

HOLIDAYS HOMEWORK
CLASS-XII(SCIENCE STREAM)
2025-26

Holiday Activities (Recommended):

1. Balance your study time with fun and fitness. Go for a walk, play outside, or do simple exercises.
2. Take a metro ride and visit a museum. Keep your ticket stub—you can earn bonus points by showing it to your teacher!
3. Keep a bowl of clean water and some food outside for birds and stray animals.
4. Lend a hand with chores. Surprise your parents with a simple no-flame recipe!
5. Talk to your grandparents, share your holiday fun, and listen to their amazing stories.
6. Plant a seed and take care of it every day. Watch it grow with love and care!
7. Build your awareness of current affairs. Note down new words and their meanings to improve your vocabulary.
8. Maintain a holiday journal—write about your experiences, thoughts, or reflections at least once a week.

SUBJECT: ENGLISH

Note – Holiday Homework has to be done in English Register

Activity 1: CREATIVE EXPRESSION

Heading – Literary Analysis

- (a) Analyse – Journey to the end of this world , explore theme and write the research of around 250 words on the topic
- (b) Read – The Third Level and write 5 to 7 interesting facts on The Grand Central Railway Station. Support your facts with pictures

Activity 2 : Exploring our twin state Sikkim

Heading - State Research

Do research on Sikkim and write about its history, culture and economy. Support your draft with pictures. (Word limit – 300 words)

Activity 3 . ASSIGNMENT ZONE

1. Read the passage given below and answer the questions that follow:

(12)

(1) Five enterprises received approval and grants for prototype development of sustainable educational toys.

(2) The government authorities, educational institutions and EdTech start-ups are planning to introduce state-of-the-art, made-in-India educational toys that not only throw light on Indian values, and civilisations, but also help in developing children's critical thinking, and decision-making skills.

(3) "One such enterprise is working on different types of projects that can teach children how electromagnets and magnetic fields work. These projects can resolve a lot of issues in many schools in tier two and three cities that don't have proper infrastructure. Another is working on an excavation site to teach children about ancient Indian civilizations. It has implanted a few artifacts at the site, which the children will have to find so that they are able to learn how to preserve and label artifacts. Another start up has proposed to create miniaturized labs for schools in tier 2 and 3 cities where children can learn concepts of Physics. "We will ensure that these prototypes are developed within a year and then the production can be scaled up," says the senior manager of the project talking about the importance of indigenously-built educational toys.

(4) Playtime is vital for the cognitive development of children and toys are an essential component that helps enhance specific cognitive abilities and skill sets. "Well-designed toys ignite students' curiosity, increase focus and can be very beneficial in helping them master a skill and enhance understanding. These can be in the form of visuals, auditory aids, kinesthetic, or a mixture of all three." says HOD, Early Childhood Education.

(5) Toys offer an engaging avenue to teach mathematical, verbal, problem-solving skills. "Toys that engage students in experiential learning enhance their special awareness and fine motor skills. Those designed for two or more players help students develop better social skills as they learn to negotiate, settle differences, etc, with their peers."

(6) Experiential gadgets and toys enable students to learn faster and retain lessons longer. "A child's interest is piqued when he is taught in a contextual framework as opposed to rote learning. The Indian education system has been witnessing several innovations with the development of toys and gadgets that can be used and felt in person or through VR platforms across subjects, be it Science, Technology, Math or Engineering.

Answer the following questions, based on the passage given above:

(i) By tier 2 and tier 3 cities, the author refers to.

1

(A) Metro cities

(B) Cities with huge population

(C) Underdeveloped cities

(D) Cities with less population

(ii) Complete the sentence with evidence from the text.

The made-in-India educational toys serves dual purpose of_____.

1

(iii) The author's point of view that can be inferred from the above passage is that_____. 1

(A) educational toys are the booming business.

(B) educational toys are meant to entertain children.

(C) educational toys will replace teachers.

(D) educational toys will make education more pragmatic.

(iv) Complete the following sentence appropriately:

Educational toys enhance the personality of children by_____

(v) Read the five headlines (a)-(e), given below:

(a) Sustainable Educational Toys are Developmentally Appropriate.

