SUMMER VACATION ASSIGNMENT 2025

CLASS-IX

The Earth is warm, the Sun's ablaze,
It is time of carefree days!
And bees abuzz that chance to pass,
May see you snoozing in the grass!
Hurray! It's Summer Break again!

MAY 31, 2025 TO JULY 06, 2025

The School Reopens on JULY 07, 2025.

NAME_____   ROLL NO._____

Dearest Students

Greetings from NIHS!

Summer Vacation brings with itself a much-needed breather from hectic schedule. It is the most awaited time meant for relaxation and enjoyment, and if this time is utilised for creative pursuits, it becomes a learning experience.

Keeping this in view, we have designed a few exciting fun projects/ assignments to enhance learning skills, help understand concepts better, and make for a great crash course aimed at improving your academic output as well. These assignments will not only help you to revise and reinforce what you have learned in school, but will also enrich your knowledge.

This time we embark on a fascinating journey through the rich cultural tapestry and diverse landscape of vibrant state of India- **Telangana.** Get ready to explore the tradition, culture, cuisines, attires, dances, folksongs, history and much more. In a nutshell, the Summer Vacation Assignment has been designed to be a meaningful and creative exercise.

As parents, kindly maintain and lend support to your children and ensure that they complete the given work, well-in-time and to their best ability. Your encouragement can actually make a huge difference to the ultimate learning outcome of these projects.

Important Note:

- Homework must be completed neatly and creatively, in accordance with the given specifications and relevant to the question.
- Parental supervision is advised and required while surfing the internet.
- All the Art Integration Projects of Telangana, to be compiled in one common beautifully decorated file folder.
- These projects/ assignments will be assessed as Subject Enrichment Activity to be added in your Portfolio.
- Submit the Summer Vacation Assignment to the Class Teacher within a week of reopening of the school.

A Little Note for Parents

- These projects/ assignments will be assessed as Subject Enrichment Activity to be added in your child's Portfolio.
- Submit the Summer Vacation Assignment to the Class Teacher within a week of reopening of the school.
- Make sure your child has a quiet, well-lit place to do homework.
- Don't let your child do homework with the television on or in places with other distractions, such as mobile phones, people coming and going, etc.
- Make sure the material your child needs, such as paper, pencils and a dictionary, are available.
- Ask your child if special material is required for some projects and get them in advance.
- Help your child with time management.
- Establish a set time each day for doing homework. It will help regulating your child's Body Clock as per the set schedule.
- Be positive about homework.
- Tell your child how important school is. The attitude you express about homework will be the attitude your child acquires.
- When your child does homework, you too do your work.
- Show your child that the skills they are learning are related to things you do as an adult. If your child is reading, you read too.
- When your child asks for help, provide guidance, not answers.
- Giving answers means your child will not learn the material. Too much help teaches your child that when the going gets rough, someone will do the work for him or her.
- Help your child figure out what is hard homework and what is easy homework.
- Ask your child to do the hard work first. The harder a task is, the more energy and focus we need to complete it. Starting the harder tasks when you are tired is more difficult and often results in putting them off for another day.
- Reward progress in homework.
- If your child has been successful in homework completion and is working hard, celebrate that success with a special event (e.g., pizza, a morning or evening walk, a trip to the park, star gazing) to reinforce the positive effort.

Best wishes for Happy Holidays!

NIHS Team

ENGLISH

Q.1 TIME TRAVEL

1. Topic: Time Travel Through Tenses: Understanding Time Lapse in Language

Material Required:

(i)Use **A4 sheets** (3 pages total).

(ii)Write in neat **handwriting**

(iii)Include **headings**, underline key terms, and use **coloured pens** or light decoration for better presentation.

(iv)You may include illustrations or drawings related to time, clocks, past/future scenes, or characters.

Procedure:

(a) Page 1: Title & Introduction

- o Title: *The Power of Tense Shifts in Narrative Writing*
- o Define "tense shift" and briefly introduce their purpose.

(b) Page 2: Creative Application

- o Write a short original scene or paragraph using all three tenses.
- o Example: "You find an old, dusty key hidden under a loose floorboard in your room. You have no idea what it opens, but something tells you it's the start of an adventure."

(c) Page 3- Highlight how tense changes in piece of writing and explain the effects they provide.

- o Add a conclusion about what you learned about tense shifts.

Q.2 ART INTEGRATION PROJECT

1.Topic: Explore Telangana Language

Write an elaborative essay on Telangana language 'Telugu' covering its origin, use in literature, etc. Make a list of 10 Telangana words with English meaning.

(a)Content should be of 8-10 pages on interleaf white sheets.

(b)Use black gel pen or coloured sketches for headings, blue gel pen for content and well sharpened pencil for tables, margins, or any diagrams.

(c)**Page1**- COVER page, A4 sheet, including topics name, subject, submitted to (subject teacher name) (in left bottom) and submitted by (student's name) in right bottom corner along with class, roll no and session.

(d)**Page2**, CERTIFICATE page, which state that the given information in project is true.

(e)**Page 3,** ACKNOWLEDGEMENT, a thanking note from the student for their helping hands in the project.

(f)**Page 4,** INDEX, covering all the topics with page numbers.

(g)**Page 5,** onwards required content.

(h)Last page, BIBLIOGRAPHY, which includes brief of all the sources through which the information is being collected.

NOTE- Project should be neat and clean.

(Solve the given question in English notebook)

Q.3 Exploring Schools: Past, Present & Future

Prepare a comparing and contrasting table in your notebooks highlighting Margie's future school and today's real schools and give your own opinions in the conclusion part.

Q.4   WORKSHEET
A. Read the following paragraph and answer the following questions:

The Changing Nature of Work in the 21st Century

The 21st century has witnessed a seismic shift in the nature of work, driven by rapid technological advancements, globalization, and evolving social expectations. Traditional notions of employment—marked by 9-to-5 schedules, fixed office spaces, and long-term job stability—are steadily giving way to more flexible, dynamic, and decentralized work models. Remote work, freelancing, and gig economy roles are increasingly common, offering workers more autonomy but also posing new challenges in terms of job security, benefits, and work-life balance.

Technology has played a dual role in this transformation. On the one hand, digital tools have enabled greater connectivity, collaboration across borders, and unprecedented access to global talent pools. On the other hand, the pressure to be constantly available and productive has blurred the lines between personal and professional life. The rise of automation and artificial intelligence has also sparked concerns about job displacement, as machines take over tasks once performed by humans.

However, this evolving landscape is not without its opportunities. As routine tasks become automated, there is growing emphasis on uniquely human skills—creativity, emotional intelligence, adaptability, and critical thinking. Organizations are increasingly valuing employees not just for their technical expertise, but for their ability to learn, innovate, and lead in uncertain environments.

To thrive in this new era of work, both individuals and institutions must embrace lifelong learning and a growth mindset. Rather than fearing change, workers must view it as an opportunity to reinvent themselves. Governments and organizations must also rethink policies around labour rights, benefits, and education to support a workforce in constant transition.

