Mukand

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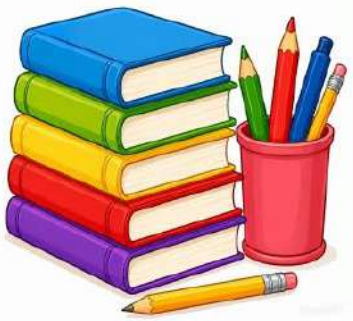
Holidays HOMEWORK

SESSION (2026-27)

CLASS X

Learn, Explore, Grow
Make your holidays meaningful!



Dear Parents

As we welcome the much-awaited summer break, we are delighted to share the Holiday Homework for the Academic Session 2026–27.

Summer vacation offers children a wonderful opportunity to explore, reflect, and learn beyond the boundaries of the classroom. Keeping this spirit in mind, the assignments have been carefully planned to ignite curiosity, inspire creativity, and foster empathy among our learners.

In accordance with the vision of the National Education Policy (NEP) 2020, these activities emphasize experiential, value-based, and project-oriented learning. They are designed to help students relate academic concepts to everyday life experiences. Each task encourages learners to discover their interests, strengthen essential life skills, and develop a broader understanding of the world around them.

With your constant support and encouragement, we are confident that this summer break will become a meaningful journey of learning, growth, and joyful experiences for every child.

Principal

ENGROSSING ENGLISH

- **Roll No.1-8**

1.From Takhti to Tablet – The Journey of Writing Boards"

Decorate traditional wooden boards using calligraphy, borders, folk art, or miniature painting styles. On each board, write:

- Ancient alphabets
- Proverbs
- Moral values
- Different scripts (Hindi, Urdu, Sanskrit, English)

- **Roll No. 9-16**

2. Create decorative pens with feather quills, and handmade scrolls inspired by traditional writing styles. Write poems by famous poets, or famous literary lines on the scrolls using beautiful calligraphy and artistic handwriting. Decorate the scrolls creatively with ribbons, seals, antique designs, borders, and vintage effects to give them an elegant historical appearance.Present the entire project neatly and attractively by arranging the quills, pens, ink pots, and scrolls in a creative display that showcases the beauty and evolution of writing and the power of inspirational words.

- **Roll No. 17-24**

3. Take a plain tile and decorate it beautifully using paints, colours, mirrors, beads, glitter, or other craft materials. Write meaningful messages, inspirational quotations, motivational thoughts, or creative slogans on each tile in artistic handwriting. Design the tile neatly and attractively to make it visually appealing .

- **Roll No. 25-32**

4.Journey of Writing Tools: From Stone to Stylus.

Prepare a creative chart on the topic "Journey of Writing Tools: From Stone to Stylus." Show the evolution of writing tools from ancient times to the modern digital age, including stone

carvings, clay tablets, reed pens, feather quills, fountain pens, ball pens, typewriters, keyboards, and digital styluses. Decorate the chart neatly with pictures, labels, timelines, facts, and creative designs to make it informative, attractive, and easy to understand.

- **Roll No. 33 onwards**

5. Make handmade inland letters and postcards with creative designs and neat decoration. Use colours, borders, drawings, stamps, and beautiful handwriting to give them an old-fashioned look. Write short messages, greetings, poems, or quotations inside them to show the traditional way of communication.

FOR All

1.Prepare a colourful comic strip based on your favourite story.Include important characters, dialogues, captions, and illustrations to present the story in an interesting and creative manner.

2.Make a poster promoting kindness, cleanliness, or saving the environment.

- **अनुक्रमांक 1 - 10**

1.अगर पंचतंत्र आज लिखा जाता- तो कल्पना कीजिए पात्रों की रचना कैसे होती
उदाहरण:-
चालाक लोमड़ी- साइबर ठग
बुद्धिमान कौआ - ए. आई सहायक
जंगल सभा -सोशल मीडिया समूह
इन्हीं प्रतीकात्मक रूप को लेकर एक आधुनिक पंचतंत्र शीर्षक को फ्लैश कार्ड या वॉल हैंगिंग के रूप में प्रस्तुत कीजिए

- **अनुक्रमांक 11-20**

चित्रात्मक और शाब्दिक प्रस्तुतिकरण के माध्यम से एक कॉमिक स्ट्रिप की रचना कीजिए:-
शीर्षक:- रोबोट और पंचतंत्र का उल्लू।

