4) पर वृक्ष बनाते हुए संस्कृत के सभी व्यंजन वर्ण लिखें व याद भी करे।

3.माँ सरस्वती का चित्र (A4)चार्ट पर बनाइये व एक श्लोक लिखिए।

4.पाँच फलों के नाम चित्र बनाते हुए संस्कृत भाषा में अपनी उत्तर पुस्तिका में लिखिए।

### COMPUTER

Create project on Evaluation of Artificial intelligence with pictorial methods.

Note: - Do in H.W. note book.



## MBV/SUMMER HOLIDAYS HOMEWORK/VII/2023-2024

### HINDI

1. निम्नलिखित शब्दों के तीन-तीन पर्यायवाची शब्द चित्र सहित लिखिए .  
बादल, पुष्प, शत्रु, तरु, गंगा, चंद्रमा, आंख, पक्षी, राजा, रात
2. निम्नलिखित शब्दों के विलोम शब्द लिखिए .  
अमृत, कृतज्ञ, आस्तिक, दुर्लभ, निंदा, बंधन, साक्षर, ज्ञानी, ऊसर, अपव्ययी
3. आप अजमेर निवासी राजकीय उच्च माध्यमिक विद्यालय की छात्रा सुनीता शर्मा हैं। पुस्तकालय में हिंदी पत्र-पत्रिकाओं के समुचित प्रबंध के लिए प्रधानाचार्य को प्रार्थना पत्र लिखिए।
4. भारत: त्योहारों की भूमि विषय पर 150 शब्दों में निबंध लिखिए।
5. पठित पाठों के प्रश्न उत्तर याद करें।

### ENGLISH

1. Make a colourful chart on any one of the following topics-  
Adjective or Preposition (in your notebook)
2. Write 15 regular verbs and 15 irregular verbs with their forms.
3. Write 2 diary entries from your grammar book.
4. Write and learn new words of chapters-1 to 10 with their meanings and try to use them in communication.
5. Revise the topics which were covered in the class.
6. Try to converse in English with your family members and friends.

### MATHEMATICS

1. Do lab manual activities 1 and 2 in your lab manual book.
2. Do Mental maths and Multiple choice questions ( pg22,23) in your practice copy
3. Learn and write tables 2 to 25 in practice copy
4. Do 'check your progress'(pg-26) in your H.W. copy.
5. Do 'Value based Question' of Chapter -1 (pg-24) in H.W. copy

### SCIENCE

- Q. 1 Describe the digestive system of humans with the help of a well-labelled diagram .
- Q.2 what do you understand by heterotrophic mode of nutrition in animals? Explain different processes involved in it.
- Q.3 To show that chlorophyll is necessary for photosynthesis? (Write Activity of ch- 1 with observation and conclusion)
- Q.4 What is oxidation reaction? How is different from reduction reaction? Explain with the help of examples.
- Q.5 What are the characteristics of chemical reactions? Explain.
- Q.6 Read and write their view of chapter 1

### SOCIAL SCIENCE

- 1 Draw a flow chart showing different forms of government on A4 size sheet
- 2 Make a model of any one ecosystem from the following:-  
a) Forest      b) Desert      c) Grassland      d) Lake      e) Ocean
- 3 Make a chart to show how man is changing the natural environment
- 4 a) On the Political map of India locate all the states of India  
b) On the physical map of world locate all the continents and oceans of the world  
Paste both the maps in homework copy
- 5 a) Learn the names of capitals of all the states of India  
b) Learn question and answers of  
Ch-1 History  
Ch-1 Geography  
Ch-1 Civics