Based on the given paragraph, answer the following questions:

i) What major transformation in employment does the author describe in the passage?
ii) How has technology both helped and hindered the modern work environment?
iii) What concerns does the author raise about automation and artificial intelligence?
iv) What qualities are becoming more important in the modern workforce, according to the passage?
v) According to the passage, the modern workplace is increasingly characterized by:
a) Stability and long-term contracts   b) 9-to-5 office jobs
c) Flexibility and decentralized models   d) Minimal use of technology
vi) The author suggests that to adapt to new work trends, individuals must embrace:
a) financial independence and personal branding   b) Lifelong learning and a growth mindset
c) Technological resistance and job security   d) Uniform working hours and rigid schedules

vii) Complete the analogy:
Automation is to routine tasks as human workers are to _____.

viii) Assertion (A): The changing nature of work has led to increased autonomy for workers.
   Reason (R): Workers now have greater access to gig economy and freelance opportunities.
      a) Both A and R are true, and R is the correct explanation of A
      b) Both A and R are true, but R is not the correct explanation of A
      c) A is false, but R is true
      d) Both A and R are false

ix) The author implies that the key to future career success lies in _____.

x) A. Fill in the blanks with correct forms of verb:

Last weekend, my family and I **(i)** _____ **(go)** on a short trip to the hills. We **(ii)** _____ **(leave)** early in the morning and **(iii)** _____ **(reach)** our destination by noon. The weather **(iv)** _____ **(be)** pleasant, and we **(v)** _____ **(enjoy)** the fresh air and scenic views.

B. Fill in the blank with the correct determiner:

vi) _____ of the information provided was inaccurate.
a) Many   b) Few   c) Some   d) All
vii) There isn't _____ milk left in the bottle.
a) any   b) some   c) many   d) few

C. Choose the correct modal verb to complete the sentence:

viii) You _____ carry your ID card to enter the examination hall.
a) might   b) can   c) must   d) would
ix) We _____ reduce our plastic use to protect the environment.
a) should   b) could   c) would   d) may

D. Identify and correct the error in the sentence: (SUBJECT-VERB AGREEMENT)

x) The list of items are placed on the table.

ERROR	CORRECTION

xi) Neither Rina nor her friends was invited to the event.

ERROR	CORRECTION

xii) Each of the girls sing beautifully.

ERROR	CORRECTION

हिंदी

प्रश्न 1.

(क) गिलहरियों की 5 प्रजातियों का सचित्र वर्णन करें।(ROLL NOS.1-18)

निर्देश: गिलहरी का चित्र, नाम, क्षेत्र, जीवनकाल, अन्य तथ्य

(ख) भक्त कविः कबीर (4), गुरु नानक देव (4), नामदेव (4), मीराबाई (4) के विषय में जानकारी एकत्रित करें तथा उनकी रचनाओं का संकलन करें। (ROLL NOS.19-36)

निर्देश: चित्र, जन्म, मृत्यु, प्रारंभिक जीवन, रचनाओं के नाम, अन्य तथ्य

प्रश्न 2. आर्ट इंटीग्रेशन

विषय: तेलंगाना राज्य के खान-पान व GI टैग के विषय में सचित्र जानकारी एकत्रित कर लिखें|

क) विषय-वस्तु 8-10 पृष्ठों की होनी चाहिए, जो कि इंटरलीफ सफेद शीट पर हो।

ख) शीर्षकों के लिए काले जेल पेन या रंगीन रेखाचित्र, विषय-वस्तु के लिए नीले जेल पेन और तालिकाओं, मार्जिन या किसी भी आरेख के लिए अच्छी तरह से नुकीली पेंसिल का उपयोग करें।

ग) **पेज 1-** कवर पेज, A4 शीट, जिसमें विषय का नाम, विषय, (विषय शिक्षक का नाम) को प्रस्तुत किया गया (बाएं निचले कोने में) और (छात्र का नाम) द्वारा दाएं निचले कोने में कक्षा, रोल नंबर और सत्र के साथ प्रस्तुत किया गया।

घ) **पेज 2-** प्रमाण पत्र पेज, जिसमें बताया गया है कि परियोजना में दी गई जानकारी सत्य है।

ङ) **पेज 3-** आभार, परियोजना में मदद करने के लिए छात्र की ओर से धन्यवाद नोट।

च) **पेज 4-** अनुक्रमणिका, पृष्ठ संख्याओं के साथ सभी विषयों को कवर करना।

छ) **पेज 5-** आगे आवश्यक सामग्री।

ज) **अंतिम पृष्ठ-** ग्रंथसूची, जिसमें उन सभी स्रोतों का संक्षिप्त विवरण शामिल है जिनके माध्यम से जानकारी एकत्र की जा रही है।
नोट- परियोजना साफ-सुथरी होनी चाहिए

आवश्यक सामग्री:

1. व्यजन के चित्र
2. विभिन्न प्रकार के रंग
3. A4 शीट

निर्देश: 5 ऐसे खानपान के व्यंजन जिन्हें GI टैग प्राप्त है|

(i) **मुख्य पृष्ठ: -** A4 शीट (विषय का नाम)

प्राप्तकर्ता- शिक्षक का नाम (पृष्ठ के नीचे बाएं ओर)

प्रेषक- छात्र का नाम, कक्षा, अनुक्रमांक और सत्र (पृष्ठ के नीचे दाएँ ओर)

(ii) **दूसरा पृष्ठ:** प्रमाण पत्र (परियोजना कार्य में दी गयी पूर्ण जानकारी सत्य है)

(iii) **तीसरा पृष्ठ:** अभिस्वीकृति (सभी सहायकों को धन्यवाद देते हुए एक नोट)

(iv) **चौथा पृष्ठ:** विषय सूची (पृष्ठ नंबर सहित सभी विषयों के नाम)

(v) **सम्पूर्ण परियोजना कार्य| (5-6 पृष्ठ)**

(vi) **अंतिम पृष्ठ:** ग्रंथ सूची (सहायक सामग्री)

प्रश्न 3: किसी एक पर्वतारोही के विषय में सम्पूर्ण जानकारी एकत्रित कर लिखें| (250-300 शब्द)

निर्देश: मुख्य बिंदु- जन्म तिथि, जन्म स्थान, प्रारंभिक जीवन व शिक्षा, पर्वतारोहण की शुरुआत, उपलब्धियां,आदि -कार्यपुस्तक में करें

(नीचे दी गयी कार्य-पत्रिका को हिंदी कार्यपुस्तिका में लिखिए।)

प्रश्न 4:- निम्नलिखित गद्यांश को पढ़कर पूछे गए प्रश्नों के उचित उत्तर दें:

सच्चाई व ईमानदारी वे मूल्य हैं जो किसी भी समाज की नींव मजबूत बनाते हैं| एक इमानदार व्यक्ति पर सभी लोग विश्वास करते हैं, और उसे समाज में सम्मान प्राप्त होता है| हालाँकि सच्चाई के मार्ग पर चलना आसान नहीं होता, क्योंकि उसमे कई बार कठिनाइयों का सामना करना पड़ता है| फिर भी, दीर्घकाल में यही मार्ग सबसे श्रेष्ठ और संतोषजनक है|

कथन व कारण को पढ़कर सही उत्तर का चुनाव करें:

I. कथन और कारण दोनों सही हैं और कारण कथन की सही व्याख्या करता है|
II. कथन सही है और कारण गलत है|
III. कथन गलत है और कारण सही है|
IV. कथन और कारण दोनों सही हैं किन्तु तर्क कथन की सही व्याख्या नहीं करता|

1) कथन: ईमानदारी से व्यक्ति समाज में आदर प्राप्त करता है|
   कारण: ईमानदारी का मार्ग कठिन होता है|

