

INTER-DISCIPLINARY PROJECT
THEME: EK BHARAT SHRESHTHA BHARAT
CLASS IX
2020-21

The **Interdisciplinary Approach** towards learning promotes engaging students and helping them to develop knowledge, insights, problem solving skills, self-confidence, self-efficacy, and a passion for learning, which are common goals, and interdisciplinary instruction and exploration promotes realization of these objectives.

Based on this approach, student thinking and work reflects an understanding of relationships and ideas across disciplines as students explore multiple disciplines through the use of project-based learning or other student-centered learning approaches. Habits of the mind are applied by students for reading, writing, and thinking across the disciplines. Students make connections, pose questions, explore solutions as a means to engage in real-world scenarios and application transfer, and apply knowledge to different contexts and scenarios. Working in flexible, cooperative groupings enables them to solve problems and analyze texts, demonstrating understanding of a task or concept through multiple perspectives.

As you are aware, ‘**Ek Bharat Shrestha Bharat**’ (EBSB) programme was launched by Hon’ble Prime Minister on Ekta Diwas (31st October 2015) on the occasion of birth anniversary of Sardar Vallabhbhai Patel to foster national integration. Under this initiative, Delhi has been partnered with Sikkim, a pristine state with exotic flora and fauna, sacred lakes, and cascading rivers and streams. To facilitate greater participation of students, it has been suggested by CBSE that various activities may be organized under this programme. This would not only lead our learners to research and explore, but also, in the process, develop a sense of bonding between the students of the partner state.

These activities will go a long way in developing our students as responsible citizens with deep belief in unity in diversity of the nation.

We wish that our students not only enjoy their vacations filled with fun and frolic, at the same time consistently pursue their academic and co curricular endeavors. We hope that this interdisciplinary project will motivate our students to think out-of-the-box, and trigger their critical thinking and exploration of a subject outside course material.

- **Please note that Part E is an individual project. The guidelines given under that section must be followed to complete the project. It must be compiled in a different folder by students individually and submitted separately**
- The class will be divided into groups comprising 5 members each on the basis of roll numbers i.e., 1-5, 6-10, etc. (8 groups per class)
- Each group is expected to do all the 5 tasks given under each part. (One task per child for each part)
- Each group will have a leader who will be coordinating with the group members, so that the work is completed and submitted on time
- Each group will collate and present their work in **one single file only**
- Make use of eco-friendly materials for preparing the models

Part A: English

Task 1: Link Lesson: The Sound of Music

Indian musical instruments chiefly constitute inter alia, Sitar, Sarod, Sarangi, Flute, Shehnai, Tabla, Pakhawaj, Harmonium, Jaltarangam, Mridangam, Ghatam etc. There are still many more instruments according to our vast culture and varied tradition. The lesson, '*The Sound of Music*' traces the origin of the 'shehnai' and musical notes.

For Task 1, you will narrate the journey of any two musical instruments from Sikkim in the form of short poems. Remember to sprinkle at least three to four poetic devices in it to enhance the beauty of your poems. You may read 'The Brook' by Alfred Lord Tennyson on the internet to get an idea about how to write an autobiographical poem. The following links should help you:

<https://sikkim.gov.in/departments/cultural-affairs-and-heritage-department/musical-instruments>

<https://en.wikipedia.org/wiki/Chyabrung>

<https://gurusoundzcity.wordpress.com/tag/indian-musical-instruments/>

<https://youtu.be/UTCWR37zMGc>

Task 2: Link Lesson: A Truly Beautiful Mind

In this task you will explore the life and times of two famous Indian scientists from Sikkim who have contributed to not only their field of study (subject) but also in literature just like the world famous physicist, Albert Einstein. Prepare their timeline mentioning their important achievements with the dates.

The following links will be helpful for you:

<https://venngage.com/blog/timeline-template/>

Remember: These are only suggestions! So, explore and find out more! Present your research work on an ivory sheet/ chart paper or any other material readily and easily available at home.