## SANSKRIT

- प्र.1 पठ् खाद् धातुयोः रूपाणि लट् लकारे लिखत ।  
(पठ् और खाद् धातुओं के रूप लट् लकार में लिखिए।)
- प्र.2 खाद् हस् धातुयोः रूपाणि लृट् लोट् लकारे च लिखत ।  
(खाद् और हस् धातुओं के रूप लृट् और लोट् लकार में लिखिए।)
- प्र.3 पठ् धातोः रूपाणि लङ् लकारे लिखत ।  
(पठ् धातु के रूप लङ् लकार में लिखिए।)
- प्र.4 स्वपाठ्यपुस्तकात् दौ संस्कृत - श्लोकौ लिखत।  
(अपनी पाठ्यपुस्तक से दो संस्कृत श्लोक लिखिए।)
- प्र.5 1तः 50 पर्यन्तं संख्यां लिखत।  
(1 से 50 तक संख्या लिखिए।)

## COMPUTER SCIENCE

Prepare a project on Uses of following Common Apps:  
Education Apps  
Social Networking  
Entertainment Apps  
Banking & Finance Apps  
Note: - Do in H.W. note book.

## हिंदी

1. संज्ञा की परिभाषा तथा भेदों को उदाहरण एवं चित्र सहित लिखिए।
2. सर्वनाम की परिभाषा तथा भेदों को उदाहरण एवं चित्र सहित लिखिए।
3. 'विद्यार्थी और अनुशासन' विषय पर 150 शब्दों में निबंध लिखिए।
4. आप स्वयं को भरतपुर निवासी अनिल कुमार मानते हुए अपने मोहल्ले में व्याप्त गंदगी के संबंध में नगर पालिका को एक शिकायती पत्र लिखिए।
5. पठित पाठों के प्रश्न उत्तर याद कीजिए।

## ENGLISH

1. Story Writing:- Write a story in your own words giving it's title and moral taking the help of pictures given in your book at page number 47 and 48.
2. Poetry Writing:- Write a poetry that conveys a message. Also write the message conveyed by it in a colourful and decorative way. You can also draw or paste related pictures.
3. Dictionary:- Choose the difficult words of chapter 1 and 2 and poem 1 and 2. Use dictionary to find its meaning and synonyms. Assemble it in alphabetical order, chapter wise, to form a dictionary.
4. Comic Writing:- Describe any incident/ event /story /situation in the form of a comic, writing dialogues. Take help of chapter 3 for reference.

Book Exercise :- Do back exercise of chapter 1 and learn all the question and answers of it. Also learn question answer of poem 1 and read chapter 2.

## MATHEMATICS

- Learn & Write tables 2 to 25 in your practice copy.
- Learn & Write all properties of Rational Numbers in practice copy.
- Do Ex 1.1 , 2.1 and 2.2 in HW copy.
- Write Squares and Cubes of Natural Numbers 1 to 20 in HW copy

## SCIENCE

Q.1 Visit a nearby village and collect information on

- 1) Name of crops grown
- 2) Irrigation process
- 3) Time of growth and harvest
- 4) Pesticides used
- 5) Kinds of fertilizers or manure used

Q.2 Draw a diagram of hoe?

Q.3 Through an activity, to show that organic matter is decomposed by microbes present in soil. Write activity with observation and conclusion.

Q.4 List down some viral diseases, bacterial diseases and protozoan diseases in humans. How can they be prevented?

Q.5 Visit a doctor: Find out why antibiotics should not be overused . Prepare a short report.

Q.6 Read and write the review of ch- 1.

## SOCIAL SCIENCE

Q.1 On the political map of India locate all the states and their capitals.

Q.2 On the political map of India locate all the Union territories and their capitals.

Q.3 On the political map of India locate all the neighbouring countries.

Q.4 On the physical map of India locate all the Seas and Oceans.

Q.5 On the physical map of India locate all the Islands.

Q.6 On the political map of Rajasthan Locate all the Districts.

Q.7 Define the following terms.

- (A) Human trafficking
- (B) Tyranny
- (C) Patent
- (D) Technology
- (E) Weathering

Q.8 Draw a diagram of Soil profile and label it.

Q.9 Prepare a chart on Fundamental rights of the Indian constitution.

Q.10 Prepare a chart on factors affecting soil formation.

Q.11 Learn chapter-1 of History, Chapter-1 of Geography, chapter-1 of Civics.