- **अनुक्रमांक 21-30**

  कहानियों के बदलते स्वरूप को कविता लेखन/ नारा लेखन के माध्यम से प्रस्तुत कीजिए।

- **अनुक्रमांक (31- 40)**

  क्या AI भविष्य में रचनाकारों की जगह ले सकता है - प्राचीन पृष्ठभूमि से आधुनिकता की ओर बढ़ते हुए इसके पक्ष और विपक्ष के बिंदुओं को शोध कार्य के रूप में प्रस्तुत कीजिए।

कला एकीकरण कार्य(Art Integrated work)

चार्ट पेपर अथवा A3 साइज शीट पर पोस्टर मेकिंग के माध्यम से

कहानियों की दुनिया:- 'तब और अब ' शीर्षक देते हुए एक तरफ प्राचीनतम रूप जैसे गुरु शिष्य परंपरा / ताड़पत्र, भोजपत्र/ पुस्तक और दूसरी तरफ आधुनिकतम रूप जैसे रोबोट/ मोबाइल /ए.आई आदि का कलात्मक स्वरूप प्रदर्शित कीजिए।

MAJESTIC MATHEMATICS

1. The taxi charges in a city comprise of fixed charges together with the charge for the distance covered. For the journey of 10 km the charge pay is₹75 and for a journey15 km the charges paid is ₹ 110. What will a person have to pay for travelling a distance of 25 km?
2. Find the value of k for which the equations $3x$ +y= 1 and (2k – 1)x + (k – 1)y = 2k+1 has no solution.
3. The sum of a two digit number and the number formed by reversing its digits is 110. If 10 is subtracted from The number, the new number is 4 more than 5 times the sum of the digits in the original number. Find the Number.
4. A boat covers 32 km upstream and 36km downstream in 7 hours. Also, it covers 40 km upstream and 48km Downstream in 9 hours. Find the speed of the boat in still water and that of the stream.
5. Solve for x and y :

   148x+231y = 527

   231x+ 148y = 610

6. Susan invested certain amount of money in two schemes A and B, which offer interest at the rate of 8% per Annum and 9% per annum, respectively. She received 1860 as annual interest. However, had she Interchanged the amount of investments in the two schemes, she would have received 20 more as annual Interest. How much money did she invest in each scheme?
7. It takes 12 hours to fill a swimming pool using two pipes. If the pipe of larger diameter is used for 4 hours and the pipe of smaller diameter for 9 hours, only half the pool can be filled. How long would it take for each pipe to fill the pool separately?
8. If the sum of the zeroes of the polynomial $p(x) = (k^2 - 14)x^2 - 2x - 12$ is 1, then find the value of k.
9. If the zeroes of the polynomial $x^2 + px + q$ are double in value to the zeroes of $2x^2 - 5x - 3$, find the value of p and q.
10. Find the probability of getting 53 Fridays in a leap year.
11. One card is drawn at random from a well-shuffled deck of 52 playing cards. Find the probability that the card drawn is (i) either a red card or a king, (ii) neither a red card nor a queen.
12. Find the largest number which divides 70 and 125 leaving remainder 5 and 8 respectively.
13. Explain why $(17 \times 5 \times 11 \times 3 \times 2 + 2 \times 11)$ is a composite number?
14. The length, breadth, and height of a room are 8 m 50 cm, 6 m 25 cm and 4 m 75 cm respectively. Find the length of the longest rod that can measure the dimensions of the room exactly.
15. Deven has two vessels containing 720 ml and 405 ml of milk respectively. Milk from these containers is poured into glasses of equal capacity to their brim. Find the minimum number of glasses that can be filled.
16. There are 104 students in class X and 96 students in class IX in a school. In a house examination, the students are to be evenly seated in parallel rows such that no two adjacent rows are of the same class.
    (a) Find the maximum number of parallel rows of each class for the seating arrange¬ment.
    (b) Also, find the number of students of class IX and also of class X in a row.
    (c) What is the objective of the school administration behind such an arrangement?

17. The median of the distribution given below is 14.4. Find the values of x and y, if the sum of frequency is 20.

Class Interval	0-6	6-12	12-18	18-24	24-30
Frequency	4	X	5	y	1

18.A survey regarding the heights (in cm) of 50 girls of class Xth of school was conducted and the following data was obtained. Find the mean, median and moof the given data.