You can also look up these links for ideas:

<https://www.jagranjosh.com/current-affairs/top-15-science-technology-achievements-of-india-in-2019-1574943222-1>

<https://www.firstpost.com/tech/science/year-in-review-indias-biggest-achievements-in-the-fields-of-science-and-medicine-5784081.html>

Task 3: Link Lesson: Wind (Poem)

And the storms whispered, "She still stands tall to fight..."

Read this poem by Ephraim Glick and find a connection between the poem and our present circumstances. For Task 3, you will create a tribute to every woman in your life who fulfils every role in this hour of pandemic with love, compassion and humanity. Create a portfolio of either paintings/stories/poems/videos or audio clips dedicated to them. Each student in the group has to contribute with one personal piece in the portfolio.

Next, remember how the poem 'Wind' encourages you to learn patience and practice strength, similarly finding a connect between the two poems, write a descriptive paragraph in 100-150 words explaining the similarity in relation to the themes of the two poems. The following links can be seen for ideas:

<https://allpoetry.com/poem/12313392-She-Still-Stands-Tall-by-EphraimGlick>

https://youtu.be/_MvRSZrBmm0

<https://owlcation.com/humanities/How-To-Compare-Two-Or-More-Poems>

Task 4: Link Lesson: The Fun They Had

A comic strip is either one panel or three panels that tell a story or a joke. Humorous comics are usually found in the pages of some newspaper's entertainment sections, or more increasingly on the internet as more papers go online to save money. Editorial comics, are usually more serious and are found within the opinion pages of newspapers. Sometimes writers and artists collaborate and create comic books, where one storyline is shown altogether instead of having to wait for a new paper to find out what happens in the story. Some artists have taken classic novels and other books and turned them into graphic novels, where the story is illustrated in a comic book format. Some comic strips aren't even featured in papers at all. These are usually found on the internet and are referred to as web comics. All of these would not be in existence today if it wasn't for Richard F. Outcault's 'Yellow Kid'

For Task 4, make an interesting comic strip based on the lesson, 'The Fun They Had' that you have read recently. Your comic strip or storyboard should reflect a happy ending where Tommy and Margie are enjoying their "school" life. You can imagine they came across a travelogue of India and were amazed to see how beautiful our country is! Create from 5 to 15 storyboards.

You can learn how to make a comic strip with the help of the following links:

<https://www.imagineforest.com/blog/how-to-create-a-comic-strip/>

<https://youtu.be/JpT74FUOTuM>

<https://study.com/academy/lesson/what-is-a-comic-strip-definition-history.html>

<https://www.storyboardthat.com/storyboard-creator>

Task 5: Link Lesson: The Road Not Taken, The Little Girl

In this task, you will be creating a game of Snakes and Ladders in a new and an interesting manner. Each roll of the dice will give you an advice from the above mentioned link poem and lesson. Maybe not the whole of life; that would be rather two dimensional; but certainly parts of life are. Your game should have meaningful advices for the players. Not following the advice will take the player down! So, get creative and design an exciting game to play!

Look up the following links for exciting ideas:

<https://norahcolvin.com/2015/07/15/life-is-like-a-game-of-snakes-and-ladders/>

<http://itsbraap.blogspot.com/2012/08/snakes-ladders-quick-poem.html>

आधार पाठ:- *दो बैलों की कथा *ल्हासा की ओर *कैदी और कोकिला

कौशल :- *सृजनात्मकता-कल्पनात्मकता *प्रस्तुतीकरण (कलात्मकता, सौंदर्यबोध) *भाषिक-निपुणता (स्तर, शुद्धता, सटीकता) *विषय का सम्यक् ज्ञान *जीवनमूल्य (देशभक्ति, सांस्कृतिकता)

‘इन्द्रधनुषी भारत में चार चाँद लगाता सिक्किम प्रदेश’

