



LORD MAHAVIR JAIN PUBLIC SCHOOL

(An English Medium Co-educational Sr. Sec. School, Affiliated to CBSE, New Delhi)

HAVE A FUN FILLED SUMMER VACATION

!! Greetings !!

Dear Parents

Summer vacation begins from 25 May, 2026 to 30 June, 2026.

The School will reopen on 1 July, 2026 (Wednesday)

The much-awaited summer vacations have arrived and it's the perfect time for your child to relax, explore and engage in fun learning activities. These holidays provide an excellent opportunity for your child to grow in various ways from developing new skills to improving their creativity. While it's essential for children to take breaks and have fun it's also crucial to incorporate learning into the holiday activities.

The following suggestions will guide you in balancing play and education at home:

- Engage in meaningful conversations with your child every day.
- Read a variety of storybooks to enhance their imagination and comprehension skills.
- Assign small household responsibilities to develop independence.
- Teach them important moral values through everyday interactions.
- Participate in indoor games together to build bonding and motor skills.

This worksheet is designed to provide educational, fun-filled activities that will help your child continue their learning journey while enjoying the holiday season.

!!Let's make this summer both exciting and educational!!

English Conversation

Encourage your child to use these phrases regularly throughout the day, whether it's during meals, playtime, or bedtime:

Good morning, Mummy! Good morning, Daddy!

- Can I go out and play, please?

YOUR EFFORTS WILL BE HIGHLY APPRECIATED

"THE BEAUTIFUL THING ABOUT LEARNING IS THAT NO ONE CAN TAKE IT AWAY FROM YOU."

FEW REMINDERS FOR THE STUDENTS:-

- Read all the instructions carefully.
- Be creative, innovative and imaginative.
- Homework should be neat & clean.
- Original Drawings/ Illustrations and Creative use of material will be appreciated.
- Go for walk daily with your family.
- Do Meditation and Simple Yoga Exercise daily.
- Don't forget your magic words: Please, Sorry & Thank You- Make these a part of your personality.
- Don't watch too much television & Mobile Phones.
- This is your chance to look after your parents, grandparents, elders and even younger brothers and sisters. You can surely help around the house.
- Take care of your health by eating fresh and healthy food.
- Revise all work done in your class of all subjects.
- Bring the Holiday work with you when you come on 1 July, 2026.

SUMMER BREAK

From 25 May, 2026 to 30 June, 2026

The School will reopen on 1 July, 2026 (Wednesday). The School timings will be as follows:

Classes Nursery to UKG	7:40 am to 12:00 noon
Classes 1 st to 10 th	7:40 am to 1:50 pm
Classes 11 th & 12 th	7:40 am to 12:30 pm



HAVE A FUN FILLED VACATION



LORD MAHAVIR
JAIN PUBLIC SCHOOL

HOLIDAY
Homework

SESSION 2026-27

LORD MAHAVIR JAIN PUBLIC SCHOOL 🏠 ✨
CLASS-10
SUBJECT-HINDI 📖 ✍️
HOLIDAYS HOMEWORK ☀️ 📝

1. निबंध 📖💡 (Research-based Essay)

विषय: 'आधुनिकता और परंपरा का समागम' 🤝🌐

👉 इस विषय पर 300-400 शब्दों में एक विस्तृत निबंध लिखें।

👉 इसमें यह बताएं कि कैसे आधुनिकता और परंपरा मिलकर समाज के विकास में योगदान देते हैं। 🏛️➡️💻

👉 अपने विचारों को तर्क और उदाहरणों के साथ प्रस्तुत करें।

Picture Idea: आधे हिस्से में गाँव का मंदिर + दूसरे आधे में मेट्रो/लैपटॉप का कोलाज 🏠💻

2. रचनात्मक लेखन 🎨🏙️ (Creative Writing)

विषय: 'मेरे सपनों का शहर' 🌈✨

👉 अपनी कल्पनाशीलता का प्रयोग करते हुए एक काल्पनिक शहर का वर्णन करें।

👉 उस शहर की विशेषताएँ, जगहें, संस्कृति और जीवनशैली का वर्णन करें। 🌍👤🍜

👉 इसे आकर्षक बनाने के लिए चित्रांकन भी करें। 🖍️📷

Picture Idea: खुद का बनाया शहर का नक्शा भी दिखा सकते हैं या शहर में जो जो काल्पनिक चीज दिखाना चाहते हैं उनका चित्र लेकर चिपका सकते हैं।

3. कविता का संशोधन 🖋️☀️ (Poetry Revision – Innovative Work)

विषय: दी गई कविता को और प्रभावशाली बनाइए

>"सूरज की पहली किरण, सुनहरी किरण,

प्रकृति का अनमोल खजाना, हर दिल में बस जाए।" ☀️🌿

👉 निर्देश: अपनी रचनात्मकता का प्रयोग कर इस कविता को और सुंदर बनाइए ।

👉 नए शब्द, उपमा, अलंकार जोड़ सकते हैं । 🎵

Picture Idea: सूर्योदय की फोटो के साथ अपनी कविता लिखें 📷

4. प्रेरणादायक विज्ञापन 📣 100 (Motivational Ad)