Heights (in cm)	**No. of Girls**
120 – 130	**2**
130 – 140	**8**
140 – 150	**12**
150 – 160	**20**
160 – 170	**8**

19. Check graphically whether the pair of equations 3x – 2y + 2 = 0 and 32x – y + 3 = 0, is consistent. Also find the coordinates of the points where the graphs of the equations meet the Y-axis.

20. Find the value ofα and β for which the following pair of linear equations has infinite number of solutions:

2x + 3y = 7;

αx + (α +β)y = 28

Math Magic & Innovation

- The model should be creative, colourful, and mathematically correct.
- Students may use waste or eco-friendly materials wherever possible.
- **Roll No 1-10**

Human Height Measuring Machine using Trigonometry

Working Features

Use laser/light pointer

Measure angle using protractor

Calculate height live

Maths Formula:

Tan θ= height / base

- **Roll No 11-20**

Rainwater Harvesting Automatic Calculator

Working Features:

Real flowing water

Water level indicator

Volume calculation display

Maths Used:

Volume

Surface area

Real-Life Use:

Water conservation systems.

- **Roll No 21 – 30**

Google Maps Navigation Model

Working Features :

Find shortest route between places.

Working Features

LED routes glow

Buttons select destinations

Shortest path lights up

Maths Used:

Coordinate geometry

Distance calculation

- **Roll No 31 onwards**

ATM PIN Security Probability Machine

Working Idea:

Show probability of guessing ATM PIN.

Working Features:

Keypad

Password attempts

Lock/unlock system

Maths Used:

Probability

Number system

STIMULATING SCIENCE

Art integrated Learning projects

- **Roll No - 1 to 14 (Biology)**
- **Roll No - 15 to 28 (Chemistry)**
- **Roll No. 29 onwards (Phyiscs)**

Biology

Interactive Endocrine Flipbook (Gland-wise Study)To prepare an interactive flipbook on the endocrine system, with each page dedicated to one gland, include the gland's diagram, location, hormone secreted, and its main function.Use colors, tabs, borders, and other creative elements to make the flipbook neat and attractive.

Chemistry

Create Electroplating model at home to demonstrate the deposition of thin layer of metal onto another object (using copper sulphate solution , two copper wires/ plates , iron object , Battery 3-6 V, connecting wires and beaker or glass container.

Physics

Create Mosaic Sculpture of dispersion of white light into its constituent colours through water droplet (use paper mache or small mirrors or mosaic tiles to represent raindrop and use colourful clay to represent rainbow formation).

COMPULSORY PROJECT: "Organ Spotlight" (For all students of all sections)

Shine the spotlight on ONE human body organ. Your chart should feature a bold, colored, labelled diagram plus a "Fast Facts" corner covering its function, size, location, and one tip to keep it healthy Creativity, color, and clarity will earn top marks!

MODELS

X – A, B

BIOLOGY

- **(Roll No 1-3)**

Photosynthesis 2.0: The Solar Fusion A model comparing natural leaf structures with "Artificial Leaves" (photo-electrochemical cells). It highlights how plants have used solar fusion for millennia and how humans are now mimicking this "fusion" of chemistry and light.

- **(Roll No 4-6)**

Bioluminescence: The Living Cold Flame An exhibit exploring organisms like fireflies or glowing deep-sea fish. Create a model using fluorescent paints to explain the chemical

"fusion" (luciferin-luciferase reaction) that produces light without heat.

- **(Roll No 7-9)**

Genetic Engineering: Fusion of DNA A visual representation of Recombinant DNA technology. Show how a specific gene from one organism is "fused" into another (e.g.,producing insulin) to create a "next-generation" biological solution.

- **(Roll No. 10-12)**

The Evolution of the Heart A comparative model showing the transition from a 2-chambered (fish) to a 3-chambered (amphibian) to the 4-chambered human heart.

- **(Roll No 13-15)**

Bio-Regenerative Life Support System (BRLSS) A complex diagram or 3D model showing the "Earth to Beyond" cycle: Humans exhale CO_2 and Algae/Plants absorb CO_2 and produce O_2 and food. Waste is recycled via microbes into fertilizer.

CHEMISTRY:**(Prepare a project report of at least 5-7 pages and make working model on the same topic)**

- **(Roll No.15-17)**

Design colourful display and handmade packets of Eco friendly Holi colours from flowers,turmeric.