2) कथन: झूठ से प्राप्त सफलता स्थायी नहीं होती|
   कारण: झूठ बोलने वाला व्यक्ति हमेशा भय से मुक्त रहता है|

प्रश्न 5: निम्नलिखित व्याकरण सम्बंधित प्रश्नों के उत्तर दें:- (कार्यपुस्तिका में करें)

1) शब्द और पद में क्या अंतर है? उदाहरण सहित उत्तर स्पष्ट करें|
2) रेखांकित पदों के नाम लिखें व उनका प्रयोग कर एक और सार्थक वाक्य बनाएं:
   I. कुसुम बहुत <u>धीरे धीरे</u> लिखती है|
   II. <u>उसने</u> बताया था की <u>वह</u> आज नहीं आएगा|
3) दो ऐसे उपसर्गों का प्रयोग करके शब्दों का निर्माण करें जिनका अर्थ "अधिकता" से हो| (हर उपसर्ग से चार-चार शब्द बनाएं)
4) नीचे दी गयी धातु में उचित प्रत्यय जोड़कर नए शब्द का निर्माण करें तथा उनका वाक्य में प्रयोग करें:
   I. बुद्धि
   II. बो
   III. भाव
5) निम्नलिखित शब्दों का संधि विच्छेद करें:
   I. गुरेश्वर
   II. रामोषा
   III. रघोदेय

6) निम्नलिखित शब्दों का संधि मेल करके दिखाएँ तथा संधि भेद बताएं:

    I. मन+ उदय

    II. धर्म+ ईश्वर

    III. शिक्षा+ अर्थी

7) निम्नलिखित विराम चिन्हों का प्रयोग कर 2-2 वाक्यों का निर्माण करें:

    I. :

    II. !

8) निम्नलिखित वाक्यों में उचित स्थान पर विराम चिन्ह लगायें:

    I. मैं कल कक्षा में देर से पहुंचा और रोहन ने मुझसे कहा आज तुम्हारा एक महत्वपूर्ण पाठ देरी की वजह से छूट गया

    II. मेरे मित्र ने मुझसे पूछा क्या तुम्हे लगता है हमें विद्यालय में होने वाले कार्यक्रम में भाग लेना चाहिए

9) निम्नलिखित वाक्यों में उद्देश्य व विधेय छांट कर अलग करें:

    I. जब बारिश होती है तब बच्चे बाहर नहीं जाते।

    II. अगर तुम समय पर आओगे तो हम फिल्म देखने जायेंगे।

    III. गाँव के लोग मिलकर त्यौहार मना रहे हैं।

10) निम्नलिखित वाक्यों में उद्देश्य का विस्तार पहचानें व रेखांकित करें:

    I. पुस्तकालय में कोने में बैठा बूढ़ा आदमी अखबार पढ़ रहा है।

    II. गहरे लाल रंग की टोपी वाला लड़का बहुत तेज़ दौड़ता है।

प्रश्न 6 क) निम्नलिखित प्रश्नों के उत्तर दीजिए: (50-60 शब्दों में उत्तर दें)

1) बुढ़िया के दुःख का अपमान करने वाले समाज की तुलना वर्तमान समाज से करें और विचार करें कि दोनों में क्या समानताएं और असमानताएं हैं। अपने विचारों को प्रकट करें।

2) क्या आपको लगता है की समाज का व्यक्ति के दुःख मनाने के तौर तरीको पर निर्देश देना उचित है? अपने विचार प्रकट करें।

3) आपके अनुसार लड़कियों का एवरेस्ट की चढ़ाई जैसे कठिन अभियानों में भाग लेने का क्या महत्त्व है?

4) बिचेंद्री पाल की एवरेस्ट विजय के बाद उनसे की गयी बातचीत को संवाद के रूप में लिखें।

5) रैदास ने किस प्रकार अपने पदों में जाती-पाती के भेदभाव को नाकारा है? उनके दो ऐसे पदों की व्याख्या करें जिसमें यह सन्देश प्रत्यक्ष हो।

6) यदि रैदास आज के समाज को देखते तो वे अपने पदों द्वारा क्या सन्देश देने का प्रयास करते?

7) रहीम के दोहे आज के समय में भी किस रूप से प्रासंगिक है?

8) रहीम की भाषाशैली पर अपने विचार प्रकट करें। आपके अनुसार उनकी भाषा में इतनी विविधता क्यों है?

MATHEMATICS

Q.1 PROJECT (3D MODEL)

1.Topic: A **Square Root Spiral** is a geometric figure that visually demonstrates how square roots are related to one another. **(EVEN ROLL NOS.)**

Material Required:

(i)Graph Paper
(ii)Ruler
(iii)Compass
(iv)Pencil and Eraser
(v)Markers or Coloured Pens

Objective

This model helps students better understand the concept of square roots in a **geometrical** way. They can visualize how each square root increases in size and gain insight into the relationship between squares and their roots.

Procedure:

(a) Draw the First Square
  - Start by drawing a **1x1 square**. Label the first corner as **(0,0)** and the top right corner as **(1,0)**.
  - The side of this square represents **1\sqrt{1}**, which equals 1.

(b) Draw the Second Square
  - Next to the first square, draw a **2x2 square**.
  - This square represents **2\sqrt{2}**.
  - Start the square by drawing a horizontal line from the top-right corner of the first square and extending it to the right, with the side of the square being equal to **2\sqrt{2}**.

(c) Draw Quarter Circles
  - Place a **compass** with its centre at the bottom-left corner of the square.
  - Draw a quarter circle from the bottom-left corner of each square, making sure the radius of each circle corresponds to the square root of the number (i.e., for **1\sqrt{1}**, the radius is 1, for **2\sqrt{2}**, the radius is 2, and so on).

(d) Extend the Spiral
  - Continue adding squares with increasing side lengths, where each side length corresponds to the square root of the next integer. For example:
    - The next square will be a 3x3 square, and the next radius will correspond *to 3\sqrt{3}*.
    - Continue this pattern for as many squares as you like.
  - Each time, draw a quarter circle for each square, where the radius corresponds to the square root of the number associated with that square.

(e) Draw the Spiral Path
  - The spiral will form as you connect the edges of each quarter circle.
  - The spiral starts at the centre of the first square and grows outward as you continue drawing quarter circles.

(f) Final Touches
  - Once all the squares and quarter circles are drawn, use markers to highlight the squares and spiral path.
  - Label each square with its corresponding integer and the square root. For example, for the **3x3 square**, label it with **9\sqrt9.**

Example:
Here's how the first few steps of the spiral will look (using square roots of 1, 2, 3, 4, etc.):

- **Square 1**: $1\sqrt{1}$ o   Side length: 1 o   Quarter circle radius: 1
- **Square 2**: $2\sqrt{2}$ o   Side length: 2   Quarter circle radius:

By repeating this process, students will be able to see how square roots form an expanding spiral, which visually represents their increasing values.
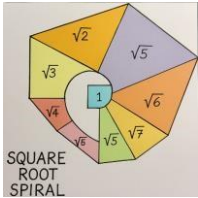

2. **Topic:** Model Showing Types of Polynomials **(ODD ROLL NO'S.)**

Objective:

This model will help students visually differentiate between the various types of polynomials, understand their structure, and see how polynomials are built from terms. The combination of mathematical and visual elements will aid in better understanding and retention of the topic.