(b) Sustainable Educational Toys Promote Free play.

(c) Sustainable Educational Toys - Free and Widespread.

(d) Sustainable Educational Toys - Experiential Learning.

(e) Sustainable Educational Toys - Hinder Interaction with people.

Identify the option that displays the headline that DOES/DO NOT correspond with what the passage highlights.

(A) only (e)

(B) (a) and (b)

(C) (c) and (e)

(D) only (d)

(vi) What evidences do you gather from the passage to state that educational system is revolutionized by educational toys ? Answer in about 40 words. 2

(vii) Explain in about 40 words, how education at grassroot level is benefitted by these projects. 2

(viii) As opposed to learning by heart, experiential toys 1

(A) ignite interest

(B) challenge the teachers

(C) replace textbooks

(D) confuse learners

(ix) Playing is usually considered a distraction. Is it justified on the part of the narrator to assert that playing is an important aspect of education? Write your answer in about 40 words. 2

2. Bharat Public School , IP Nagar has recently constructed a Science Park, a dedicated area where equipments related to principles of Science are setup. As Rashi Kapoor , President of Science Club , draft a notice for the school notice board informing students of the same. Invent necessary details .

(4)

3. Read the given extracts and answer the questions. (1*5=5)

....I looked again at her, wan,

Pale

as a late winter's moon and felt that

old

familiar ache, my childhood's fear,

but all I said was, see you soon,

Amma,

all I did was smile and smile and smile.....

3.1 What is the speaker's emotional state when looking at her mother?

- (A). Confused and disoriented
- (B) Nostalgic and longing
- (C). Empathetic and understanding
- (D) Fearful and apprehensive

3.2 Select the word that WILL NOT complete the sentence appropriately. The description of the mother as "wan, pale / as a late winter's moon" creates a vivid image of _____ .

- (A) vulnerability (B) . sensitivity (C). frailty (D). mortality

3.3 State whether the given statement is TRUE or FALSE. The poetic device used in the line, 'pale as a winter's moon' is the same as the one used in the line, 'the winter wind wistfully wailed at night'.

3.4 What message do these lines highlight, in the context of familial relationships, and the speaker's sense of anxiety and fear at the prospect of losing her mother?

3.5 Complete the sentence appropriately. The repetition of the word, 'smile' suggests that _____.

4. Answer the following in 30 to 40 words : (2 x 2 =4)

4.1 When do the people of Alsace realize how precious their language is to them?

4.2 What do you learn about Galesburg Illinois during 1894 from the lesson third level?

SUBJECT: MATHEMATICS

ACTIVITY 1 Creative Expression

Heading :Pen and Perspective

1.Watch any two movie Zero,Imitation game ,The man who new infinity,Pursuit of happiness.Write few lines about what you learned from these movie.

ACTIVITY 2 Academic (subject) enrichment

Heading Mission Revision

- 1.Prepare mind maps related to covered syllabus.
- 2.Revise all questions of NCERT from covered syllabus.Draw all venn diagram in separate notebook
- 3.Complete 3 activities from Kelm501.pdf from <https://ncert.nic.in>

ACTIVITY 3: Exploring our pairing state-Sikkim

Heading State your Art

Make a pie chart and frequency polygon of culture ,festivals,dance, art and craft food etc.

SUBJECT: PHYSICS

TEACHER: MR NABHJOT SINGH

1 Find an investigatory project prescribed by CBSE , get it approved ,prepare viva for it including definition, theory ,examples, structures/pictures/ all concept involved . Search the topic given in your project from your NCERT book and prepare it from there too. Write maximum question answers based on your project on loose sheets and after the completion of your project attach sheets in the last of your project	https://www.icbse.com/projects/subject/physics
2 -Observe following practicals using the link provided , Complete all practical in your file and submit file after summer holidays	
3-Observe videos of chapter 1 and chapter 2 on Shiksha house and write all main points on a flow chart and prepare for UT-2	CH1 https://www.youtube.com/live/MVvHdH6n2VE?si=7V_J6AuYCtTaUA CH2 https://youtu.be/KV5HL1AgLeY?si=xP0cH-EFT0PQ3dSZ Physics Practical link https://youtu.be/kLkYLuqJOSY?si=KimpwLKYcAqACidK
4-DELHI VS SIKKIM Exploring our Pairing State	In a short report compare optical fibre communication in Delhi and Sikkim (On A-4 sized project sheets)