विषय: 'पढ़ेगा India, तभी तो बढ़ेगा India' 🇮🇳📈

👉 एक ऐसा विज्ञापन बनाइए जो छात्र-छात्राओं को पढ़ाई के लिए प्रेरित करे ।

👉 इसमें अपने पाठ्यक्रम या विशेष ऑफर्स का उल्लेख करें ।

👉 Catchy स्लोगन + आकर्षक डिज़ाइन जरूरी है । 🎯

Example: "डर के आगे जीत है – इस बार 95% पार!" 🏆

Picture Idea: A4 शीट पर रंगीन पोस्टर

5. निम्नलिखित विषयों पर 80 से 100 शब्दों में पत्र लेखन करें:-

1. प्रधानाचार्य को पत्र 🏠

विषय: विद्यालय में खेल-सामग्री और खेल पीरियड बढ़वाने हेतु आवेदन पत्र लिखिए ।

संकेत बिंदु: NEP 2020 में खेल पर जोर, शारीरिक विकास जरूरी

2. संपादक को पत्र 📰

विषय: आपके शहर में बढ़ते वायु-प्रदूषण की समस्या की ओर ध्यान आकर्षित करते हुए किसी दैनिक समाचार-पत्र के संपादक को पत्र लिखिए ।

संकेत बिंदु: दिवाली के पटाखे, गाड़ियों का धुआँ, समाधान सुझाओ

3. नगर निगम अधिकारी को पत्र 🏙️

विषय: अपने मोहल्ले में जगह-जगह कूड़े के ढेर और नालियों की सफाई न होने की शिकायत करते हुए स्वास्थ्य अधिकारी को पत्र लिखिए ।

संकेत बिंदु: डेंगू-मलेरिया का खतरा, स्वच्छ भारत अभियान का हवाला दो

4. पुस्तक विक्रेता/प्रकाशक को पत्र

विषय: डाक द्वारा मँगवाई गई पुस्तकों के खराब होने/गलत आने की शिकायत करते हुए उन्हें बदलने हेतु पुस्तक भंडार के प्रबंधक को पत्र लिखिए ।

संकेत बिंदु: ऑर्डर नंबर, बिल की फोटो, 7 दिन में बदलने का आग्रह

5. बैंक प्रबंधक को पत्र

विषय: आपका ATM कार्ड खो गया है । नया ATM कार्ड जारी करवाने हेतु बैंक प्रबंधक को आवेदन पत्र लिखिए ।

संकेत बिंदु: खाता संख्या, कार्ड ब्लॉक करवाने का उल्लेख।

LORD MAHAVIR JAIN PUBLIC SCHOOL

CLASS-10

WORKSHEET -HINDI

विषय: 1. मुहावरे 2. रचना के आधार पर वाक्य रूपांतरण

खंड – क : मुहावरे [10 अंक]

प्रश्न 1: निम्नलिखित मुहावरों का अर्थ लिखकर अपने वाक्यों में प्रयोग कीजिए। [2x3 = 6 अंक]

1. आँख का तारा होना
2. ईंट से ईंट बजाना
3. घी के दीये जलाना

प्रश्न 2: रिक्त स्थानों में उपयुक्त मुहावरे भरिए। [1x2 = 2 अंक]

1. सच बोलने के कारण मोहन को नौकरी से हाथ धोना पड़ा, अब वह _____ पछता रहा है।
2. साल भर मेहनत न करने के कारण परीक्षा में _____ रह गया।

प्रश्न 3: नीचे दिए गए वाक्यों में प्रयुक्त मुहावरों को छाँटकर उनका अर्थ लिखिए। [1x2 = 2 अंक]

1. चोरी पकड़े जाने पर रमेश के तो होश उड़ गए।
2. दादी हमेशा कहती हैं कि लालच बुरी बला है, इससे अपना भी हाथ जलता है।

खंड – ख : रचना के आधार पर वाक्य रूपांतरण [10 अंक]

प्रश्न 4: निर्देशानुसार वाक्य बदलिए। [2x3 = 6 अंक]

1. सरल वाक्य में बदलिए:

जब मोहन आया तब मैं सो रहा था।

2. संयुक्त वाक्य में बदलिए:

ईमानदार व्यक्ति को सभी सम्मान देते हैं।

3. मिश्र वाक्य में बदलिए:

परिश्रमी छात्र सफल होकर खुश होता है।

प्रश्न 5: निम्नलिखित वाक्यों के भेद पहचानकर लिखिए – सरल/संयुक्त/मिश्र। [1x2 = 2 अंक]