Procedure:
(a) Prepare the Base: Use a large sheet of paper or poster board.
(b) Divide into Sections: Label sections for monomial, binomial, trinomial, and polynomial with more than three terms.
(c) Add Visuals: Draw shapes or boxes to represent the terms for each type. For instance, you can use a box for monomials, two connected circles for binomials, and three circles for trinomials.
(d) Label Examples: Inside the shapes, write different polynomial examples for each type.
(e) Decorate and Colour: Use colour to distinguish between the different types of polynomials, making the model visually appealing.
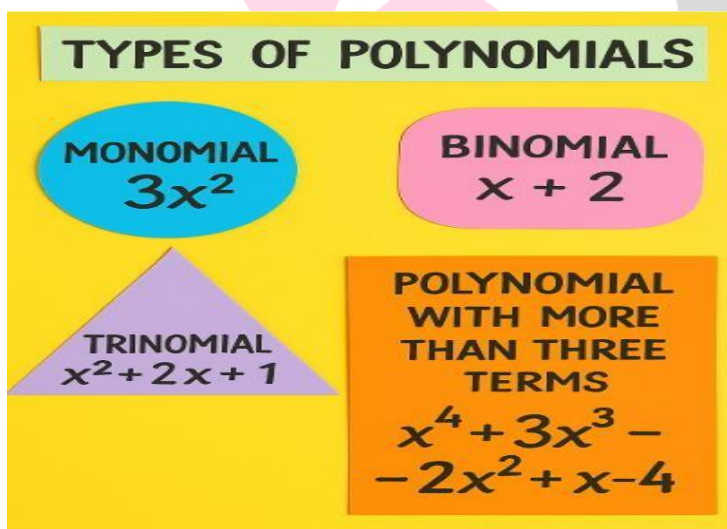
Q.2 ART INTEGRATION PROJECT

1.Topic: Literacy Rate of Telangana

(a) Content should be of 8-10 pages on interleaf white sheets.

(b) Use black gel pen or coloured sketches for headings, blue gel pen for content and well sharpened pencil for tables, margins, or any diagrams.

(c) **Page1**- COVER page, A4 sheet, including topics name, subject, submitted to (subject teacher name) (in left bottom) and submitted by (student's name) in right bottom corner along with class, roll no and session.

(d) **Page2**- CERTIFICATE page, which state that the given information in project is true.

(e) **Page 3,** ACKNOWLEDGEMENT, a thanking note from the student for their helping hands in the project.

(f) **Page 4-** INDEX, covering all the topics with page numbers.

(g) **Page 5-** Onwards required content.

(h) **Last page**- BIBLIOGRAPHY, which includes brief of all the sources through which the information is being collected.

NOTE- Project should be neat and clean

Objective:
(i) To help students understand the importance of literacy and its impact on society.
(ii) To analyse the literacy rate of Telangana using mathematical concepts such as percentages, data representation, and graphs.
(iii) To create a visual representation of the literacy rate in Telangana with creative art.

Material Required:

(i) Graph Paper or Poster Board
(ii) Coloured Markers or Pencils
(iii) Glue/Tape
(iv) Scissors
(v) Printed Data on Literacy Rate
(vi) Ruler
(vii) Compasses
(viii) Images or Illustrations related to literacy, education, books, etc.
(ix) A coloured project file

Procedure:

(a) Research on Literacy Rate of Telangana
   o Start by researching the **literacy rate of Telangana**. The literacy rate data is available from government census reports or online resource.
   o Collect Data on:
   Urban vs Rural Literacy.
   Male and Female Literacy Rate.

- District-wise Literacy Rates in Telangana.

(b) Representation of Data in Mathematics
- **Calculate the Literacy Percentage**: Use the data to calculate the percentage of literacy rates across various groups (male, female, urban, rural, etc.)
  - (i) **Bar Graph Representation**: Draw a bar graph to represent different literacy rates (e.g., male vs female, urban vs rural).
  - (ii) **Pie Chart**: Draw a pie chart to represent the distribution of literacy rates across different categories, such as Male and Female Literacy.

(c) Use of Colours: Use vibrant colours to make the graph visually appealing. Each category in your bar graph and pie chart can have its own colour, for example:
  - (i) **Male Literacy Rate**: Blue
  - (ii) **Female Literacy Rate**: Pink o **Urban Literacy Rate**: Green o **Rural Literacy Rate**: Yellow

(d) Creating the Poster
- **Organize the sections**:
  - (i) The top of the poster should have a title: "Literacy Rate in Telangana."

- **Labelling**:
  - (i) Add **labels** to your graphs and illustrations, such as "Urban Literacy," "Rural Literacy," "Male Literacy," and "Female Literacy.

Q.3 SUBJECT ENRICHMENT ACTIVITY

1. Topic: 3D Model of a Wheel Representing Different Types of Numbers.
(ROLL NOS.1-18)

Objective:
(i)To understand the classification of numbers.
(ii)To explore how different types of numbers are related to each other.
(iii)To visually represent these relationships using a 3D model.

Material Required
(i)Cardboard or Thick Paper
(ii)Scissors
(iii)Ruler
(iv)Glue or Tape
(v)Coloured Markers/Pens
(vi)Compass or Circular Object
(vii)Labelling Paper or Stickers
(viii)Coloured Paper or Stickers for decoration

Procedure:

(a) Draw the Wheel Base
- **Draw a large circle** on a piece of cardboard using a compass or any round object.
- **Divide the circle** into equal sections. For example, you can divide it into **6 segments** (one for each type of number).
- Cut the circle out carefully.

(b) Create the Segments for Each Type of Number

o Label each segment with one of the types of numbers:

    a. **Natural Numbers (N)** o   **Whole Numbers (W)** o   **Integers (Z)** o
    Rational Numbers (Q) o   **Irrational Numbers**
    b. **Real Numbers (R)**

o For each segment, colour code it differently to make the wheel visually appealing and easy to understand.

    Natural Numbers: Green o **Whole Numbers**: Blue o **Integers**: Yellow o
    Rational Numbers: Red o **Irrational Numbers**: Purple o
   **Real Numbers**: Orange

(c) Label the Segments
Write the definitions of each number set inside its corresponding segment.

(d) Create the 3D Effect
o To make the model 3D, fold each segment slightly so that it stands out from the rest of the wheel.
o **Mount the wheel on a base**: Cut a small circle from cardboard to place underneath the main circle. Attach it at the centre of the wheel, making it the "hub" of the wheel.
o If you want to add a spin effect, you can attach a small pin or brad in the centre of the wheel to allow it to spin.

(e) Assemble and Final Touches
o Once all the segments are labelled and coloured, and the 3D effect is achieved, glue or tape the segments in place.
o **Decorate the centre** of the wheel with additional designs, such as a small circle representing the "hub" or a decorative piece showing **"Types of Numbers"**.
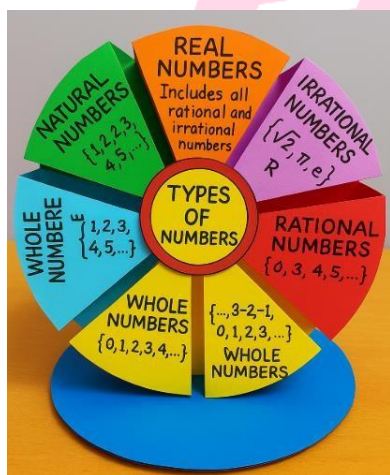
2. Topic: 3D Cube Model for Algebraic Identities. (ROLL NOS.19-36)

Objectives:
This 3D algebraic identity model are to improve student understanding, engagement, and retention of algebraic concepts. It makes learning interactive, encourages creative thinking, and helps students visually and conceptually grasp the relationships between different algebraic identities.