	https://youtu.be/fR39zrTgd-c?si=hY5ov9GwYa6tEWiC
<p>5. Search new themes / hand on activities / models for Different science competition/exhibition from Arvind Gupta toys ,Think tac or any other sites and bring rough sketch of your idea</p> <p>https://www.arvindguptatoys.com/toys.html</p> <p>https://www.thinktac.com/</p>	<p>Topics :</p> <p>New discoveries of science in the field of technology, EMW, Dynamics. optical Communication, save environment, best use of nuclear physics etc . get it approved for zonal level competitions from your teachers</p>
	<p>PLANT A TREE, GROW A FUTURE.</p> <p>Steps-</p> <ol style="list-style-type: none"> 1. Choose a Plant or Tree sapling you can plant in in your own Garden or in a pot. 2. Take pictures (holding the sapling, digging the soil, watering etc. 3. Take one Photo after a few days to show how plant is growing. 4. Make a collage to show growth of plant on A-4 sized sheet and attach in portfolio <p>Also mention -</p> <ul style="list-style-type: none"> • The name of Plant • Benefits of plants

TOPIC AND LINKS	ACTIVITY
<p>Human health and diseases</p> <p>Link1</p> <p>https://www.who.int/news-room/fact-sheets/detail/malaria</p> <p>Link 2</p> <p>https://www.healthline.com/health/malaria#outlook</p> <p>Link 3</p> <p>http://www.idph.state.il.us/envhealth/pcmosquitoes.htm</p> <p>DRUG ABUSE</p>	<ul style="list-style-type: none"> •Read your textbook and other resources from the internet to get the information about malaria. After reading Link 1& Link 2: <ul style="list-style-type: none"> ❖ Find out the microbe responsible for the same and its life cycle. ❖ Also list the symptoms of malaria and ways to prevent the spread. ❖ Try to find out the treatment given in malaria ❖ After reading Link 3 find out: <ul style="list-style-type: none"> ❖ What other diseases spread by way of mosquito bites. Find out their causative pathogen and the symptoms. Also collect information about how to prevent them ❖ WRITE DOWN ALL INFORMATION IN YOUR BIO NOTE BOOK <p>ACTIITY 1-Make a poster showing life cycle of plasmodiumand the symptoms associated with it.</p>

<p>LINK-4 https://www.youtube.com/watch?v=Qh6n4AgSDP8</p> <p>LINK-5 https://www.youtube.com/watch?v=1V0_OaBhk5Q</p> <p>LINK-6 https://www.youtube.com/watch?v=FPSGNp5pIOI</p>	<p>Watch this video. Explore the information from internet and answer the following:</p> <ul style="list-style-type: none"> ❖ What problem/ social issue is shown on video of Link 4. ❖ What could be the possible signs which we look for to know whether the person is drug addict or not. ❖ Which drugs are commonly abused and from which source they are derived? ❖ What are the harmful effects of drug on a person? ❖ What makes adolescence to fall the pray of drugs?
<p>MICROBES IN HUMAN WELFARE</p> <p>LINK-7 https://www.drugs.com/article/antibiotics.html</p> <p>LINK-8 https://microbiologysociety.org/members-outreach-resources/outreach-resources/antibiotics-uneearthed/antibiotics-and-antibiotic-resistance/the-history-of-antibiotics.html</p> <p>LINK-9 https://www.cdc.gov/patientsafety/features/be-antibiotics-aware.html</p>	<p>ACTIVITY-2-Make a power point presentation covering all these points</p> <p>Collect information of the microbes used in the field of medicine.</p> <p>Collect information about what is antibiotic?</p> <p>How are antibiotic derived?</p> <p>Which was the first antibiotic discovered and how?</p> <p>Various group of antibiotics and how they help in killing the pathogens.</p>