प्रस्तुत विषय के आधार पर निर्देशानुसार कार्य कीजिए ।

वर्ग 1. 1975 में भारत देश में सम्मिलित सिक्किम प्रदेश की संस्कृति यथा खान-पान , पहनावे, धर्म, त्योहारों, लोकनृत्य, लोकगीत एवं वहाँ के कलाकारों को प्रदर्शित करते हुए दो पृष्ठों की एक आकर्षक ,ज्ञानवर्धक पत्रिका बनाइए । उसे एक आकर्षक सा शीर्षक भी दीजिए । (ए 3 आकार के कागज पर)

वर्ग 2. सिक्किम प्रदेश के धार्मिक, ऐतिहासिक, राजनैतिक, सांस्कृतिक एवं प्राकृतिक सौन्दर्य से परिपूर्ण,

दर्शनीय स्थलों की विशिष्टताओं को प्रदर्शित करते हुए उनके भ्रमण हेतु पर्यटकों को आकर्षित करने हेतु एक आकर्षक सा भित्तिचित्र ए3 आकार के चार्ट पर बनाइए ।

वर्ग 3. कोविड-19 की इस आपदाकाल में जहाँ कोरोना बीमारों और मृतकों की संख्या बड़ी तेज़ी से बढ़ रही है वहीं सिक्किम राज्य में आज भी इसके आँकड़े शून्य पर अटके हैं जो कि अत्यंत प्रशंसा की बात है । उनकी देशभक्ति को प्रणाम करते हुए उनके द्वारा अपनाए गए कोरोना से बचाव के कम से कम पाँच उपायों का सचित्र संकलन कर उन्हें सरकंडे/आइसक्रीम की डंडियों पर लिखकर उन्हें फूल का आकार

देकर उनका संकलन कर सुन्दर सा मनमोहक गुलदस्ता बनाइए ।

वर्ग 4. सिक्किम प्रदेश के नागरिकों के सहित सभी भारतीयों में देशभक्ति की भावना भरते हुए अनेकता में एकता के संदेश से युक्त 5-5 नारे अलग-अलग फ्लैश-कार्ड पर लिखिए ।

वर्ग 5. हिन्द देश के निवासी सभी जन एक हैं , रंग-रूप वेशभूषा चाहे अनेक है ।’

प्रस्तुत देशभक्तिपरक गीत को चार्ट पर आकर्षक ढंग से लिखिए तत्पश्चात् गीत की कुछ पंक्तियों को आकर्षक से आकाशदीप (कंदील) पर लिखकर उसे सजाइए ।

(कम से कम पाँच आकाशदीप)

Part B (b)

Subject- Sindhi

➤ Task – 1

Charita IX-D, Radhika IX –A

भारत देश जी संस्कृति अनेकता में एकता जो पैगामु डिए थी | जंहिंजी मिसाल समूरे विश्व में आहे | हरहिक प्रदेश जूं गूनागून खासियतूं आहिनि | उन्हनि मां सिक्किम, मेघालय, मणिपुर, आसाम एवं अरुणाचल प्रदेश जूं संस्कृति ते हिकु एलबम (पोस्टर - A - 4) ते ठाहियो |

➤ Task – 2

Vaanya IX-B

*भारत देश में रीतियुनि रिवाजुनि जी तमाम घणी अहमियत आहे | इन्हनि सोरहनि संस्कारनि जो असां जे जीवन सां गहिरो लाग्गपो आहे | जंहिंखे षोडश संस्कार चडजे थो | सोरहनि संस्कारनि जा नाला लिखंदे किनि बि पंजनि संस्कारनि खे फोटनि सुमेत डेखारियो | पोस्टर - A - 3 ते ठाहे एलबम तैयार कयो |