Material Required: -

(i) Cardboard or Foam Board (to create the cube faces)
(ii) Coloured Markers/Pens (to write the algebraic expressions)
(iii) Ruler and Compass (for accurate cutting and drawing)
(iv) Glue/Tape (for assembling the cube)
(v) Scissors (to cut out the shapes)
(vi) Coloured Paper (optional for decoration)

(vii) Labels/Stickers (for labelling each face)

Procedure:

(a) Create the Cube Structure
- o Cut out six square faces from cardboard or foam board. Each square should be of equal size.
- o Assemble the squares into a cube shape, gluing or taping them together. Make sure the cube is stable and can stand upright.

(b) Label Each Face with an Algebraic Identity
(c) Label each face of the cube with a different algebraic identity.
(d) Colour Each Face Differently
- o Use different colours for each face of the cube to make it visually appealing.
- o You can use **colour coding** to represent the various types of algebraic identities:
  - c. **Green** for square identities.
  - d. **Blue** for sum and difference of cubes.
  - e. **Yellow** for cubic expansions.
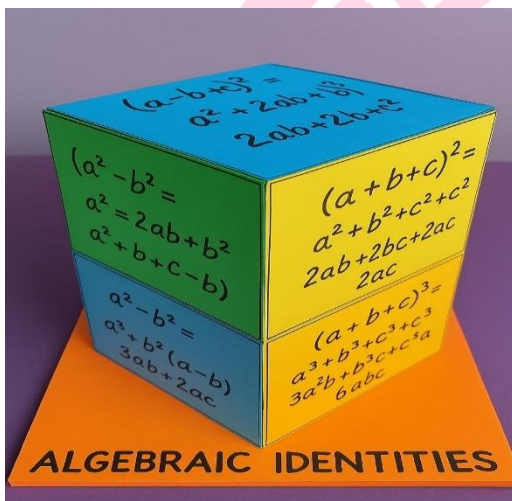
(Solve the given worksheet in Maths notebook.)

Q.4 WORKSHEET

(i) What is the value of $\sqrt{4}$ and $\sqrt{82}$?

(ii) Fill in the blanks.

(a) The decimal expansion of a rational number is either ___ or _____.

(b) The product of two irrational numbers may be __.

(c) The degree of $x^2 + 3x + 4$ is _____.

(d) The product of $(x+2)(x+3)$ is a __polynomial.

(e) A polynomial of degree 1 is called a _____.

(iii) If $p(x) = x^2 + 3x + 2$ find the value of $p(2)$.

(iv) Factories $x^2 - 4$.

(v) Rationalize the denominator of $1/[7+3\sqrt{3}]$.

(vi) If $x = 2+3\sqrt{2}$, then find the value of $(x+14/x)$.

(vii) If $a=-2$, $b= -1$, then find the value of $a^{-b} - b^{\wedge}a$.

(viii) Find the value of x in $3+2^x = (64)^{1/2} + (27)^{1/3}$.

(ix) **Case Study** I

Mrs. Rakhi lives in an undeveloped area where there is no facility of proper education. But one thing is available in that area i.e., network. Since she was very keen to take education, so she decided to complete her education through e-learning. One day she was studying number system, where she learnt about rational numbers, irrational numbers and decimal numbers, etc.

On the basis of the above information, solve the following questions:
  (a) Convert the rational number 2/15 into decimal number.
  (b) Write one irrational number between 2.365 and 3. $1\overline{25}$.
  (c) If $x+\sqrt{2} = 3$, find the value of 1/x.
  (d) Find the product of two irrational numbers $(7+2\sqrt{3})$ and $(7-2\sqrt{3})$.

(x) Check whether the polynomial $f(x) = 4x^3 + 4x^2 - x - 1$ is a multiple of 2x+1. Q12. If x=2 is a root of the polynomial $p(x) = 2x^2 - 3x + 7a$, find the value of a.
(xi) Find the coefficient of x^2 in $(x^2-2)^3$.
(xii) If a+b+c= 6 and ab+bc+ca = 11, find the value of $a^3+b^3+c^3 - 3abc$.
(xiii) Expand $(1/x + y/3)^3$
(xiv) Find the value of the following using the identities.
   o $249^2 - 248^2$
   o 95×96
 (xv) x+1/x= 3, find the value of $x^2 + 1/x^2$ and $x^3 + 1/x^3$.

(xvi) If $p(x) = x^3 + 3x^2 - 2x + 4$, find the value of p(-2) +p(1) +p(0).

(xvii) (a) **Assertion:** $3x2 + x - 1 = (x + 1)(3x - 2) + 1$.
         Reason: To factorise $ax2 + bx + c$, write b as sum of two numbers whose product is ac.

     (b) **Assertion:** The expression $3x4 - 4x3/2 + x2 = 2$ is not a polynomial because the term $-4x3/2$ contains a rational power of x.
         Reason: The highest exponent in various terms of an algebraic expression in one variable is called Its degree.

(xviii) **Case Study** II
On one day, principal of a particular school visited the classroom. Class teacher was teaching the concept of polynomial to students. He was very much impressed by her way of teaching. To check, whether the students also understand the concept taught by her or not, he asked various questions to students. Some of them are given below. Answer them.

(a) Which one of the following is not a polynomial?

   (a) $4x2 + 2x - 1$ (b) y+ (3/y)   (c) x3 - 1   (d) y2 + 5y + 1

(b) The polynomial of the type $ax2 + bx + c$, a = 0 is called

   (a) Linear polynomial   (b) Quadratic polynomial   (c)Cubic polynomial   (d)Biquadratic polynomial

(c) The value of k, if (x - 1) is a factor of $4x3 + 3x2 - 4x + k$, is

   (a) 1   (b) -2   (c) -3   (d) 3

(d) If x + 2 is the factor of x3 – 2ax2 + 16, then value of a is

(a) –7   (b)1   (c) –1   (d)7

(e) The number of zeroes of the polynomial x2 + 4x + 2 is

(a) 1   (b) 2   (c) 4

SCIENCE

Q.1 PROJECT (3-D MODEL)

1. Topic: DNA Working model **(EVEN ROLL NOS.)**

Material Required

For the DNA structure:

(i) Colored beads or foam balls (for A, T, C, G)

(ii) Skewers or sticks (for base pairs)

(iii) Flexible straws or pipe cleaners (for sugar-phosphate backbone)

(iv) Glue gun or strong tape

For the rotating stand:

(i) Small DC motor (like from a toy)

(ii) Battery (AA or 9V) + holder

(iii) Switch

(iv) Base (cardboard or plastic)

Procedure:

(a) Build the DNA Double Helix:

- o Connect foam balls/beads in A–T and C–G pairs using skewers.
- o Attach the ends of the skewers to two flexible pipe cleaner strands to form a twisted ladder.
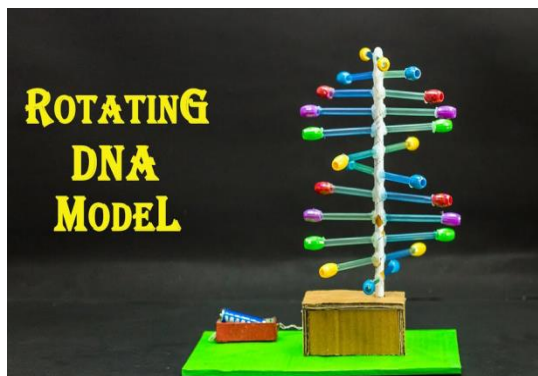- o Twist it gently into a helix.