Do Holiday Homework in notebook (Paste Maps)

### संस्कृत

प्र 1. खाद् धातु-रूपाणि पंचसु लकारेषु लिखत।

प्र.2 किम् शब्दस्य रूपाणि त्रिषु लिंगेषु लिखत।

प्र.3 शुल्कमुक्ति-अर्थम् प्रार्थना पत्रं लिखत।

प्र.4 आवश्यक-कार्यार्थम् प्रार्थना पत्रं लिखत।

प्र.5 स्वपाठ्यपुस्तकात् दौ संस्कृत - श्लोकौ लिखत।

प्र.6 1तः 100 पर्यन्तं संख्यां लिखत।

5.

### COMPUTER SCIENCE

Prepare a project on Networking Concepts

## MBV/SUMMER VACATION HOME WORK/X/2023-2024

### हिन्दी

- प्र. 1. स्वयं को अलवर निवासी रमेश कुमार मानते हुए आपके पड़ोस में आग लगने की दुर्घटना की सूचना तुरंत दिए जाने पर भी पुलिस और दमकल अधिकारी देर से पहुँचे, जिससे आग ने भीषण रूप ले लिया। इसके बारे में विवरण सहित एक शिकायती पत्र अपने जिला अधिकारी को लिखिए।
- प्र. 2. निम्नलिखित विषय पर संकेत बिन्दुओं सहित लगभग 300 से 350 शब्दों में निबंध लिखिए।  
(क) जनतंत्र और मीडिया  
(i) प्रस्तावना (ii) मीडिया का स्वरूप (iii) मीडिया जनतंत्र का प्रहरी  
(iv) मीडिया के दायित्व
- प्र. 3. समाचार-पत्र से दो विज्ञापन काटकर गृहकार्य कॉपी में चिपकाइए। (शब्द सीमा लगभग 25 से 50, विज्ञापन हिन्दी भाषा में हो)
- प्र. 4. शारीरिक अंगों (कान, नाक, दाँत, आँख, हाथ) पर आधारित कोई दो-दो मुहावरों का अर्थ लिखकर वाक्य में प्रयोग कीजिए।
- प्र. 5. पाठ्यपुस्तक के पठित पाठों के प्रश्नोत्तर याद करें।

### ENGLISH

- Q.1 Read the poem Fire and Ice and write it's summary.
- Q2 Read chapters 'Two stories about flying ' and ' From the Diary of Anne Frank' thoroughly and write all hard words with their meanings.
- Q 3. Develop stories based on given topics. Write their moral also.  
1 River God and the woodcutter 2 The Vain Stag
- Q4 Write an E\_mail to the editor of ' Times of India ' expressing your views on the topic 'Ban on Plastic bags '.
- Q5 Write a letter to the Municipal Commissioner of your city on the necessity of a public park in your locality.
- Q6 Write paragraphs on given topics in 200 words.  
1 My Future Plans  
2 Save water
- Q6 Learn chapter number 1,2, of textbook First flight and chapter number 1 of textbook Footprints without Feet.
- (Note \_ Do all questions in Home Work copy )

### MATHS

- Write 156 as a product of its primes and find the sum of powers of prime factors.
- Find LCM and HCF of 510 and 92 and verify that LCM x HCF = product of two numbers.
- Find LCM and HCF of 6, 72 and 120 by using prime factorisation method.
- Given that  $HCF(306,657) = 9$ , find  $LCM(306,657)$ .
- Prove that  $\sqrt{7}$  is irrational.
- Find the zeroes of the following quadratic polynomials and verify the relationship between the zeroes and the coefficients.  
(i)  $6x^2 - 3 - 7x$  (ii)  $t^2 - 15$
- Find a quadratic polynomial whose zeroes are -2 and 3.
- Check whether -2, -3 and 1 are zeroes of polynomial  $p(x) = x^3 - 19x - 30$ .
- Solve the following pair of linear equations by substitution method:  
 $\frac{4}{3}x + 2y = 8$  ;  $x + 3y = 10$
- Solve the following pair of linear equations by elimination method:  
 $3x + 2y = 8$  ;  $2x - 3y = 14$
- For what value of k, following pair of linear equations has infinitely many solutions:  
 $x + 3y = 5$  ;  $kx + 9y = 15$
- 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?
- The sum of a two digit number and the number obtained by reversing the digit is 66. If the digits of the number differ by 2, find the number. How many such numbers are there?
- Find the solution of the equations  $x - y + 1 = 0$  and  $3x + 2y - 12 = 0$  graphically.
- Find the solution of the equations  $x + 3y = 6$  and  $2x - 3y = 12$  graphically.
- Learn tables up to 25.
- Learn squares up to 30.
- Learn cubes up to 15.