➤ Task – 3

Pranjal IX-C, Tanishka IX-D

*भारत देश में मिजमाननि खे हिकु अहमियत भरियो दर्जो डिनो वेन्दो आहे | हर घर में मिजमाननि खे भगवान मजियो वियो आहे | सिक्किम, महाराष्ट्र, गुजरात, तमिलनाडु एं प. बंगाल जी अजिया रस्म बाबति जाण डियो | हिक चार्ट ते कोलाज ठाहियो |

Part B (c)

Sujet – Français

Topic - Le voyage en Inde

Link Leçon – La Famille et Mon Voyage

Tâche 1- Le tourisme en Inde avec ses stations de montagne brumeuses, ses plages captivantes, ses monuments historiques, ses déserts dorés, ses eaux stagnantes sereines, ses sites de pèlerinage, sa faune riche et ses foires colorées captive le cœur de chaque touriste.

Préparer les itineraries pour trios jours de meilleures destinations en Inde pour les voyageurs français .

Tâche 2- La nourriture indienne est différente du reste du monde non seulement par son goût mais aussi par ses méthodes de cuisson. Il reflète un mélange parfait de différentes cultures et âges. La cuisine indienne est l'une des cuisines les plus populaires à travers le monde Dessiner un livre de recette sur les cinq aliments traditionnel en Inde.

Tâche 3- Nous sommes vraiment fiers d'être un Indien, car l'Inde est un pays connu pour son unité dans la diversité. Cela me rend fier car je fais partie d'un pays aussi libéral et modernis. Composer un poème de trios strophes sur “Mon Inde mon Fierté.

Tâche 4- Épopées impliquant généralement un temps au-delà de la mémoire vivante dans lequel se sont produites les actions extraordinaires des hommes et des femmes extraordinaires qui, en traitant avec les dieux ou d'autres forces surhumaines, ont donné forme à l'univers moral pour que leurs descendants, le

poète et son public, comprennent eux-mêmes en tant que peuple ou nation. Créer une planche d'histoire sur d'une scène intéressante épique indienne.

Tâche 5-Notre pays, les gens, la société, l'école, tous les autres endroits, doivent être propres et propres. Donc, notre pays devrait progresser jour après jour sans que nous ne puissions pas le faire progresser. Composer cinq slogans accrocheurs sur "Inde vert Inde proper" sur les cartes A3.

Part C

Subject:- Science

Task 1 - Roll numbers 1, 6, 11, 16, 21, 26, 31, 36

According to recent scientific studies, it has been found that we face at least 3°C of global heating by the end of the century. Make a **Power Point Presentation** of 8-10 slides elaborating the effects of rise in temperature on agriculture, water resources and forests in India. The slides should also include the effect of rise in temperature on countries like UAE , UK and Australia. In conclusion, compare the effect of rise in temperature due to climatic changes in all the four countries.

Web source: <https://www.publichealth.org/public-awareness/climate-change/>

<https://climate.nasa.gov/effects/>

<https://www.sciencedirect.com/science/article/abs/pii/S0959378098000338>

<https://www.moccae.gov.ae/en/knowledge-and-statistics/climate-change.aspx>

Task 2 .Roll numbers 2, 7, 12, 17, 22, 27,32, 37

Global warming is directly linked to the increase of greenhouse gases in our atmosphere, worsening the greenhouse effect.

Make a project file on different projects launched in India to decrease the release of these gases into air . These gases lead to rise in temperature and pollution of air .The project file should also include data on how countries like UAE , UK and Australia are dealing with the issue of green house gases produced by human activities.

Web source<https://www.nrdc.org/stories/how-you-can-stop-global-warming>

<https://www.northwestern.edu/fm/fm-staff/10-ways-to-stop-global-warming.html>

<https://www.bradford.gov.uk/environment/climate-change/what-is-climate-change-and-how-will-it-affect-the-uk/>

Task 3 -Roll numbers 3, 8, 13, 18, 23, 28,33, 38

Do a research work on action taken by India , UAE, UK and Australia in combating the problem of rise in temperature due to climate changes. Using the research work on the action taken by the above mentioned countries, do a **comparative study** on all four countries -India, Australia ,UAE and UK in this regard. This study to be done on A-4 sheets .