1. यदि तुम पढ़ोगे तो अवश्य पास होंगे।

2. सूरज निकला और अँधेरा दूर हो गया।

प्रश्न 6: दिए गए वाक्य को अन्य दो भेदों में रूपांतरित कीजिए। [2 अंक]

मिश्र वाक्य: जो व्यक्ति दयालु होता है, ईश्वर उसकी मदद करता है।

इसे सरल वाक्य और संयुक्त वाक्य में बदलिए।

LORD MAHAVIR JAIN PUBLIC SCHOOL, AMBALA CANTT

SUMMER HOLIDAYS HOMEWORK

CLASS- X (2026-27)

SUBJECT - ENGLISH

Dear Students

Holidays is the time that we all eagerly wait for. We all make plans to enjoy, to relax and to empower ourselves during these gala days. This summer vacation the Holiday Homework so designed by mentors of the school is a medium for you all to achieve the motto of "Fun and Learn".

As it is well recognized that LORD MAHAVIR JAIN PUBLIC SCHOOL, not only focuses on academics but lay equal importance on Co-Scholastic Competencies. The school also desires you to adhere to the following guidelines for a fulfilling break.

Instructions:

- a. Do all the work neatly
- b. The work should be presented in a well written format
- c. All the work should be compiled in A4-size sheet and keep in a file folder.

LITERATURE SECTION

Q1. Select the question according to your Roll Number

A. "WHAT IF?" ALTERNATE ENDING TASK :Roll no. 1 to 10

Rewrite the ending of:

- a. A Triumph of Surgery

OR

- b. Dust of Snow

OR

- c. A Letter to God

B. CHARACTER INTERVIEW SHOW : ROLL NO 11 to 20

Conduct an imaginary interview with ANY ONE character:

- a. Nelson Mandela
- b. Mrs Pumphrey
- c. Robert Frost

d. Lencho

Submission: Short video

C. EMOTION COLLAGE : ROLL NO 21 to 30

Create a visual collage showing:

- a. Desire (Fire)
- b. Hatred (Ice)
- c. Hope
- d. Forgiveness
- e. Freedom

Must Include:

- (i). One self-written slogan
- (ii). One quotation from the poems

D. NEWSROOM ACTIVITY : ROLL NO 31 and above

Prepare a newspaper front page based on ANY ONE event:

- a. Mandela becomes President
- b. Tricki's miraculous recovery
- c. "Hatred destroying society" special report
- d. Snowfall miracle from Dust of Snow
- e. Lencho receives God's letter

Must Include:

- (i). Headline
- (ii). Editorial column
- (iii). Advertisement
- (iv). Weather section

WRITING SKILL

Q 2. (A). Write a formal Letter to the Editor of National daily on the given issue: Do any three

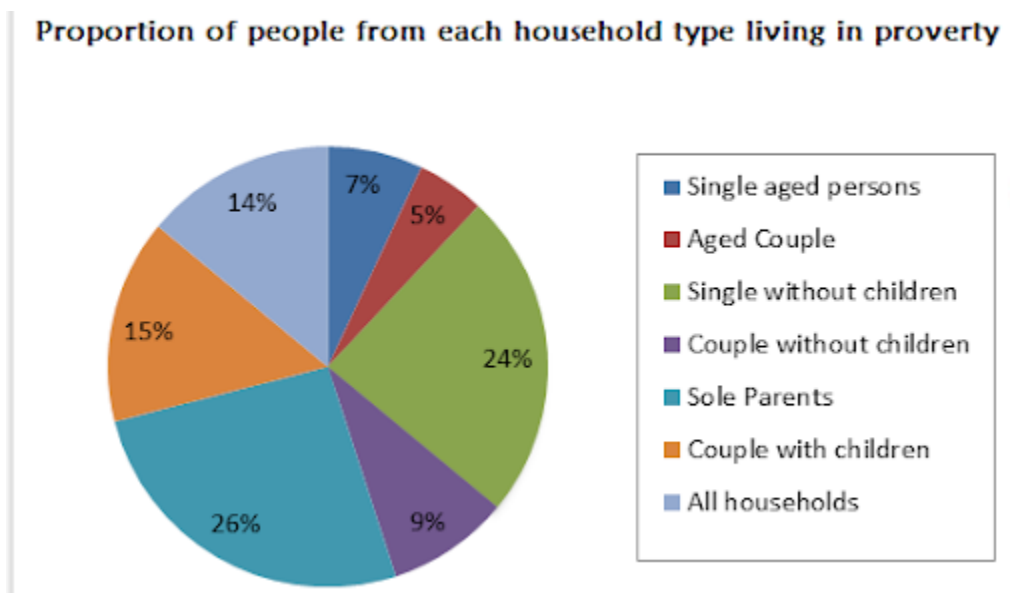
- a. Social media addiction among teenagers
- b. Declining moral values in society
- c. Pressure of academic competition
- d. Cruel treatment of animals by owners