### SCIENCE

- Do activity 1.4 of chapter 1 chemical reactions and equations. Write activity, its observation and conclusion. Identify the type of reaction and write balanced chemical equation of it.

- 2 Do activity "Prepare your own indicator " of chapter 2 acids bases and salts Write activity and prepare the conclusion in tabular form.
- 3 Do activity 6.8 of chapter 6 Life processes Write activity, its observation.
- 4 Draw neat and labelled diagram of the following:-
  - (i) Human Digestive System
  - (ii) Human Respiratory System
  - (iii) Human Heart
  - (iv) Human Double circulation of blood
  - (v) Human Excretory System
- 5 Balance the given chemical equations

- 1)  $\underline{\quad} \text{N}_2 + \underline{\quad} \text{H}_2 \rightarrow \underline{\quad} \text{NH}_3$
- 2)  $\underline{\quad} \text{KClO}_3 \rightarrow \underline{\quad} \text{KCl} + \underline{\quad} \text{O}_2$
- 3)  $\underline{\quad} \text{NaCl} + \underline{\quad} \text{F}_2 \rightarrow \underline{\quad} \text{NaF} + \underline{\quad} \text{Cl}_2$
- 4)  $\underline{\quad} \text{H}_2 + \underline{\quad} \text{O}_2 \rightarrow \underline{\quad} \text{H}_2\text{O}$
- 5)  $\underline{\quad} \text{Pb(OH)}_2 + \underline{\quad} \text{HCl} \rightarrow \underline{\quad} \text{H}_2\text{O} + \underline{\quad} \text{PbCl}_2$
- 6)  $\underline{\quad} \text{AlBr}_3 + \underline{\quad} \text{K}_2\text{SO}_4 \rightarrow \underline{\quad} \text{KBr} + \underline{\quad} \text{Al}_2(\text{SO}_4)_3$
- 7)  $\underline{\quad} \text{CH}_4 + \underline{\quad} \text{O}_2 \rightarrow \underline{\quad} \text{CO}_2 + \underline{\quad} \text{H}_2\text{O}$
- 8)  $\underline{\quad} \text{C}_3\text{H}_8 + \underline{\quad} \text{O}_2 \rightarrow \underline{\quad} \text{CO}_2 + \underline{\quad} \text{H}_2\text{O}$
- 9)  $\underline{\quad} \text{C}_8\text{H}_{18} + \underline{\quad} \text{O}_2 \rightarrow \underline{\quad} \text{CO}_2 + \underline{\quad} \text{H}_2\text{O}$
- 10)  $\underline{\quad} \text{FeCl}_3 + \underline{\quad} \text{NaOH} \rightarrow \underline{\quad} \text{Fe(OH)}_3 + \underline{\quad} \text{NaCl}$

Note: Do all the above questions in your HW notebook. Learn all the taught topics.

### SOCIAL SCIENCE

- Q1. On a political map of India, locate all the states and their capitals.
- Q2. On a political map of India, locate all the union territories and their capitals.
- Q3. On a political map of India, locate all the neighbouring countries.
- Q4. On a physical map of India, locate all the seas, oceans, and islands.
- Q5. Explain the terms-
  - a) Conservatism
  - b) Ethnic
  - c) Civil War
  - d) Infant Mortality Rate
  - e) Net Attendance Ratio

Note- Learn –

History – L-1

Pol.Sc. – L-1

Geo. – L-1

Eco. – L-1

Do H.W. in H.W. Note book.