- **(Roll No.18-20)**

Create a model of Cool pot green fridge without electricity by using clay pots,sand,water etc.

- **(Roll No. 21-23)**

Create a model and report on trash to treasure energy hub showing conversion of plastic into fuel for greener future.

- **(Roll No. 24-27)**

Research and design a model of hydroponics farming which involve mineral ions,Ph balance. (a self watering plant system.)

PHYSICS

- **(Roll No. 28-30)**

Create Diorama of star gazing village depicting how in ancient how in ancient time people use to know about the directions with the help of stars.

- **(Roll No. 31-33)**

Create a model of star tracker (space camera) capturing star images to calculate the exact orientation of space craft.

- **(Roll No. 34-36)**

Create model or research on how quantum sensors will help space craft in space to detect direction without external signals.

- **(37 onwards)**

Create model of how ancient calendar worked with the help of space observations and how it help them to understand seasons.

X -C, D

PHYSICS

- **(Roll No.1-3)**

Create a model on how scientists use satellites to make calendars and time keeping very accurate.

- **(Roll No. 4-6)**

Research on how future satellites may use advanced atomic clocks to measure time extreme accurate (create dummy model for your idea)

- **(Roll No 7-9)**

Create working Geocentric model of the universe.

- **(Roll No.10-12)**

Create working Heliocentric model of the universe.

- **(Roll No.13-15)**

Research on how astronauts perform experiments in microgravity (create power point presentation.

CHEMISTRY

- **(Roll No. 16-18)**

Create a model of Reactivity spinning wheel which explain information ,comparison ,or scientific concepts in rotating and interactive way.

- **(Roll No. 19-21)**

Create a model of artificial rain generator based on concept condensation and cloud formation.

- **(Roll No. 22-24)**

Research on advanced carbon capture using algae.

- **(Roll No. 25-27)**

Research and design model on metal coating process by using two different metals.

BIOLOGY

- **(Roll No.28-30)**

The Neuralink: Future of Human-AI Interaction Concept: Simulating the bypass of the peripheral nervous system to assist patients with Paralysis using direct cortical signaling.

- **(Roll No.31-33)**

Disease Spread Simulation City Construct a model city to demonstrate how diseases spread in a population. Use lights or markers to show transmission from one point to another. The model should clearly show infection spread over time.

- **(Roll No.34-36)**

Artificial Sun for Plants Create a model showing plant growth using artificial light. Use LEDs to represent sunlight and explain indoor farming. The model should demonstrate future plant growth conditions

- **(37 onwards)**

Evolution Tunnel (Past to Future Human) Develop a 3D or layered model showing human evolution from
early stages to future possibilities. Arrange it as a journey or timeline including future predictions.

X -E,F, G

CHEMISTRY

(Roll No. 1-3)

Create a fire extinguisher working model

- **(Roll No.4-6)**

Create Mosaic of periodic table using different grains or coloured pebbles.

- **(Roll No.7-9)**

Design fruit battery model which demonstrates how chemical energy can be converted into electrical energy.

- **(Roll No.10-12)**

  Create 3D molecule craft studio by using clay balls ,wool threads ,ice cream sticks, bottle caps magnetic balls ,LED lights etc.

- **(Roll No.13-15)**

  Create reactivity series Spinning wheel of different metals and their reactivities.

BIOLOGY

- **(Roll No.16-18)**

  Human Energy Converter Suit Design a model or wearable showing how human movement generates energy. Use simple circuits to light an LED through motion or pressure.

- **(Roll No.19-21)**

  Emotion-Detecting Face Model Prepare an interactive face model representing different emotions. Use lights or movable parts to show changes when selected

(Roll No.22-24)

Self-Healing Skin Model Create a model demonstrating how skin repairs itself after injury. Show damage and recovery using simple materials.

- **(Roll No.25-28)**

  Genetic Trait Selector Model Design a model showing selection of genetic traits. Use switches or buttons to display traits like eye or hair color.

PHYSICS

- **(Roll No.29-31)**

  Create timeline using hanging paper cutouts showing famous Indian aircrafts (Aryabhata, Chandrayaan-1, Chandryaan-3, Mangalyaan, Aditya L-1

- **(Roll No.32-34)**

  Create a model of simple telescope using lenses to observe distant objects.