Must include:

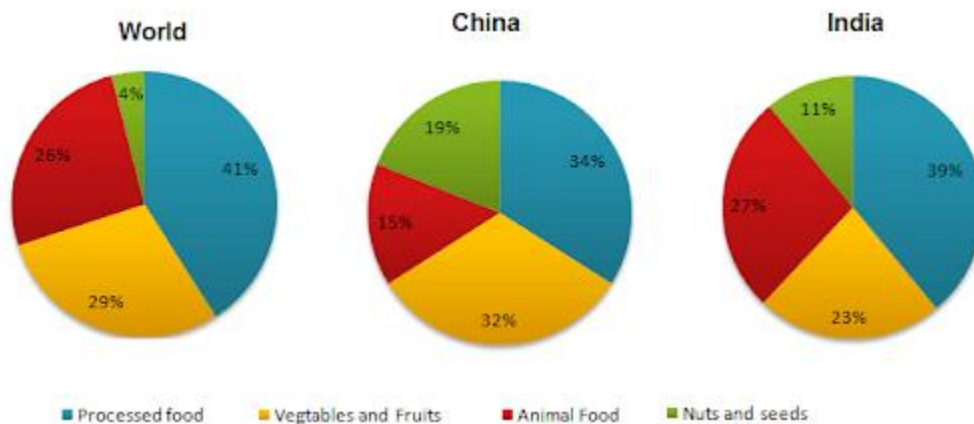
- (i). One proverb
- (ii). One rhetorical question
- (iii). One statistical fact
- (iv). One advanced vocabulary word in every paragraph

2. (B). Do any two questions from the following:

- a) The pie chart shows the proportion of people from different households living in poverty in the UK in 2002. Write an analytical paragraph to describe the information in 100-120 words.



- b) Below given are three pie charts showing consumption habits of India, China and World overall in 2008. Write an analytical paragraph describing the pie charts (100-120 words).

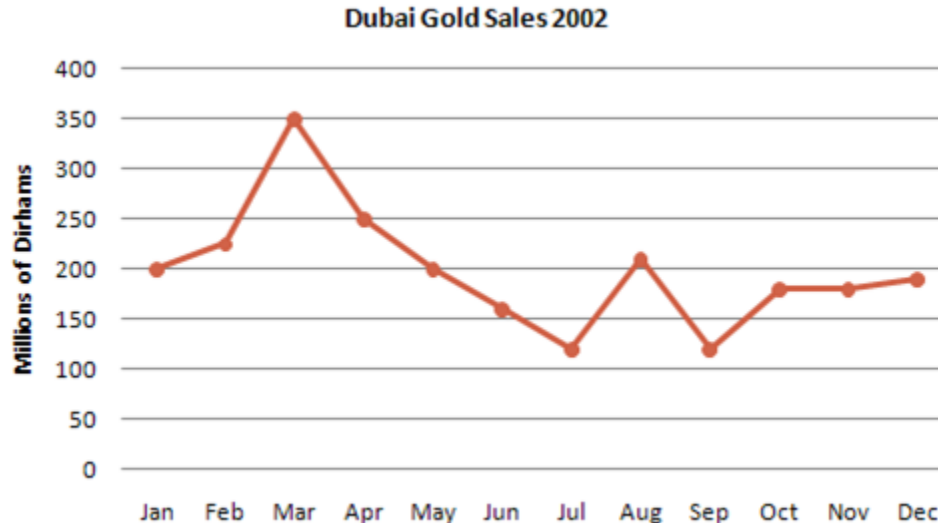


- c) The following table shows details about the internet activities for six categories for different age groups. Write an analytical paragraph for the table given in around 150-200 words.

Internet Activities by Age Group

Activity%	Age group						
	Teens	20s	30s	40s	50s	60s	70+
Get News	76	73	76	75	71	74	70
Online games	81	54	37	29	25	25	32
Downloads	52	46	27	15	13	8	6
Product research	0	79	80	83	79	74	70
Buying a product	43	68	69	68	67	65	41
Searching for people	5	31	23	23	24	29	27

- d) The graph given shows estimated sales of gold in Dubai in 2002. Write an analytical paragraph describing the line graph in around 150 words.



Q3. SUBJECT-VERB CONCORD: FOR ALL TO DO

Correct the following:

1. Neither the students nor the teacher _____ aware of the announcement.
2. The quality of the mangoes _____ disappointing.
3. Physics _____ considered difficult by many students.