Paste Maps.

### संस्कृत

- प्र.1 'तत्' शब्दस्य रूपाणि त्रिषु लिंगेषु लिखत।
- प्र.2 'किम्' शब्दस्य रूपाणि त्रिषु लिंगेषु लिखत।
- प्र.3 स्वपाठ्यपुस्तकात् कोडपि(कोई भी) चत्वारः श्लोकान् लिखत।
- प्र.4 100 तः 200 पर्यन्तं संख्यां लिखत।
- प्र.5 स्थानांतरण-प्रमाणपत्रार्थं प्रार्थनापत्रं लिखत।
- प्र.6 दिनत्रयस्य अवकाशार्थं प्रार्थनापत्रं लिखत।
- प्र.7 हरि,फलम् शब्दयोः रूपाणि लिखत।

### **C.I.T.**

Answer the following questions:-

1. Discuss merge and split in Excel.
2. Explain information entering in excel in detail.
3. How can you set margins for header and footers?
4. Explain filter and sort operation in details.
5. What are the navigation keys in MS Excel?
6. What is the difference between function and formula in Excel?
7. Explain locking rows and columns by splitting panes and freezing panes.
8. How can you add a new sheet in Excel?
9. Draw or paste seven E-Commerce business model and explain each.
10. Write a short note on E-Commerce. Draw its diagram also.

Note: - Do in H.W. note book.

## SUMMER HOLIDAYS HOMEWORK 2023-24/XII/COMMERCE

### हिंदी

प्र 1 निबंध लिखिए (शब्द सीमा 300)

क नारी आज और कल

ख विद्यार्थी जीवन और अनुशासन

प्र 2 कवि परिचय लिखिए।

क हरिवंशराय बच्चन

ख तुलसीदास

प्र 3 लेखक परिचय लिखिए ।

क जैनेंद्र कुमार

ख महादेवी वर्मा

प्र 4 फीचर लिखिए (शब्द सीमा 150)

क राष्ट्र उत्थान में युवाओं की भूमिका

ख कटते जंगल घटते मंगल

प्र 5 आलेख लिखिए (शब्द सीमा 150)

क मोबाइल वरदान या अभिशाप

ख सड़क दुर्घटनाएँ एक विकट समस्या ।

प्र 6 पठित पाठ्यक्रम याद कीजिए।

### ENGLISH

- I. Read lesson 2 and 3 of Vistas and make a glossary of 20 -30 hard words, writing 2 synonyms and antonyms of each.
- II. Read the poem, A Thing Of Beauty from your course book Flamingo and write a Character sketch of the poet John Keats.
- III. Read the newspaper daily and write news under any three of the categories in the form of a report in 100 -150 words.  
A. Political B. Entertainment C. Sports  
D. Environmental E. International
- IV. Read Ch -3 Deep Water from Flamingo and prepare a character sketch of William Douglas in 100 – 120 words .
- V. Prepare one word questions and write their answers for Chapter 1, 2 and poem 1 of Flamingo.
- VI. Learn the course completed so far.

### ACCOUNTANCY

Chapter 1: Accounting for Partnership: Basic Concepts

Q. No. 8, 9, 14,15,16,20,21,22,23,24,25,27,28,29,30,31,38,39,40,41

### BUSINESS STUDIES

- Q1. Give the life history of F.W.Taylor and Henri Fayol?
  - Q2. Explain evolution of management principles.
  - Q3. Describe terms related to Modern production / Scientific Management.
  - Q4. What are the differences in the contributions of Taylor and Fayol?
  - Q5. Explain with examples, the various dimensions of business environment.
- Learn Chapter-1 and Chapter-2.

### ECONOMICS

1. Define the Production Possibility Curve (PPC) and explain its significance in economics.
2. Draw a simple PPC with two goods (e.g., books and butter) and explain what it represents.
3. Explain the concept of opportunity cost in the context of PPC.
4. Give an example of a PPC shifting outward and explain the reasons for the shift.
5. Give an example of a PPC shifting inward and explain the reasons for the shift.