(b) Mount the DNA on a Rotating Base:

- o Fix the base of the DNA model to a cardboard disc or Lazy Susan.
- o Insert a stick or motor rod through the centre so the DNA can rotate.

(c) Add a Motor:

- o Attach the motor to the base and connect the rod to spin the DNA.
- o Connect the battery and switch to make it rotate on command.

Image for reference

(Note: Use your own creativity)

2. Topic: Plant Cell Working Model **(ODD ROLL NOS.)**

Objective

(i) Identify and locate major organelles (nucleus, chloroplast, cell wall, etc.) in a plant cell.

(ii)Explain the role each organelle plays in maintaining cell life and function.

Material Required

(i) Cardboard sheet or foam board (base)

(ii) Coloured clay/foam sheets (to make organelles)

(iii) 6–8 small LED lights (different colours preferred)

(iv) Connecting wires (thin, insulated)

(v) 9V battery or 2 AA batteries + battery holder

(vi) Small push buttons or switches (one for each organelle)

(vii) Resistors (220 ohms for each LED)

(viii) Glue gun or strong adhesive

(ix) Black marker or printed labels

(x) Cutter or scissors

Procedure:

(a) Create the Base

- o Cut the cardboard/foam board into a **rectangular or oval plant cell shape**.
- o Draw a **cross-section layout** of a plant cell on it (cell wall, membrane, cytoplasm, etc.).

(b)Make the Organelles

- o Use coloured clay or foam to model the following:
- o Nucleus
- o Chloroplasts
- o Vacuole
- o Mitochondria
- o Golgi body

- o Endoplasmic reticulum
- o Cytoplasm
- o Stick them in their respective positions.

(c) Wire the LEDs

- o Insert one **LED into each organelle** (e.g., green LED for chloroplast).
- o Connect the **positive leg (longer) of the LED** to a **push button**, and then to the **positive terminal** of the battery (via a resistor).
- o Connect the **negative leg** directly to the battery's **negative terminal**.

   Tip: Use **resistors** to prevent LEDs from burning out.

(d)Add Switches

- o Glue a small **push-button switch** next to or on each organelle.
- o When a student presses the button, the **corresponding LED lights up**, symbolizing that the organelle is "active."
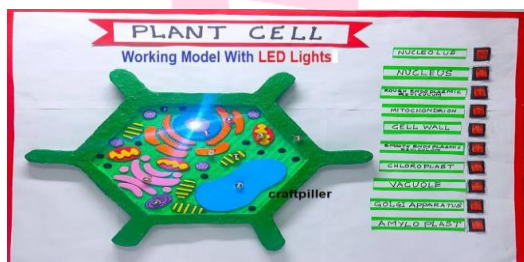
(e) Label the Organelles

- o Label each part clearly (you can print labels or handwrite them).

(f) Test the Circuit

- o Connect the battery.
- o Press each switch to test whether the corresponding LED lights up correctly.

Image for reference

Q.2 ART INTEGRATED PROJECT

1.Topic: Write any 5 mode of water conservation opted by Telangana state with time synchronous. (from traditional to modern time)

(a)Content should be of 8-10 pages on interleaf white sheets.

(b)Use black gel pen or coloured sketches for headings, blue gel pen for content and well sharpened pencil for tables, margins, or any diagrams.

(c) **Page1**- COVER page, A4 sheet, including topics name, subject, submitted to (subject teacher name) (in left bottom) and submitted by (student's name) in right bottom corner along with class, roll no and session.

(d) **Page2**- CERTIFICATE page, which state that the given information in project is true.

(e) **Page 3-** ACKNOWLEDGEMENT, a thanking note from the student for their helping hands in the project.

(f) **Page 4-** INDEX, covering all the topics with page numbers.

(g) **Page 5-** Onwards required content.

(h) **Last page**- BIBLIOGRAPHY, which includes brief of all the sources through which the information is being collected

NOTE- Project should be neat and clean

Objectives:

(i) To explore traditional water conservation systems like *tank (chervil)* and *kundas.*

(ii)To understand the impact of integrated water conservation projects.

Procedure:

(a) Write a clear title at the top of the page, such as "**Modes of Water Conservation in Telangana: Traditional to Modern Techniques**."
(b) **Introduction**: Write a short paragraph introducing the topic (2-3 lines).
(c) **Main Content**: For each water conservation method, create a subheading and write a brief description, followed by the procedure, benefits, and challenges.
(d) **Comparison Table**: Draw a simple table comparing the different methods. Ensure it is neat and readable.
(e) **Conclusion**: End with a short conclusion, summarizing the key points.
(**NOTE**- Project should be neat and clean and do it on coloured A-4 sheets.)

Q.3 OBSERVATION BASED

1. Topic: Find any 5 medicinal plants in your neighbours. Write its benefits and also write which of its part is used in making medicines

Objectives:

(i) To identify commonly found medicinal plants in the local environment.

(ii) To understand the medicinal uses and importance of various plant parts.

Procedure:

(a) Walk around your neighbourhood, gardens, parks, or nearby open areas.

(b) Observe and identify common plants that are known for their medicinal properties.

(c) Choose 5 different medicinal plants that are easily visible and accessible.

(d) Record detail for each plant

- o Name of the plant
- o Medicinal benefits
- o Part used (e.g., leaf, root, flower, bark, seed
- o Observation table

S. no.	Name of the plant	Medicinal benefits	Part used

Q4. WORKSHEET

(Solve the given worksheet in Science notebook.)

A. Multiple choice Questions:

(i) Which of the following quantities has both magnitude and direction?

    a. Speed   b. Distance   c. Velocity   d. Time

(ii) The area under a velocity-time graph represents

    a. Speed   b. Displacement   c. Acceleration   d. Distance travelled

(iii) If the velocity of an object changes from 10 m/s to 20 m/s in 5 seconds, the acceleration is

    a. 2 m/s²   b. 5 m/s²   c. 10 m/s²   d. 15 m/s²

(iv) Which of the following is found only in plant cells and not in animal cells?

    a. Mitochondria   b. Ribosomes   c. Ribosomes   d. Plasma membrane

(v) Which cell organelle detoxifies poisons and drugs in liver cells?

    a. Rough ER   b. Golgi body   c. Smooth ER   d. Lysosome

(vi) Which organelle is responsible for packaging and transporting materials inside the cell?

    a. Lysosomes   b. Endoplasmic reticulum   c. Golgi apparatus   d. Mitochondria

(vii) Which of the following statements is correct regarding latent heat of vaporization?

    a. It is the energy released during condensation

    b. It is the energy required to convert 1 kg of solid into liquid

    c. It is the energy required to convert 1 kg of liquid into gas at its boiling point without a change in temperature

    d. It is the energy required to increase the temperature of 1 kg of liquid by 1°C

(viii) Which of the following changes involves absorption of heat but no change in temperature?

    a. Heating of water from 0°C to 100°C   b. Boiling of water at 100°C

    c. Heating of ice from –10°C to 0°C   d. Heating of steam from 100°C to 120°C

(ix) On increasing pressure and decreasing temperature, a gas can be converted into.

    a. Liquid only   b. Solid only

    c. Either liquid or solid depending on the gas   d. Only plasma

(x) Which one is a correct explanation for the compressibility of gases?

    a. High speed of gas particles   b. Strong intermolecular forces

    c. Large intermolecular space   d. Low kinetic energy of particles

B. Case Study I

(xi) A group of students went on a school trip. They boarded a bus at 7:00 AM from their school. The bus started with uniform acceleration and reached a speed of 60 km/h in 5 minutes. After that, it moved at a constant speed for 1 hour. Later, the driver applied brakes and brought the bus to a complete stop in 2 minutes. The total distance covered during the journey was 65 km.