4. Each of the dancers _____ prepared well.
5. Bread and jam _____ my favourite breakfast.

Q4. Select the question according to your Roll Number

A. “Freedom and control are deeply connected.”

Compare how this idea is explored in:

- | | |
|---|---------------|
| a. Nelson Mandela: Long Walk to Freedom | ROLL NO 1-10 |
| b. A Triumph of Surgery | ROLL NO 11-20 |

Instructions:

- (i). 120-150 words
- (ii). Include emotional and symbolic analysis
- (iii). Use textual references
- (iv). Compare leadership and dependency

B. “Are human emotions powerful enough to build or destroy society?”

With reference to Fire and Ice and Nelson Mandela: Long Walk to Freedom, research how emotions such as hatred, desire, forgiveness, greed, and compassion influence human behavior and the fate of nations. **Roll no 21-30.**

Your research must include:

- (i). The symbolic meaning of “Fire” and “Ice”
- (ii). Nelson Mandela’s role in overcoming hatred through forgiveness
- (iii). At least two historical or present-day examples where emotions changed society positively or negatively
- (iv). Psychological effects of uncontrolled emotions
- (v). Your personal opinion on whether emotions are humanity’s greatest strength or greatest weakness

C. “Can hope and positivity help humans survive difficult times?” Roll No 31 and above

With reference to A Letter to God and Dust of Snow, research how faith, optimism, and small moments of positivity help people overcome challenges and emotional struggles.

Your research must include:

- (i). Lencho’s unwavering faith and belief in God

- (ii). The symbolic meaning of the crow, hemlock tree, and snow
- (iii). Real-life examples of people overcoming hardships through hope and positivity
- (iv). Scientific or psychological research on positive thinking and mental strength
- (v). Your personal reflection on whether hope is powerful enough to change human life

Q5. Research Question:

Suggested Plays:

Julius Caesar or The Tempest

Task: Rewrite the play as modern fiction or a contemporary short novel.

Include:

1. Cover Page with Theme
2. Introduction to Shakespeare
3. Plot Summary
4. Fictional Adaptation (1000–1200 words)
5. Character Diary Entry (any one character)
6. Important Quotes
7. Conclusion with Learning Outcome

Creative Add-ons:

Newspaper report of an important event

Interview with a character

Alternate ending

ASSIGNMENT (MAY)

Section A – Reading Comprehension

Read the passage carefully and answer the questions that follow:

In the contemporary world, technological advancement has transformed human interaction in unprecedented ways. Although digital communication has enhanced accessibility and convenience, it has simultaneously diminished the depth of interpersonal relationships. Individuals, especially adolescents, are increasingly becoming dependent on virtual validation through social media platforms. This dependence often results in anxiety, lack of concentration, and emotional isolation. Furthermore, excessive exposure to digital devices has reduced the habit of critical thinking and meaningful conversation. Experts argue that unless technology is regulated with self-discipline and awareness, society may gradually lose the essence of genuine human connection and emotional resilience.

1. What paradox of technological advancement is highlighted in the passage?
2. Why are adolescents becoming emotionally vulnerable according to the writer?
3. Explain the phrase “virtual validation” in the context of the passage.
4. How has technology affected critical thinking and communication skills?
5. “Convenience often comes at a hidden cost.” Justify the statement with reference to the passage.

Section B – Grammar

Tenses & Subject–Verb Concord

1. By the time the doctor arrived, Tricki ____ unconscious due to overfeeding.
(had become / has become)
2. Neither Mrs Pumphrey nor her servants ____ capable of controlling Tricki’s diet.
(was / were)
3. The quality of modern gadgets and social media platforms ____ rapidly changing human behaviour.
(is influencing / are influencing)
4. Hardly had the students entered the classroom when the principal ____ the inspection.
(announced / had announced)
5. Ten kilometres ____ not considered a long distance by trained athletes.
(is / are)

Section C – Literature

1. “Mrs Pumphrey’s affection became the cause of Tricky’s suffering.” Critically examine the statement.
2. How does James Herriot use humour and irony to expose human weaknesses in the story?
3. Compare Dr Herriot’s practical wisdom with Mrs Pumphrey’s emotional behaviour.
4. How does the poet transform an ordinary natural incident into a profound life experience? (Dust of Snow)
5. Explain the symbolic significance of the crow and the hemlock tree in the poem. (Dust of Snow)

ENJOY YOUR SUMMER VACATIONS

Class X

Mathematics Holiday Homework

“Mathematics is not only about numbers; it is a way of thinking logically and solving real-life problems creatively. Enjoy learning through observation and practice.”

Theme: “Mathematics in Everyday Life”

Objective:

To help students understand how Mathematics is used in daily life through observation, calculation, creativity, and practical applications.

General Instructions

Complete the work neatly in a separate Mathematics notebook/file.

Show all calculations clearly.

Use graphs, coloured pens, and diagrams wherever required.

Maintain proper presentation and accuracy.

Submit the homework on the first day after the holidays.

Avoid copying from others.