6. Explain the difference between a point inside the PPC, on the PPC, and outside the PPC.
7. Define the Indifference Curve (IC) and explain its significance in economics.
8. Draw a simple IC with two goods (e.g., apples and oranges) and explain what it represents
9. Explain the concept of marginal rate of substitution (MRS)
10. Explain the difference between a higher IC and a lower IC in terms of consumer preferences.

### MATHS

1. Use matrix multiplication to divide Rs. 30,000 into two parts such that the total annual interest at 9% on the first part and 11% on the second part amount is Rs. 3060.
2. The cost of 4 kg onion, 3 kg wheat and 2 kg rice is Rs. 410. The cost of 2 kg onion, 4 kg wheat and 6 kg rice is Rs. 680. The cost of 6 kg onion, 2 kg wheat and 3 kg rice is Rs. 540. Express it algebraically and then find the cost of each item per kg by matrix method.
3. If  $A = \begin{bmatrix} 1 & 2 & 2 \\ 2 & 1 & -2 \\ a & 2 & b \end{bmatrix}$  is a matrix satisfying  $AA^T = 9I_3$ , then find the value of a and b.
4. If  $A = \begin{bmatrix} 0 & -\tan \frac{\alpha}{2} \\ \tan \frac{\alpha}{2} & 0 \end{bmatrix}$  and I is the identity matrix of order 2, show that  

$$I + A = (I - A) \begin{bmatrix} \cos \alpha & -\sin \alpha \\ \sin \alpha & \cos \alpha \end{bmatrix}$$
5. Show that the matrix  $B'AB$  is symmetric or skew symmetric according as A is a symmetric or skew symmetric matrix.
6. Let a, b and c denotes the sides BC, CA and AB respectively of  $\Delta ABC$ . If  $\begin{vmatrix} 1 & a & b \\ 1 & c & a \\ 1 & b & c \end{vmatrix} = 0$ , then find the value of  $\sin^2 A + \sin^2 B + \sin^2 C$ .
7. The sum of three numbers is 6. If we multiply third number by 3 and add second number to it, we get 11. By adding first and third numbers, we get double of the second number. Represent it algebraically and find the numbers using matrix method.
8. If  $A = \begin{bmatrix} -2 \\ 4 \\ 5 \end{bmatrix}$ ,  $B = [1 \quad 3 \quad -6]$ , verify that  $(AB)' = B'A'$ .
9. If area of triangle is 35 square units with vertices (2,-6), (5,4) and (k,4) then find the value of k.
10. If A and B are invertible matrices of the same order, then prove that  $(AB)^{-1} = B^{-1}A^{-1}$ .
- \* Revise Chapter 3 and 4.
- \* Draw the graph of  $\sin^{-1}x$  and  $\cos^{-1}x$  in your practice copy.

### INFORMATICS PRACTICES

- Q.1 Do All question answers of chapter -1 .
- Q.2 Define Function and String Function.
- Q.3 Name different operations which can be performed on relations ? Explain each with diagram.
- Q.4 What is a JOIN operation on tables? Explain each join with example.

NOTE:- Home Work is to be done in Home Work copy.

## MBV/SUMMER VACATION HOMEWORK/XII SCI/2023-2024

### हिंदी

प्र 1 निबंध लिखिए (शब्द सीमा 300)

क नारी आज और कल

ख विद्यार्थी जीवन और अनुशासन

प्र 2 कवि परिचय लिखिए।

क हरिवंशराय बच्चन

ख तुलसीदास

प्र 3 लेखक परिचय लिखिए ।

क जैनेंद्र कुमार

ख महादेवी वर्मा

प्र 4 फीचर लिखिए (शब्द सीमा 150)

क राष्ट्र उत्थान में युवाओं की भूमिका

ख कटते जंगल घटते मंगल

प्र 5 आलेख लिखिए (शब्द सीमा 150)

क मोबाइल वरदान या अभिशाप

ख सड़क दुर्घटनाएँ एक विकट समस्या ।

प्र 6 पठित पाठ्यक्रम याद कीजिए।

### ENGLISH

- I. Read lesson 2 and 3 of Vistas and make a glossary of 20 -30 hard words, writing 2 synonyms and antonyms of each.
- II. Read the poem, A Thing Of Beauty from your course book Flamingo and write a Character sketch of the poet John Keats.
- III. Read the newspaper daily and write news under any three of the categories in the form of a report in 100 -150 words.