- **(Roll No.35-38)**

  Create a model of modern space civilization [split in 3 zones: Moon base (Dome houses, solar panels) , Mars colony (underground tunnels, farming domes) , Deep space travel (large spaceship, Earth to mars route).

- **(37 onwards)**

  Create a model for space Debris capturing system using earth in centre and satellites orbiting removing debris using robotic arm, Magnetic system, optical net .

SIGNIFICANT SOCIAL SCIENCE

- **Roll number 1-8**

"War – A Man-Made Disaster: Impact & Peace"*

Concept
Disaster Type: Man-made disaster – armed conflict
Materials Needed
Cardboard, world map printout, red LEDs, buzzer, battery, switch, toy soldiers/houses, cotton, black chart paper, peace symbols, small plants

3 Working Parts to Show "Disaster Impact"*

Part 1: Economic & Infrastructure Damage*
1. Make 2 small "cities" with houses, hospital, school, oil tank.
2. Connect red LEDs under buildings to a switch.
3. Demo: Flip switch → LEDs glow = "power grid hit, buildings damaged".
4. Science link: War disrupts electricity, water, hospitals → humanitarian disaster.

Part 2: Environmental Impact – Oil Fire
1. Small container = "oil facility". Put cotton + red cellophane.
2. Demo: Lift cotton = "smoke". Explain: Oil well fires cause air pollution, black rain.
3. Real case: Use 1991 Gulf War oil fires as general example of war's environmental cost.
4. No actual fire– school rules ban real flames.

Part 3: Human Cost & Displacement*
1. Toy figures + small tents = "refugee camp".
2. Path of blue paper = "people migrating".
3. Chart: Add UN data – "War displaces families, disrupts education, causes food crisis".

Quote: "There never was a good war or a bad peace –

"Science gives us technology. We must use it to build, not destroy."

- **Roll number 8-16**

Oil Spill Cleanup Model – Pollution Disaster
Disaster: Marine oil spills from ships/tankers
Materials: Glass tray, water, cooking oil, blue food color, cotton, sponge, dish soap, spoon, feather
How it works:
1. Fill tray with water + blue color = "ocean". Pour oil = "oil spill".
2. Demo 1: Dip feather → show how oil sticks to birds.
3. Demo 2: Use cotton/sponge = "absorption method". Spoon = "skimming". Drop soap =

"dispersant" – oil breaks up.
Science link: Oil is less dense than water, floats. Soap reduces surface tension.
Add: Paste photo of Mumbai 2010 oil spill. Write 3 effects on marine life.

- **Roll number 17-24**

Fire in High-Rise Building + Sprinkler System*
Disaster: Urban fires due to short circuit, gas leak
Materials: Cardboard, 9V battery, buzzer, thermistor/LDR, LED, small water pump/dropper, straws, red cellophane
How it works:
1. Make 3-floor building from cardboard.
2. Circuit: When you bring candle near thermistor, heat ↑ → resistance ↓ → circuit completes → buzzer rings + LED glows = "fire alarm".
3. Sprinkler: Connect dropper to straws on ceiling. Press dropper = water sprays on "fire" made of red cellophane.
Science link: Thermistor as heat sensor. Automatic fire suppression systems.
Add: Write "Stop, Drop, Roll" and emergency number 101.

- **Roll number 25-32**

Chemical Gas Leak Model – Bhopal Gas Tragedy Type*
Disaster: Industrial gas leaks like methyl isocyanate
Materials: Plastic bottle, baking soda, vinegar, balloon, box as "factory", small paper houses, lime water
How it works:
1. Put vinegar in bottle, baking soda in balloon. Fix balloon on bottle mouth = "factory tank".
2. Drop baking soda in → CO_2 gas fills balloon → "gas leak".
3. Release gas near lime water → turns milky = proves CO_2. Show how gas spreads to houses.
4. Prevention demo: Spray sodium hydroxide solution to neutralize acid gases.
Science link: CO_2 is heavier than air – settles in low areas. Gas detection & neutralization.
Add: Map of Bhopal, mention December 1984, safety rules for industries.