Holiday Homework Activities

1. Daily Life Mathematics Project

Prepare a project on any one topic:

Mathematics in Shopping

Mathematics in Sports

Mathematics in Architecture

Mathematics in Banking

Mathematics in Cooking

Include:

Introduction

Real-life examples

Mathematical calculations

Pictures/charts

Conclusion

2. Data Handling Activity

Collect data of:

Daily temperature of your area for 10 days

OR

Time spent on mobile/TV/study during holidays

Represent the data using:

Bar Graph

Pie Chart

Mean, Median, and Mode

3. Case Study Based Questions

Solve any 05 case-study or application-based questions on any 3 topics given below:

Linear Equations

Quadratic Equations

Trigonometry

Surface Areas & Volumes

Probability

4. Do Complete lab manual activities of Chapter Ch 03 and Ch14.

5. Revise Periodic 1 syllabus

6. Do assignment based on periodic test syllabus(ch 01,02,03,14) in fair notebook.

Lord Mahavir Jain Public School

Class 10

Mathematics Assignment

Chapters:

1. Real Numbers
2. Polynomials
3. Pair of Linear Equations in two Variables
4. Probability

Total Marks: 40

Section A — MCQs

(5 × 1 = 5 Marks)

1. The HCF of 24 and 36 is:
 - a) 6
 - b) 12
 - c) 18
 - d) 24
2. The degree of the polynomial $5x^3 - 2x + 7$ is:
 - a) 1
 - b) 2
 - c) 3
 - d) 5
3. If one zero of the polynomial $x^2 - 5x + 6$ is 2, the other zero is:
 - a) 1
 - b) 3
 - c) 4
 - d) 6
4. A coin is tossed once. The probability of getting a head is:
 - a) 0
 - b) 1
 - c) $1/2$
 - d) $1/3$
5. Which of the following numbers is irrational?
 - a) $\sqrt{49}$
 - b) $\sqrt{25}$

- c) $\sqrt{2}$
- d) $3/5$

Section B

(4 × 2 = 8 Marks)

6. Use Euclid's Division Algorithm to find the HCF of 135 and 225.
7. Find the zeroes of the polynomial:
 $x^2 - 9$
8. Solve: $x+y = a+b$ and $ax-by = a^2 - b^2$
9. Verify the relationship between zeroes and coefficients for the polynomial:
 $x^2 - 7x + 10$

Section C

(5 × 3 = 15 Marks)

10. Prove that $\sqrt{5}$ is an irrational number.
11. The ratio of incomes of two persons is 9:7 and the ratio of their expenses is 4:3. If each of them manages to save ₹2000 per month, find their monthly incomes and expenses.
12. Find the quadratic polynomial whose zeroes are 3 and -2.
13. A bag contains 5 red balls, 3 blue balls, and 2 green balls. One ball is drawn at random. Find the probability that the ball drawn is:
 - (i) Red
 - (ii) Blue or Green
14. Determine whether the following can end with digit 0:
 $2^3 \times 7$
Give reason.

Section D — Case Study Based Questions

(3 × 4 = 12 Marks)

15. Case Study 1 — Real Numbers

Riya and Aman are arranging chairs for a school function. Riya has 84 chairs and Aman has 126 chairs. They want to arrange them in equal rows such that each row has the same number of chairs.

- (i) Find the HCF of 84 and 126. (1 Mark)
- (ii) What is the maximum number of chairs that can be placed in each row? (1 Mark)

(iii) If they make rows using the HCF number of chairs, how many rows will be formed altogether? (2 Marks)

16. Case Study 2 — A school canteen sells sandwiches and juice packs during lunch break. On Monday, 4 sandwiches and 3 juice packs cost ₹210. On Tuesday, 2 sandwiches and 5 juice packs cost ₹190.

Let the cost of one sandwich be ₹ x and the cost of one juice pack be ₹ y .

The situation can be represented by the following equations:

$$4X+3Y=210$$

$$2X+5Y=190$$

Answer the following questions:

(i) Write the pair of linear equations representing the above situation.

(1 Mark)

(ii) Find the cost of one sandwich.

(1 Mark)

(iii) Find the cost of one juice pack using any suitable method.

(2 Marks)

17. Case Study 3 — Probability

A box contains cards numbered from 1 to 10. One card is drawn at random.

(i) Find the total number of possible outcomes. (1 Mark)

(ii) Find the probability of drawing a prime number. (1 Mark)

(iii) Find the probability of drawing:

- an even number

- a number greater than 7

(2 Marks)

Lord Mahavir Jain Public School

Holidays Home Work

Class – X

Session – 2026-27

SUMMER HOLIDAYS ACTIVITY

Genes Through Generations

Creative Heredity Family Trait Tree Activity

Theme

“Like Grandparents, Like Parents, Like Me!”

Discover how traits travel through generations and explore the science of heredity in a fun and creative way

AIM

Students will:

- Understand the concept of heredity and genes
- Identify dominant and recessive traits in family members
- Compare similarities among generations
- Create a creative family trait tree using observations and analysis

Observe These Traits in Your Family

Study the following inherited traits:

- Tongue rolling
- Attached or free ear lobes
- Dimples
- Eye colour
- Hair type (curly/straight)
- Left or right-handedness

Family Members to Include

Observe at least **3 generations**:

- Grandparents
- Parents
- Yourself and siblings/cousins

Activity Instructions

Step 1 — Collect Data

Observe each family member carefully and note their traits.