(a) Calculate the acceleration of the bus during the first 5 minutes of motion.

(b) How much distance did the bus cover during the acceleration phase?

(c) What was the distance covered during the uniform motion phase?

(d)Calculate the deceleration (negative acceleration) of the bus when it came to rest.

Case Study II

(xii) A student added a drop of sugar solution to a slide with red blood cells and observed that the cells shrunk.
(a) What type of solution was added to the slide?
(b) Name the process responsible for the shrinking of cells.
(c) Which part of the cell regulates the entry and exit of substances?
(d) In which part of cell all other organelles float.

C. Assertion Reason:
A. Both Assertion and Reason are true, and Reason is the correct explanation of Assertion.
B. Both Assertion and Reason are true, but Reason is not the correct explanation of Assertion.
C. Assertion is true, but Reason is false.
D. Assertion is false, but Reason is true.

(xiii) **Assertion:** Golgi apparatus helps in the packaging of materials.
 Reason: It modifies, sorts, and packs proteins and lipids for storage or transport.

(xiv) **Assertion:** Displacement of an object can be zero even if the distance travelled is not zero.
 Reason: Displacement is the shortest distance between initial and final position of the object.

Q.5 SUBJECT ENRICHMENT ACTIVITY

Objective:
Create a comprehensive portfolio about the life and contributions of the following scientists:
 o Antoine Lavoisier **(EVEN ROLL NO'S.)**
 o Theodor Schwann **(ODD ROLL NO'S.)**

Procedure:
(a) Cover Page:
 o Title: "Portfolio on Sidney Fox"
 o Your Name
 o Class
 o Date
 o A picture of Sidney Fox (if available)

(b)Table of Contents:
 o Introduction
 o Early Life and Education
 o Major Scientific Contributions

- o   Key Experiments and Discoveries
- o   Impact on Science and Society
- o   Personal Reflections
- o   References

Presentation Guidelines

(i) Format: The portfolio can be hand-written or typed. If hand-written, ensure your handwriting is neat and legible.

(ii) Length: Aim for 5-7 pages, including pictures and diagrams.

(iii) Visuals: Use images, diagrams, and charts to make your portfolio visually appealing. Ensure all visuals are properly labelled.

(iv) Clarity and Organization: Make sure your portfolio is well-organized with clear headings and subheadings. Ensure there are no spelling or grammatical errors.

(v) Creativity: Feel free to add creative elements such as quotes, fun facts, or a timeline of Sidney Fox's life and achievements.

SOCIAL- SCIENCE

Q.1 PROJECT
1. Topic: Comparison of Preamble in India and USA. (ROLL NOS. 1-12)

Objective:

To creatively explore and compare the Preambles of the Constitutions of the **United States of America** and **India**, understanding their values, visions, and national philosophies.

Material Required:
(i)A3/A2 poster paper or chart paper
(ii)Sketch pens, markers, paints, or coloured pencils
(iii)Ruler, glue, scissors
(iv)Printed or handwritten versions of the two preambles
(v)Optional: flags, emblems, and pictures of historical figures

Procedure:
(a) Title Your Poster

Give your poster a clear and catchy title like:

- o   *"Voices of Democracy: USA & India"*
- o   *"Two Preambles, One Spirit of Freedom"*
- o   *"We the People – A Comparative Look at USA and India"*

(b) Include the Preambles

Use a readable font or handwrite the Preambles:

- o   Left side: **Preamble of the USA**
- o   Right side: **Preamble of India**

(c) Visual Elements

Add symbols to reflect each country's values and identity:

- o **USA**: Bald eagle, flag, liberty bell, Constitution scroll
- o **India**: Ashoka Chakra, national flag, tricolour, Sarnath lions

(d) Comparison Section

In the centre or bottom part of the poster, create a **comparison chart** or Venn diagram:

Element	USA	India
Starts with	"We the People"	"We, the people of India"
Type of govt	Federal, Presidential	Sovereign, Socialist, Secular...
Key values	Justice, Liberty, Union	Justice, Liberty, Equality...
Adopted in	1787	1950

(e) Quotes or Facts

Add powerful quotes about democracy or the constitution by founding leaders like:

- o Abraham Lincoln
- o B. R. Ambedkar
- o Thomas Jefferson
- o Jawaharlal Nehru

(f) Design and Presentation

Keep it neat, colourful, and balanced. Make sure the message is clearly conveyed.

Learning Outcome

- o Understand the core values of both constitutions
- o Appreciate democratic ideals in different national contexts
- o Develop presentation and design skills

2. **Topic:** Physical features of India **(ROLL NOS.13-24)**

(i) Choose a bold and eye-catching title like:

- o *"Physical Features of India"*
- o *"Incredible India's Natural Landforms"*
- o *"Geographical Diversity of India"*

(ii) Include a map

Draw or paste a **physical map of India** showing:

- o The Himalayas **(north)**
- o Northern Plains **(south of Himalayas)**
- o Peninsular Plateau
- o Thar Desert **(west)**
- o Coastal Plains **(east and west coasts)**
- o Islands **(**Andaman & Nicobar, Lakshadweep)

Colour-code each region for clarity.

(iii) Label each feature clearly

Include small info boxes or icons around the map explaining each feature:

- **Himalayas** – Highest Mountain range, natural barrier
- **Northern Plains** – Fertile lands, river basins of Ganga, Indus
- **Peninsular Plateau** – Oldest landmass, rich in minerals
- **Thar Desert** – Arid land in Rajasthan
- **Coastal Plains** – Fishing, agriculture, trade ports
- **Islands** – Coral reefs, biodiversity hotspots

(iv) Visual Elements

Use symbols, sketches, or pictures to represent

- Rivers (Ganga, Brahmaputra)
- Mountain peaks (Kanchenjunga)
- Wildlife or vegetation
- Tourist landmarks (e.g., backwaters of Kerala, desert forts)

(v) Fun Facts or Trivia (Optional)

Add a "Did You Know?" box with cool facts:

- India has **all major landforms**.
- The Himalayas are still growing due to tectonic activity.
- The Deccan Plateau is one of the oldest land masses on Earth.

3. Topic: River Drainage Patterns of India (ROLL NOS.25-36)

(i) Title
- "River Drainage Patterns of India"
- "How Rivers Shape Our Land"
- "Mapping India's River Networks"

(ii) Include Diagrams

- Draw **mini diagrams** of each river pattern.
- Label with arrows to show the flow.
- Optionally, draw a **map of India** with rivers marked where these patterns occur.