A. Political B. Entertainment C. Sports

D. Environmental E. International

IV . Read Ch -3 Deep Water from Flamingo and prepare a character sketch of William Douglas in 100 – 120 words .

V. Prepare one word questions and write their answers for Chapter 1, 2 and poem 1 of Flamingo.

VI. Learn the course completed so far.

### MATHS

1. Use matrix multiplication to divide Rs.30,000 into two parts such that the total annual interest at 9% on the first part and 11% on the second part amount is Rs.3060.
2. The cost of 4 kg onion, 3 kg wheat and 2 kg rice is Rs. 410. The cost of 2 kg onion, 4 kg wheat and 6 kg rice is Rs.680. The cost of 6 kg onion, 2 kg wheat and 3 kg rice is Rs.540. Express it algebraically and then find the cost of each item per kg by matrix method.
3. If  $A = \begin{bmatrix} 1 & 2 & 2 \\ 2 & 1 & -2 \\ a & 2 & b \end{bmatrix}$  is a matrix satisfying  $AA^T = 9I_3$ , then find the value of a and b.
4. If  $A = \begin{bmatrix} 0 & -\tan \frac{\alpha}{2} \\ \tan \frac{\alpha}{2} & 0 \end{bmatrix}$  and I is the identity matrix of order 2, show that  $I + A = (I - A) \begin{bmatrix} \cos \alpha & -\sin \alpha \\ \sin \alpha & \cos \alpha \end{bmatrix}$
5. Show that the matrix  $B^tAB$  is symmetric or skew symmetric according as A is a symmetric or skew symmetric matrix.
6. Let a, b and c denotes the sides BC, CA and AB respectively of  $\Delta ABC$ . If  $\begin{vmatrix} 1 & a & b \\ 1 & c & a \\ 1 & b & c \end{vmatrix} = 0$ , then find the value of  $\sin^2 A + \sin^2 B + \sin^2 C$ .
7. The sum of three numbers is 6. If we multiply third number by 3 and add second number to it, we get 11. By adding first and third numbers, we get double of the second number. Represent it algebraically and find the numbers using matrix method.
8. If  $A = \begin{bmatrix} -2 \\ 4 \\ 5 \end{bmatrix}$ ,  $B = [1 \ 3 \ -6]$ , verify that  $(AB)^t = B^tA^t$ .
9. If area of triangle is 35 square units with vertices (2,-6), (5,4) and (k,4) then find the value of k.
10. If A and B are invertible matrices of the same order, then prove that  $(AB)^{-1} = B^{-1}A^{-1}$ .
- \* Revise Chapter 3 and 4.
- \* Draw the graph of  $\sin^{-1}x$  and  $\cos^{-1}x$  in your practice copy.

## PHYSICS

1. What are Dielectric substances? Write 3 examples of such substances.
2. Define equipotential surface. Draw equipotential surface for a single charge.
3. Calculate the potential at a point due to a charge  $4 \times 10^{-9}\text{C}$  located  $9 \times 10^{-2}\text{m}$  away from it.
4. In Milikan's oil drop experiment, the charge on a droplet is  $-6.4 \times 10^{-19}\text{C}$ . Find the number of electrons in the droplet.
5. A parallel-plate capacitor with air has a capacity  $8\text{pF}$ . Calculate the capacity of the capacitor if distance between the plates is halved and the space between them is fully filled with a substance of dielectric constant 5.
6. Two charges  $5 \times 10^{-8}\text{C}$  and  $-3 \times 10^{-8}\text{C}$  are located  $16\text{ cm}$  apart. At what point(s) on the line joining the two charges in the electric potential zero? Take potential at infinity to be zero.
7. 10 capacitors each of capacity  $10\mu\text{F}$  are joined first in series and then in parallel. Write the value of product of equivalent capacitances.
8. Define electric potential. Derive expression for electric potential due to a dipole at a point  $P(r, \theta)$ .
9. What is a parallel-plate capacitor? Derive expression for capacitance of a parallel plate capacitor in which a dielectric medium with dielectric constant 'k' fills the space between the plates. Draw necessary diagram.
10. Define electrostatic potential energy. Derive expression for work done in rotating the dipole from  $\theta_1$  to  $\theta_2$  in electric field.