Step 2 — Identify Traits

Dominant Traits : Traits that appear more commonly in generations.

Examples:

- Free ear lobes
- Tongue rolling
- Dimples and many more

Recessive Traits : Traits that may skip generations.

Examples:

- Attached ear lobes
- No dimples and many more

Step 3 — Create a Creative Family Trait Tree

You can make your project in any ONE creative style:

Option 1 — Tree Design : Draw a large tree:

- Grandparents at roots
- Parents on branches
- Children on leaves/fruits

Option 2 — DNA Helix Theme

Create a DNA-shaped family flowchart showing traits passing generation to generation.

Option 3 — Leaf Trait Chart

Each leaf represents one family member with traits written inside.

Option 4 — Photo Family Tree

Paste small family pictures and label inherited traits beside them.

Observation Table Format

Family	Tongue	Ear	Dimples	Eye Colour	And any
Members	Rolling	Lobes			other

Grand father					
Grand Mother					
Father					
Mother					
Me					
Siblings					

Assignment Questions

(CBSE Board Level)

1. A student added dilute HCl to sodium carbonate in a closed flask connected to lime water.
 - Predict the observations in both containers.
 - Write balanced chemical equations.
 - Explain why the reaction is considered a double displacement reaction followed by decomposition.
2. A silver spoon becomes black after some days while a copper vessel develops a green coating.
 - Name both processes.
 - Compare the chemical nature of the coatings formed.
 - Why is one harmful while the other protects the metal?
3. You are given:
 - Zn granules
 - CuSO₄ solution
 - FeSO₄ solution
 - AgNO₃ solution

Design an experiment to arrange Zn, Fe, Cu and Ag in decreasing order of reactivity.

4. Why are decomposition reactions called the opposite of combination reactions? Give one industrial application where both reactions occur together.
5. A student electrolysed acidified water and collected gases in two test tubes.
 - Why is acid added to water?
 - Which gas will be collected in double volume?
 - Why should the gases not be tested near a flame immediately?
6. A white salt:
 - loses water on heating,
 - turns blue again on adding water.

Identify the salt and explain:

- reversible change,
- role of water molecules,
- one industrial use.

7. Why are corrosion and respiration both considered oxidation reactions even though one is harmful and the other essential?
8. A person eats oily junk food regularly but still feels weak and tired.
 - Which life process is mainly affected?
 - Which organs may be overloaded.
 - Explain scientifically why energy production becomes inefficient.
9. Why can't multicellular organisms rely only on diffusion for transportation while Amoeba can?

Explain using:

- surface area to volume ratio,
- energy demand,
- distance factor.

10. A plant kept near a window bends towards sunlight.
 - Which hormone is responsible?
 - Explain how this movement increases photosynthesis.
 - Predict what happens if the tip of the shoot is removed.
11. A student covered one leaf with black paper and kept the plant in sunlight.
 - Why is starch absent in one part of the leaf?
 - Why must the plant be destarched before the experiment?
 - What error may occur if alcohol heating is skipped?
12. During vigorous exercise, muscles start paining.
 - Which process causes this?
 - Why does oxygen deficiency occur despite rapid breathing?
 - Explain why pain disappears after rest.
13. Compare transportation in plants and humans on the basis of:
 - pumping mechanism,
 - transport tissue,
 - energy requirement,
 - direction of flow

14. If stomata remain permanently closed:

- Which life processes will stop?
- Which process may continue temporarily?
- How will temperature regulation be affected?

15. Why does the small intestine contain villi but the stomach does not?

16. Draw and explain:

- nephron,
- pathway of urine formation,
- selective reabsorption.

Also explain what would happen if reabsorption stops completely.

17. Why do desert plants open stomata at night instead of daytime?

Relate your answer to:

- water conservation,
- photosynthesis,
- gaseous exchange.

18. An object is placed 30 cm in front of a concave mirror of focal length 15 cm.

1. Find the image distance.
2. Nature of image.
3. Magnification.
4. Draw ray diagram.

19. A convex lens forms a real image double the size of the object on the opposite side. If focal length = 20 cm, find:

- object distance,
- image distance.

20. Why does a diamond sparkle more than glass even though both refract light?

21. An object is placed at a distance of 12 cm from a convex lens of focal length 18 cm.

Find:

1. Image distance
2. Magnification
3. Nature of image

22. A concave lens of focal length 25 cm forms an image at 10 cm from the lens. Find:

- object distance,
- magnification,
- nature of image.

23. A student says: "A plane mirror can never form a real image." Is the statement always true? Justify with reasoning.

24. An object is placed between F and 2F of a concave mirror. The image formed is 3 times magnified. Calculate:

- object distance,
- image distance,
- focal length.