- **Roll number 33-40**

Deforestation Leading to Forest Fire & Soil Erosion
Disasters Covered: 1. Man-made: Deforestation 2. Natural + Man-made: Forest Fire

Materials Needed – All Cheap

Part	Materials
Base	Big cardboard, 2 trays – one "forest", one "bare land"
Forest Side	Small twigs = trees, green paper, cotton = clouds, blue paper = river
Bare Land Side	Brown paper = soil, sand
Fire Part	Red/orange cellophane, LED, battery, switch, small fan
Rain/Erosion	Water spray bottle, plastic sheet

How to Make – 3 Working Sections*

Section 1: Before & After Deforestation*

1. Divide cardboard in 2. Left = "Dense Forest". Stick twigs, green paper, cotton clouds, river.
2. Right = "After Deforestation". Remove trees, keep only soil + stumps.
3. Working part: Add a small water tank above both sides. Make holes.
4. Demo: Pour water = "rain". Forest side: water soaks in, river clean.
   Bare side: soil washes away → muddy water = soil erosion.
   Science: Tree roots hold soil. No trees = floods + landslides.

Section 2: Forest Fire Simulation

1. In forest side, hide red LED + crumpled orange cellophane under twigs.
2. Connect LED to battery + switch.
3. Fix small fan behind trees.
4. Demo: Switch ON → LED glows = "fire starts". Turn fan ON → cellophane flutters = "fire spreads fast with wind".

Section 3: Effect + Prevention*

1. Add 2 more things:
   a. Thermocol animals running from fire side → loss of wildlife.
   b. "Fire Line"= clear gap between trees. Show fire stops at gap.
   c. Sprinkler: Use dropper + straws as "rain/forest dept spray".

What to Explain in 1 Min

1. Cause: "Deforestation by humans for wood, farming makes forests dry. One bidi/cigarette causes fire."
2. Working: "Rain on forest → soil safe. Rain on bare land → erosion. LED + fan shows how fire spreads."
3. Real Case: "Amazon fires 2019, Uttarakhand fires 2016, 2021. India lost 38,000 hectares in 2021."
4. Science: "Trees give O_2, absorb CO_2. No trees = global warming = more fires. 1 tree = 22kg

CO_2/year."

5. Prevention: "Chipko Movement, Van Mahotsav, don't throw glass bottles in forest, make fire lines."

Slogan: "Cut 1 Tree, Burn 100 Trees – Stop Deforestation, Stop Forest Fire"

AMAZING ARTIFICIAL INTELLIGENCE

Assignment

- **Instructions**

All questions to be solved in your A.I notebook

Q1. Define the term 'Artificial Intelligence' in terms of machin capability.

Q2. Distinguish between a Rule-Based Approach and a Learning-Based Approach to AI modeling.

Q3. Briefly explain the three main domains of Artificial Intelligence.

Q4. Name and sequence the five core stages involved in a standard AI Project Cycle.

Q5. Explain the importance of the 'Problem Scoping' stage in an AI project.

Q6. What is the '4Ws Problem Canvas' used for? Name its four components.

Q7. Differentiate between Data Acquisition and Data Exploration.

Q8. What is a 'Problem Statement Template' and why is it drafted?

Q9. How does Deep Learning differ from traditional Machine Learning?

Q10. Give an example where an AI application utilizes both the Computer Vision and Natural Language Processing domains simultaneously.

Q11. Explain 'Data Privacy' as an ethical concern in AI development.

Q12. What is meant by 'AI Bias'? Give a common reason why it occurs.

Q13. Define an 'Artificial Neural Network' (ANN).

Q14. In the Modelling stage, when would you use a Classification algorithm versus a Regression algorithm?

Q15. Why is the 'Evaluation' stage crucial before deploying an AI system?*

Q16. A smart thermostat monitors your daily routine for two weeks. It notices you lower the temperature every night at 10:00 PM and begins doing it for you automatically. Is this system an example of a Rule-Based or a Learning-Based AI approach? Justify your answer.

Q17. A company develops a facial-recognition smart lock for apartment buildings. During testing, the team discovers the lock unlocks instantly for adults but frequently fails to

recognize children under the age of 10. Explain the ethical issue present here and identify the specific phase of the AI Project Cycle where this mistake originated.

Q18. In an AI project aimed at reducing city traffic, a student team jumps straight from collecting traffic camera footage (Data Acquisition) to writing a Machine Learning algorithm (Modelling), entirely skipping the Data Exploration stage. Explain why this could cause their final AI model to fail.