<p><u>PROJECT WORK</u></p> <p>Pairing State: Sikkim</p>	<p>What is antibiotic resistance?</p> <p>Which antibiotic is used as a combination therapy in cases of COVID 19 initially?</p> <p>How antibiotics are misused?RE</p> <p>ACTIVITY-3-Prepare a talk/INFORMATIVE LECTURE on the following points and record your video.</p> <p>Search some innovative and interesting topic for your project from various sources.</p> <p>Collect all the information related to your project from internet/ books.</p> <p>Try to collect the latest development/ data/ information about that topic.</p> <p>Also find out that how working on that topic can benefit you or others.</p> <p>PEN DOWN ALL INFORMATION COLLECTED IN A PROJECT FILE</p> <p>Collect information about bio diversity of Sikkim and also the information about endangered species and make a ppt using the same.</p>
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SUBJECT: CHEMISTRY

TEACHER: MS MANDEEP KAUR

NAME OF ACTIVITY	LINK
1- Complete all practicals in your file posted in Google class room also watch experiments on the link given ,take few screen shots of final results , take out colourful printout (8 pics on 1 A4 sized sheets)	https://www.olabs.edu.in/?pg=topMenu&id=34 2
2- Watch videos of chapter 1 and chapter 2 on Shiksha house and write all main points on a flow chart . Do practice of numericals and NCERT questions	https://www.youtube.com/watch?v=1VEICP7_GFI https://www.youtube.com/watch?v=paRg8Q9Y1t8
3 Search new themes / hand on activities /models for Different science competition/exhibition /new discoveries of science in the field of technology, agriculture ,Health and hygiene ,communication, save environment, best use of waste etcfrom- Arvind Gupta toys ,Think tac sites and bring rough sketch of your idea after holidays	https://www.arvindguptatoys.com/toys.html https://www.thinktac.com/
4- PROJECT Find an investigatory project prescribed by CBSE ,get it approved ,prepare viva for it including definition, theory ,examples, structures/pictures/ all	https://www.icbse.com/projects/subject/chemistry

<p>concept involved . Search the topic of project from your NCERT book and prepare it from there too. Write maximum question answers based on your project on loose sheets and after the completion of your project attach sheets in the last of your project</p>	
<p>5- Make a collage to compare medicinal plants found in Delhi and Sikkim .Mention their names and benefits , also plant one in your home .</p>	<p>PLANT A TREE, SAVE FUTURE OF GENERATIONS .</p> <p>Steps-</p> <ol style="list-style-type: none"> 1.Choose a Plant or Tree sapling you can plant in in your own Garden or in a pot. 2.Take pictures (holding the sapling, digging the soil, watering etc. 3.Take one Photo after a few days to show how plant is growing. 4.Make a collage to show growth of plant on A-4 sized sheet and attach in portfolio <p>Also mention -</p> <ul style="list-style-type: none"> • The name of Plant • Benefits of plants

Subject: Informatics Practices (065)

CBSE Practical File

- Complete the coding of programs no.1 to 8 of python Pandas according to your practical file index.

Write the programmes for the followings using python IDLE. Take print outs for practical file.

1. To create a series using list.
2. To create a series Using range() method.
3. To create a series with range () and for loop.
4. To create a series to access single and multiple values based on index.

5. To create a series to perform indexing, slicing and accessing data from a series.
 6. To create a series from dictionary.
 7. To create a series using head() and tail() functions on series.(3 programmes)
 8. Write 5 programmes of Data Frame.
- Arrange programs in MS-Word with headings: Program Number, Coding Section and Output with **Courier New font**; size 14.
 - Use **single MS-Word file for a single program**, new file for next program. Use screen shots of coding and outputs.
 - Complete the SQL Practical File with SQL statements and output screen shots. Arrange all in a MS-Word file.

CBSE Project Work

Data collection and analysis:

- Collect the details for the project assigned to you.
- Collect data about your project in **CSV file**. Visit the place to collect information/data for your project topic, if required.
- Your CSV files should contain at least 6 columns and 20 rows data.

System development (coding):

- Define the main menu, sub-menu, functions required for your project functioning.
- Your project must use the **data store in backend** concepts using **CSV Files**.
- Use proper commenting in your project to explain the logic and functions.
- Complete project documentation according to given sample project.