<https://www.climatechangeinaustralia.gov.au/en/climate-campus/australian-climate-change/australian-trends/>

<https://www.moccae.gov.ae/en/knowledge-and-statistics/climate-change.aspx>

<https://www.bradford.gov.uk/environment/climate-change/what-is-climate-change-and-how-will-it-affect-the-uk/>

Task 4 -Roll numbers 4, 9, 14, 19, 24, 29,34, 39

Increase in temperature due to climate changes leads to water scarcity. Ek Bharat , Shreshtha Bharat' also focus on water conservation to deal with water scarcity. Prime Minister urged people on June 30, 2019 to make water conservation a "Jan Aandolan".

Niti Aayog released the Composite Water Management Index 2.0 (CWMI 2.0). The objective of this index is to help the states manage water resources more efficiently .

Prepare a **graph** representing the values of CWMI 2.0 for states Delhi, Gujarat, Madhya Pradesh, Tamil Nadu and Sikkim and answer the following questions on A-4 sheets based on the analysis of this graph:

- Which state has highest value under CWMI 2.0 in water resource management?
- Identify the techniques and schemes used by the state identified in the above question for this higher value in CWMI 2.0.
- Sikkim has been paired with Delhi under the Ek Bharat , Shreshtha Bharat' programme** . What are the innovative techniques used by the state to conserve water?

The analysis to be done on sheets. The graph and the analysis can be put into a file (that can be hand made)

Web source : <https://economictimes.indiatimes.com/news/politics-and-nation/mann-ki-baat-pm-modi-makes-strong-push-for-water-conservation/articleshow/70417383.cms?from=mdr>

<https://www.insightsonindia.com/2019/08/24/composite-water-management-index-cwmi/>

Task 5 -Roll numbers 5, 10, 15, 20,25, 30,35, 40

As climate change increases outdoor temperatures, air conditioning will more often be used to maintain comfortable indoor conditions. The increased use of air conditioning driven by climate change is expected to affect health negatively. Air conditioners are now using Hydro fluorocarbons as coolants. The use of hydro fluorocarbons in place of chlorine-containing compounds, also has negative global consequences. The HFC compounds are over a thousand times more dangerous than carbon dioxide, establishing them as a significant climate concern.

Make a **poster** on A-3 or A-4 on the topic 'Cooling your home but warming the planet'. It should depict the problem of global warming caused by Air conditioners.

Web source :<https://climate.org/cooling-your-home-but-warming-the-planet-how-we-can-stop-air-conditioning-from-worsening-climate-change/>

An example of reducing the temperature of home is this innovative technique shown below. In the the bottle neck (oriented neck to interior) is encouraging the cooler air to be drawn in faster into the home. This cooler is installed on the windows. It is cheap and environment friendly device.



Find more such techniques that can be used to cool your home. Make a gadget using things available at home for this project.

https://www.straitstimes.com/sites/default/files/attachments/2017/06/24/ST_20170624_4IJAIRCON_3215694.pdf

Part D

Subject-Mathematics

Task 1:

Roll numbers 1, 6, 11, 16, 21, 26, 31, 36

How many participating ministries are there in EBSB? Write briefly the contribution of each department listed.

Task 2:

Roll numbers 2, 7, 12, 17, 22, 27,32, 37

List down the activities planned by different ministries to promote EBSB in 2020. Represent the data in the tabular form.