(iii) Colour Coding

- Use different colours for each pattern.
- Highlight examples (e.g., Ganga in blue for dendritic).

(iv) Visual Elements

- Add river symbols
- Use terrain background (hills, basins, plateaus) to show why patterns form.

(v) Fun Facts / Bonus Info

- Ganga is India's most famous dendritic river.
- Radial patterns often form on extinct volcanoes or domes.

o Rivers affect agriculture, settlements, and culture.

Q.2 ART INTEGRATION PROJECT

1. Topic: Telangana's Textile Heritage: Weaving and Dyeing Tradition.
(a) Content should be of 8-10 pages on interleaf white sheets.

(b) Use black gel pen or coloured sketches for headings, blue gel pen for content and well sharpened pencil for tables, margins, or any diagrams.

(c) Page1- COVER page, A4 sheet, including topics name, subject, submitted to (subject teacher name) (in left bottom) and submitted by (student's name) in right bottom corner along with class, roll no and session.

(d) Page2- CERTIFICATE page, which state that the given information in project is true.

(e) Page 3- ACKNOWLEDGEMENT, a thanking note from the student for their helping hands in the project.

(f) Page 4- INDEX, covering all the topics with page numbers.

(g) Page 5- onwards required content.

(h) **Last page-** BIBLIOGRAPHY, which includes brief of all the sources through which the information is being collected

 NOTE- Project should be neat and clean

Telangana, a southern state in India, has a rich and colourful textile heritage. From ancient weaving techniques to eco-friendly dyeing methods, Telangana's handloom and textile sector reflects its culture, tradition, and craftsmanship.

(i) Historical Background

- o Weaving in Telangana dates back over 2000 years.
- o Ancient records, including Satavahana period artifacts, show the use of cotton and natural dyes.
- o The region has been known for its fine cotton fabrics and silk, often used for royal garments and religious offerings.

(ii) Famous Weaving Centre in Telangana

Place	Famous For
Pochampally	Ikat weaving (Geometric and tie-dye patterns)
Gadwal	Gadwal sarees with silk-cotton blend and zari borders
Narayanpet	Checked sarees with contrasting borders
Siddipet	Handloom cotton towels and traditional wear

(iii) Techniques of Weaving

- o Handloom Weaving: **Operated by hand, using a shuttle and warp/weft threads.**
- o Ikat Technique: Dyeing the threads before weaving, creating blurred patterns.
- o Interlocking Borders**:** Gadwal weavers are skilled at weaving silk borders onto cotton fabric.

(iv) Dyeing Methods

o   Natural Dyes: Derived from plants like indigo (blue), turmeric (yellow), and madder root (red).
o   Tie and Dye (Bandhani): Threads are tied in patterns and dyed, resulting in unique designs.
o   Resist Dyeing: In Ikat, parts of yarn are tied and dyed in stages to create multi-colored patterns.

(v) Traditional Textiles and Clothing

o   Sarees – Gadwal, Pochampally, and Narayanpet sarees are worn during festivals and weddings.
o   Dhotis and Towels – Simple handloom cotton items made in Siddipet.
o   Dupattas and Stoles – With ikat or tie-dye patterns, often worn by both men and women.

(vi) Sustainability and Eco-Friendliness

o   Most dyeing methods use natural dyes which are non-toxic.
o   Handlooms use no electricity, reducing carbon footprint.
o   Promotes local employment and traditional skills.

(vii) Images and Illustrations (Paste or Draw)

o   Map of Telangana showing weaving centre
o   Photos or sketches of Gadwal and Pochampally sarees
o   A chart of natural dye sources (e.g., Indigo plant, turmeric root)

(viii) Fun Facts

o   Pochampally Ikat received the **Geographical Indication (GI) tag** in 2004.\
o   Telangana celebrates **National Handloom Day** on August 7 to promote handloom culture.
o   A Gadwal saree can be folded small enough to fit in a matchbox!

(ix) Government Initiatives

Telangana government has schemes like:

o   **"**Chenetha Mithra" – Financial aid for weavers.
o   Handloom Hubs – Infrastructure and marketing support.
o   Loom upgrades and training programs to support modern designs.

(x) Conclusion

Telangana's textile heritage is a beautiful blend of art, culture, and tradition. The handloom and dyeing techniques are not just about clothes, but about identity and history. Preserving them is essential for future generations.

References:

Telangana State Handloom Department Website

o   NCERT Textbooks
o   Ministry of Textiles, Govt. of India
o   Local newspaper articles and weavers' interviews

Q.3 WORKSHEET

(Solve the given worksheet in Social-Science notebook.)

A. Multiple Choice Questions:

(i) The southernmost point of the Indian mainland is:

   a) Kanyakumari   b) Rameswaram

   c) Cape Comorin   d) Thiruvananthapuram

(ii) India is divided into how many major physical divisions?

   a) 3   b) 6   c) 7   d) 9

(iii) What is the main economic activity in the village of Palampur?

   a) Fishing   b) Farming   c) Mining   d) Trading

(iv) What is the Green Revolution?

   a) A movement to plant more trees

   b) A movement to improve farming techniques

   c) A movement to save water

   d) A movement to improve health

(v) How do most small farmers get the money to invest in farming?

   a) By selling their land   b) By taking loans

   c) By working in the city   d) By saving money

(vi) In a democracy, who has the final decision-making power?

   a) The king   b) The government   c) The army   d) The people

(vii) Which of these is a feature of democracy?

   a) Free and fair elections   b) Rule by a dictator

   c) Rule by military   d) No voting rights

(viii) In a democratic election, each vote has:

   a) Different value   b) Same value

   c) No value   d) Value decided by the government

(ix) What economic crisis led to the calling of the Estates-General in 1789?

   a) Crop failures   b) Rise in taxation

   c) Financial bankruptcy   d) Inflation

(x) Who were the sans-culottes during the French Revolution?

   a) Nobles who supported the revolution

   b) Peasants who rebelled against the monarchy

   c) Middle-class merchants

   d) Radical urban workers

B. Competency Based Questions:

(xi) Explain the views of different socialists and philosophers regarding the vision of the future or to transform the society.

(xii) Name the three major divisions of Himalayas from the North to South.

(xiii)"The land of India displays great physical variations". Justify the statement with five examples

(xiv) "Indian Constitution is both rigid and flexible" Explain.

(xv) Why are most of the Penninsular rivers draining into the Bay of Bangal? Give reasons.

(xvi) Mention major features of public distribution System in India?

(xvii) When government officers work in election duty, are they under the control of the Election Commission or the government? Give reason.

(xviii) "Monsoon acts as a unifying bond" Explain.

C. Assertion Reason Questions:

Mark the option which is most suitable:

(a) If both assertion and reason are true and reason is the correct explanation of assertion.

(b) If both assertion and reason are true but reason is not the correct explanation of assertion.

(c) If assertion is true but reason is false.

(d) If both assertion and reason are false.

(xix) **Assertion (A):** The period from 1795 to 1798 is referred as the Reign of Terror.

   Reason (R): Robespierre followed a policy of severe control and punishment.

(xx) **Assertion (A):** The land mass of India has an area of 3.28 million square kilometre.

   Reason (R): India's total area accounts for about 2.4 percent of the total geographical are of the world.