Cover Page:

- Design an attractive cover page for your project & practical file separately.
- Cover page should include Project topic like Project report on "COVID-19 Patient Data Analysis" or Project report on "School Result Data Analysis" or "Mobile Data Analysis" etc. with your name, board roll number, class & section, session.

Chart: Design an attractive chart on the topic Ring Topology.

Pairing State: Make a ppt tradition, culture and food of Sikkim State.

CBSE Practical File

- Complete the **coding & documentation of programs no.1 to 15** according to your practical file index.
- Arrange programs in MS-Word with headings: Program Number, Objective, Coding Section and Output with font **Courier New** with font size 14.
- Use **single MS-Word file for a single program**, new file for next program.
- Use screen shots of coding and outputs.

CBSE Project Work

Data collection and analysis:

- Collect the details for the project assigned to you.
- Collect data about the system (inputs, outputs, screens, bills, reports, registration etc.). Visit the place to collect information for your project topic, if required.
- Analyse the inputs and outputs

System development (coding):

- Make a flowchart of your project in any software like **MS-Word, PowerPoint or any website**.
- Define the main menu, sub-menu, functions required for your projects functioning in Python.
- Your project must use the **data store in backend** concepts using **Python-MySQL connectivity**.
- Use proper commenting in your project to explain the logic and functions.
- Complete the project documentation using sent sample project.

Note: (A sample of project synopsis/details is already given).

Cover Page:

- Design an attractive cover page for your project & practical file.
- Cover page should include Project topic like Project report on Medical Billing System or Project report on Air Reservation System etc. with Name, Board Roll number, class, section & session.

PPT:

- Prepare a presentation in Power Point on any one of the topics listed below:
 - Social Networking effects

- Cyber Laws / Security

Pairing State: Make a ppt culture, customs, dress, agriculture and climate of Sikkim State.

SUBJECT: (PHYSICAL EDUCATION)

- Practical file topics
 - Modern Olympics (2 pages)
 - Surya Namaskar (Pics with names)
 - Pet game diagram of the ground (With dimensions)
 - Khelo India tests (Eight)
 - Calculate BMI.
 - Details of participation in sports.
 - 2 mins of PPT while performing Yoga.
 - Draw 1 KI Test on A3 size posture.

NOTE: Holiday Assignment to be done in 'Practical File Lab Manual' (To be purchased)

NOTE: Submission by first week of July, 2025.

NOTE: 10 Marks for this project in Final Practicals.

Pairing State: Write a para of about 100 words on sports and recreational activities in Sikkim. Also draw couple of activities.

SUBJECT: FINE ARTS

1. STRING ART You will love to make them. Link attached..

<https://youtu.be/dJJJ2tbjSTY?si=qSM4e8EdD2pYNglu> on a3 size MDF board

2. 5 Creative compositions Medium - Water Colour Size – A3 Topics - Road side dhaba, Sabji market, Mobile shop, laptop shop, Favorite room, Monument visit, School race 200 mtr, Bungee jumping, Mall visit ext.

3. LIVE SKETCHING *15 sketch for every day Topics – Daily life scenes, Human Figures, still lifes, Plants, Outdoor sketching Objects ext.

SUBJECT : MUSIC

WEEK 1	Write the theka and dugun of Dhamar taal with proper description in project file. https://onlinesangeet.com/dhamar-taal-in-english
WEEK 2	Write any one devotional song / shabad with its notation in project file
WEEK 3	Explain in detail what is tarana and where it is sung? https://www.youtube.com/watch?v=DPdVZv6i3Qw
WEEK 4	Write the taans of Raag Bhairav in 8 matra and 16 matra. https://ncert.nic.in/textbook/pdf/khgv106.pdf

Pairing State:

Choose 2-3 different Sikkimese Thangkas (images can be sourced from books or online resources). Analyze their composition, color palette, line work, and the depiction of figures and symbols. Create a detailed painting of a section of a Sikkimese Thangka, focusing on accurate representation of the chosen elements and understanding the traditional techniques.