Task 3:

Roll numbers 3, 8, 13, 18, 23, 28,33, 38

Make a bar graph/ pie chart of the data collected in step 2

Task 4:

Roll numbers 4, 9, 14, 19,24, 29,34, 39

Sikkim has been paired with Delhi under the '**Ek Bharat, Shreshtha Bharat**' programme. Find out the number of official languages of Delhi and Sikkim and perform the following calculations:

- (i) Calculate 5 rational numbers between the two numbers so obtained.
- (ii) Represent the square root of the difference of the two numbers on the number line

Task 5:

Roll numbers 5, 10, 15, 20, 25, 30, 35, 40

- I) Conclude and comment upon the effectiveness of EBSB based on data collected.
- II) Represent week-wise number of reported COVID-19 cases in India in the form of double bar graph for the month of March and April 2020. Analyze the data and write at least three steps to be taken by the administration (Central Govt./State Govt.)in making the situation better.

(The above mentioned question on COVID -19 is mandatory for each group.)

Part E

Subject: Social Science

Skill to be assessed:

- Understanding
- Analysing
- Evaluating
- Expression
- Presentation of ideas
- Time management

DISASTER MANAGEMENT PROJECT

Project should be developed and presented in this order

- Cover page showing project title ,schools name, student's name, class and section and academic session (year)
- List of contents with page number (approx...15 pages)
- Acknowledgements: Acknowledging institution, offices and libraries visited and people who have helped.
- Project Overview: Purpose ,aim, methodology and experience while doing the project
- Chapters with relevant headings.
- Summary and conclusions based on findings.
- Bibliography should have the title, pages referred ,author, publisher ,year of publication and if a website, the name of the website with a specific link which have been used.
- Teachers evaluation report

NOTE: Only eco friendly material to be used

PROJECT EVALUATION PROFORMA

The Proforma should be attached on the last page of the project.

School's Name

Address

Student's Name

Roll. No

Class

Section

Teacher Assessment

1. Content accuracy and originality

2. Presentation and creativity

3. Process of project competition

4. Viva –voce

5. Overall remarks:

6. Teacher signature:

Date:

7. School stamp

Topics and themes for project work on Disaster Management

“When we speak only of climate change ,there is a perception of our desire to secure the comforts of our lifestyle .But when we speak of climate justice ,we demonstrate our sensitivity and resolve to secure the future of the poor from the perils of natural disasters.”

By- Narendra Modi (Prime Minister of India)

Keeping the above statement in mind, prepare a project on Disaster Management as per the following guidelines:

1. Highlight the following:

- ❖ Definition of 'Disaster'.
- ❖ What is disaster management cycle?
- ❖ What is a 'Hazard'? How is it classified?
- ❖ Differentiate between hazard and disaster.
- ❖ Contrast and compare physical, chemical and biological hazard.

2. Complete the following table with the relevant information:

Hazard	Elements of the hazard	Vulnerable groups	Prevention	Examples
Physical				
Chemical				
Biological				

3 a. Prevention and Mitigation of Common Disasters.

- ❖ Earthquake (Roll No-1 -12)
- ❖ Cyclones (Roll No-13 -24)
- ❖ Flood (Roll No-25 -36)
- ❖ Drought (Roll No-37 -48)

3b. Based on your selection in Point 3a above, enumerate the following in your project:

- ❖ Meaning
- ❖ Causes
- ❖ Prevention and mitigation measures
- ❖ Impact on national economy
- ❖ Key challenges to safe schools according to National Disaster Management Authority (NDMA)

Part F

Subject-Information Technology & Computer Applications

Do any one of the following:

- Create a brief, effective, engaging and visually rich presentation on **Learning during COVID 19** using various tools and animation techniques of Power point.
- Design an innovative story board/ comic strip/ presentation representing the **Cyber Safety / Computer Security**.
- Create an inspiring short movie using any of the open source software representing **Innovative idea - How to create an impactful Green Zone** in your city.
- Identify and design a high-tech India and represent it with the help of a **floor plan of smart city/ home/ school/ under Atamirbhar Bharat**.
- Design a vibrant brochure using Microsoft Publisher/ Word Processor on **Developments in the field Technology in India**.
- Design a digital poster using any open source software on **Interesting Facts about Internet / How to create, connect, share respect on Internet**.

Share the assignments using Google Classroom (InfoTech9 - 402)