25. Why is a convex mirror used as rear-view mirror instead of plane mirror? Explain using:

- field of view,
- image formation

LORD MAHAVIR JAIN PUBLIC SCHOOL

HOLIDAYS HOMEWORK 2026 - 27

SUBJECT: SOCIAL SCIENCE

CLASS- IX

1. Prepare the following chapters for Periodic- I (Book -1)

- Ch-1 : Geo – Resources and Development
- Ch- 2 : His. – Nationalism in India
- Ch-1 : Pol Sc.- Power Sharing
- Ch-1 : Eco. – Development

2. Do the following Map Work in Fair Note – Book :

- I . States of India
- II.Major Soils of India
- III.Centres of Nationalist Movement
- IV. Major land forms (Map of India)

3. Make an Interdisciplinary Project on any one of the following topics.

- **Project should be strictly handwritten, relevant pictures must be pasted beautifully.**
- **Use File to make project.**
- **Cover page of the project must be relevant for the topic.**
- **Project file must be neat and beautiful. •**
- **Use stencil for headings.**

Consumer Rights

OR

Social Issues

OR

Sustainable Development

It involves combining 2 or more disciplines into one activity-more coherent and integrated. The generally recognized disciplines are Economics, History, Geography, Political Science, a sample plan has been enclosed) Kindly access the link given below.

Suggested Template for Presentation by the Students

Name of the Students (Team):	
Class :	Section:
Topics of Interdisciplinary Project:	
Title of the Project:	
Objectives:	
Multiple Assessment:	
Ex. Surveys / Interviews / Research work/ Observation/ Story based Presentation/ Art integration/ Quiz/ Debate/ role play/ viva, /Group discussion /visual expression/ interactive bulletin boards/ gallery walks/ exit cards/ concept maps/ peer assessment/ art integration /Self-assessment/ integration of technology etc.	
Evidences: Photos, Excerpts from Interviews, observations, Videos, Research References, etc.	
Overall presentation: Link of PPT, shared documents, can be digital/handwritten, as per the convenience of the school.	
Acknowledgement:	
References (websites, books, newspaper etc.)	
Reflections:	

E . Do the assignment in the fair note book

HOLIDAY HOMEWORK

Subject- IT

Instructions for All Classes

1. Work should be neat, colourful, and creative.
2. Use both handwritten and digital elements wherever possible.
3. Students should do independent research using books, newspapers, internet, or interviews.
4. Mention all sources of information.
5. Originality and innovation will be awarded extra marks.
6. Best projects will be displayed in the school Computer Lab.
7. Use proper headings, borders, and labels to make the project attractive.
8. Projects should be submitted in a well-maintained folder/file.
9. Students are encouraged to use eco-friendly and waste materials for models.
10. Include drawings, diagrams, charts, or screenshots wherever required.
11. Use simple and clear language while writing the content.
12. Students may add creative ideas beyond the given instructions.

IT
Class X

Revise Periodic Syllabus of ch-1, ch-2, ch-3 (Part-A)

Topic: “Artificial Intelligence for Social Good”

- Choose ONE area:
 - o Healthcare
 - o Agriculture
 - o Education
 - o Disaster Management
- Explain how AI can improve that field.
- Prepare:
 - o PPT/video/poster/report
- Add real-life examples and future ideas.

Model:

- Create a smart healthcare/agriculture/disaster alert model.

Topic: “Cybercrime Awareness Campaign”

- Research common cybercrimes:
 - o Phishing
 - o Hacking
 - o Identity theft
- Create:
 - o Awareness posters
 - o Short video
 - o Digital brochure

Model:

- Prepare a cyber safety awareness booth or digital security lock model.

Class X

Fill in the Blanks

1. Cybercrime includes online _____.
2. Phishing is used to steal _____.
3. AI can improve _____ management.
4. Machine learning is a branch of _____.
5. Firewall protects computer from _____.

True / False

1. Cybercrime is harmful.
2. AI is used in healthcare.
3. Firewalls improve security.
4. Phishing emails are safe.
5. Machine learning is related to AI.

MCQs

1. Which is a cybercrime?
a) Phishing b) Typing c) Painting
2. AI can help in:
a) Agriculture b) Education c) Both
3. Which software improves security?
a) Firewall b) Paint c) Calculator
4. Hacking means:
a) Unauthorized access b) Typing c) Drawing
5. Which is an AI application?
a) Chatbot b) Notebook c) Printer

Short Answer Questions

1. What is cybercrime?
2. What is phishing?
3. What is machine learning?
4. Write two uses of AI.
5. What is a firewall?

Long Answer Questions

1. Explain types of cybercrime.
 2. Describe AI for social good.
 3. Explain cyber safety measures.
 4. Write applications of machine learning.
 5. Explain importance of cyber security.
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