Q19. Consider two automated systems: (A) A GPS navigation app that calculates a new fastest route in real-time when you miss a turn, and (B) A digital alarm clock that rings exactly at 6:00 AM every day. Evaluate which of these systems possesses true Artificial Intelligence capabilities and why.

Q20. During a group presentation, Rohan speaks with a very low, monotonous tone and rarely makes eye contact, even though his slide content is excellent. Evaluate the impact of his non-verbal communication on the audience.

Q21. A software company sends an email to its non-technical clients filled with complex programming jargon like "API deprecation," "latency issues," and "refactoring." Which specific communication barrier does this create, and how can it be resolved?

Q22. "Feedback is not just the final step of a communication cycle; it transforms communication into a continuous loop." Validate this statement.

Q23. In a busy, crowded market with loud music playing, two friends are trying to discuss a complex math problem. Analyze why their communication might fail by identifying the element and barrier at play.

Q24. An interviewer forms a negative impression of a candidate simply because the candidate belongs to a particular region, ignoring their stellar technical qualifications. Identify the communication factor causing this issue and explain how it distorts objective listening.

Q25. Define the term 'Communication Process' and name its four fundamental structural elements.

Q26. Distinguish between Verbal and Non-Verbal communication methods.

27. What do you understand by the '7 Cs' of effective communication? List any four of them.

28. Explain 'Visual Communication' and provide two real-world examples where it is used over verbal text.

Q29. What are 'Perspectives in Communication'? Name any two personal factors that shape an individual's perspective.

ARTISTIC ARTS

Let's get crafty these holidays. Your task is to make a beautiful "Lamp shade with paper mache " like the one in the picture.

No expensive stuff needed. Just use waste paper and your imagination. Also a TRADITIONAL ART of INDIA Miniature painting on A3 sheet with beautiful colour scheme . And bring your masterpiece after holidays

Miniature Paintings

Paper Mache lamp

Instructions: Please find portfolio attached below in the holidays. Complete the portfolio neatly and creatively. Preserve all holidays homework, worksheets, and project work in this file. Paste relevant photographs, certificates, or artwork wherever required. Submit the completed portfolio after the holidays.

Note: This portfolio is a sample template for reference only. Students may design and create their own portfolio using their creativity. The portfolio may be handmade or prepared in typed form.

STUDENT PORTFOLIO

MUKAND LAL PUBLIC SCHOOL

STUDENT PORTFOLIO TEMPLATE

MODE OF SUBMISSION: HANDWRITTEN/TYPED IN A PROJECT FILE

Session: 2026–27

COVER PAGE

Student Name: _____

Class & Section: _____

Roll No.: _____

Teacher's Name: _____

Student photograph

PAGE 1: WHO AM I?
Three Words That Describe Me

1. ---
2. ---
3. ---

My Superpowers (Tick or write your strengths, you can choose one or more options)
□ Creative Thinker
□ Problem Solver
□ Leader
□ Team Player
□ Tech Enthusiast
□ Artist
□ Athlete
□ Public Speaker
□ Helpful Citizen
□ Curious Learner
Mention if any other

My Dream Board
When I grow up, I want to become:

Because:

Draw, paste pictures, or add inspiration here.

My Personal Motto

"_____"

PAGE 2: MY ACHIEVEMENT

Mention all achievements

My Top 5 Proud Moments

☆ _____

☆ _____

☆ _____

☆ _____

☆ _____

Showcase Corner

Paste or attach a photo, certificate, artwork, project & class activities

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PAGE 3: MY SKILL METER

Rate Yourself from 1-5 points

Communication

☐☐☐☐☐

Confidence

☐☐☐☐☐

Leadership

☐☐☐☐☐

Creativity

☐☐☐☐☐

Teamwork

☐☐☐☐☐

Technology Skills

☐☐☐☐☐

Time Management

☐☐☐☐☐

Problem Solving

☐☐☐☐☐

My Biggest Challenge This Year

How did I overcome it?

One Skill I Mastered

One Skill I Will Develop Next Year

PAGE 4: MY REFLECTION CAPSULE

- The most important lesson I learned:

- A moment that made me happy:

- Someone who inspired me:

- How I helped my school/community:

- My Goals for Next Year

1. ---

2. ---

3. ---

A LETTER TO MY FUTURE SELF

Dear Future

Student Signature: _____

Parent Signature: _____

Teacher Signature: ___