## CHEMISTRY

**Write the answer of the following questions in your home work copy and learn them.**

- 1 Write chemical formula of picric acid.
- 2 Give the halogenation and sulphonation reactions of chlorobenzene. Identify A,B,C,and D in the following:
  - (a)  $\text{R-Br} + \text{Mg} \xrightarrow{\text{Dry ether}} \text{A}$
  - (b)  $\text{C}_6\text{H}_5\text{ONa} + \text{C}_2\text{H}_5\text{Cl} \rightarrow \text{B}$
  - (c)  $(\text{CH}_3)_3\text{CBr} + \text{KOH} \xrightarrow{\text{ethanol}} \text{C}$
  - (c)  $\text{C}_2\text{H}_5\text{Cl} + \text{KOH}(\text{aq}) \rightarrow \text{D}$
- 3 (a) Arrange each set of compounds in order of increasing boiling points:
  - (i) Bromomethane, Bromoform, Chloromethane, Dibromomethane
  - (ii) 1-chloropropene, isopropyl chloride, 1-chlorobutane(b) Which alkyl halide from the following pairs would you expect react more rapidly by  $\text{S}_\text{N}^2$  mechanism? Explain your answer.
  - (i)  $\text{CH}_3\text{CH}_2\text{CH}_2\text{CH}_2\text{Br}$  or  $\text{CH}_3\text{CH}_2\text{CH}(\text{Br})\text{CH}_3$
  - (ii)  $\text{CH}_3\text{CH}_2\text{CH}(\text{Br})\text{CH}_3$  or  $(\text{CH}_3)_3\text{CBr}$
- 4 (a) Write mechanism of  $\text{S}_\text{N}^2$ .
  - (b) Explain Hunsdiecker reaction and Swarts reaction.
  - (c) Explain Finkelstein reaction and Wurtz reaction.
  - (d) The treatment of alkyl chloride with aqueous KOH leads to the formation of alcohols but in the presence of alcoholic KOH, alkene are the major products. Explain, why?
- 5 What is the formula of Freon-12 and Freon-13.
- 6 Explain inversion, racemic mixture, chiral and achiral and stereocentre carbon.
- 7 Although haloalkanes are polar, yet they are insoluble in water, why?
- 8 Write the structure of the alkene formed by dehydrohalogenation of 1-bromo-1-methylcyclohexane with alcoholic KOH.
- 9 Write hybridized state of carbon bonded to halogen atom in benzyl chloride.
- 10 Compound 'A' forms compound 'B' with sodium metal and compounds 'C' with  $\text{PCl}_5$ . Compound 'B' and 'C' react and form diethyl ether. What are compounds A, B and C?
- 11 Learn chapter 6

## BILOGY

1. Xerophytic Plants: Opuntia, Calotropis, Acacia, Capparis and Euphorbia.
2. Xerophytic Animals: Gila Monster and Camel
3. Hydrophytic Plants: Hydrilla, Eichhornia, Vallisneria, Trapa, Typha and Bladder wort.
4. Hydrophytic Animals: Labeo and Scolidon.
5. Diseases Related Spots:
  - Ent. Amoeba histolitica
  - Ascaris lumbricoides
  - Plasmodium stages: Rosette, Trophozoitic, Sporozoitic, Signet ring stages.
6. Endocrine Glands:
  - T. S. of Testis
  - T. S. of Ovary