Lt. Col. Mehar Little Angels Sr. Sec. School
HOLIDAY HOMEWORK 2024-25
CLASS-X

(The summer holiday homework is also available on the school website i.e www.laps.in)
To be ready for tomorrow's opportunities, do your homework today. Learn, refine your skills, and focus on your growth.

Dear Students,

Summer has arrived and brought with it you're amazing and fun-filled holidays. Summer break is a well-deserved opportunity to relax and unwind by indulging in various activities. Your holiday homework has been specially designed for you to be creative, innovative, and imaginative while completing your tasks. It will also enable you to recapitulate what was taught in the classrooms. We hope you will play, learn, research, analyze, experiment, imagine, think, value, appreciate and above all enjoy during your holidays.

General Instructions:
- Mention the date and day when you do your work.
- Use your creativity and imagination wherever required.
- Submit your holiday homework when the school re-opens.

ENGLISH LANGUAGE AND LITERATURE

Q1. Answer the following questions in 30-40 words:
1. What were Lencho's feelings when he found the letter with money in it? What did he do after opening the letter?
2. How far would you agree that one's positivity can bring in a spark of brightness even in adverse circumstances?
3. What impression do you form of the postmaster after reading the story 'A Letter to God'?
4. Did the letter reach God? Why did the postmaster send a reply to Lencho?
5. Lencho describes the post office employees as "a bunch of crooks."
   a) Were they really a bunch of crooks?
   b) How would you describe them?

Q2. Answer the following questions in 100-120 words:
1. Lencho received the money and a letter from God yet he was not happy. Do you think he did not know the pleasure of being grateful to others? Reflecting on the values required to lead a happy life, explain in your own words.
2. The postmaster represents such people who still believe in helping others. Mention those values of the postmaster which you would like to emulate in yourself.

Q3. Read the following lines and answer the questions that follow :
1. "Now we're really going to get some water woman."
   Is the speaker sure that it is going to rain? Give a reason for your answer.
2. "These are not raindrops falling from sky, they are the new coins."
   What are the raindrops compared to and why?
3. "A plague of locusts would have left more than this."
   What loss is being referred to in above line?
4. "If you don't help me, my family and I will go hungry this year."
   What is Lencho asking for and why?
   Who is 'you' in above line?

Q4. You have read the speech of Nelson Mandela. Prepare a speech in 150 words for the morning assembly reflecting on the following questions.
a)   How do you feel today about the country's freedom?

b)   Are we feel and independent?
c)   Are we serious about our responsibilities as citizens?

Q5. Write a letter to the editor of an English daily, making a plea to the common people to switch over to solar energy
to conserve electricity and limit electricity bills.

Q6. Make a creative poster on literary devices. You can include all of these: Alliteration, Metaphor, Personification, Simile, Onomatopoeia, Irony, Symbol, Repetition and Satire.

PROJECT WORK
Collect all the information about Anne Frank. Read chapter 4 'From the Diary of Anne Frank thoroughly and make a project on the life of Anne frank. (Hints: when and where she was born, parents, siblings, why the family went into hiding, condition of Jews during Nazi rule, holocaust, life in concentration camps, Anne as a budding writer, cheerful and lively teenager, her wit and intelligence, her intimacy with Kitty, relationship with teachers, friends and family members). The project must contain all the picture relevant to the topic. (Minimum pages -15)

NOTE- Present your work on A-4 size sheets and put it in an attractive folder with your name and class clearly written at the top

हिन्दी

1) निम्नलिखित कार्य एक <u>आकर्षक फ़ाइल</u> में कीजिए––

1) बंगाल/कोलकाता के दर्शनीय स्थलों से संबंधित **दो विज्ञापन** बनाएँ।

2) नौ रसों के **सचित्र** नाम लिखें तथा उनका उदाहरण सहित विवरण लिखें I

3) अपने जीवन की किसी एक घटना को **लघु-कथा** के रूप में लिखें I

4) 'बड़े भाई साहब' पाठ में से **30 मुहावरों के अर्थसहित वाक्य** बनाएँ। (यह व्याकरण रजिस्टर में कीजिए)

5) निम्नलिखित विषयों में से **किसी एक विषय पर भाषण** लिखें तथा **प्रतियोगिता के लिए कंठस्थ** करें l

क) फ़ेसबुक और युवा वर्ग

ख) संयुक्त परिवार – आज की आवश्यकता

ग) पर्यावरण असंतुलन – उत्तरदायी कौन?

घ) खो गया है बचपन

6) एक **लंबी कविता** लिखें और उसे **प्रतियोगिता के लिए कंठस्थ** करें। (कविता स्वरचित भी हो सकती हैi)

2) <u>मुंशी प्रेमचंद पर एक आकर्षक फ़ाइल में पोर्टफोलियो (निवेश-पत्र) तैयार करें, जिसमें उनके जीवन से संबंधित निम्नलिखित सचित्र जानकारी हो।</u>

प्रथम पृष्ठ पर – हिन्दी निवेश पत्र लिखें।

द्वितीय पृष्ठ पर – अपना परिचय लिखें।

तृतीय पृष्ठ पर – लेखक का नाम लिखें।

चतुर्थ पृष्ठ पर – प्रमाण-पत्र लिखें।

पंचम पृष्ठ पर – अनुक्रमणिका (विषय-सूची) लिखें।

अनुक्रमणिका में निम्नलिखित विषय लिखें तथा उसी के अनुसार फ़ाइल में आकर्षक कार्य करें––

1) व्यक्तिगत जानकारी

2) पारिवारिक जानकारी

3) शैक्षणिक जानकारी

4) विशिष्ट उपलब्धियाँ / पुरस्कार

5) मुंशी प्रेमचंद जी की रचनाओं के नाम

6) 'बड़े भाई साहब' पाठ का सार
7) पाठ में आपको क्या अच्छा लगा और क्यों?

MATHEMATICS

I. Make a portfolio based on **LATEST MATHEMATICIANS AND THEIR CONTRIBUTION** in 6-8 colourful pages.
II. Make a beautiful a-4 size cover page based on mathematics shapes.
III. Do any 5 activities from mathematics lab manual.
IV. Do following assignment in rolled sheets.

Note : Submit above work in a *clear bag* after vacation mentioning your roll number , name, class and section.

ASSIGNMENT

1. Prove that $5\sqrt{2} + 3$ is irrational given that $\sqrt{2}$ is irrational.

2. The numbers 525 and 3000 are both divisible only by 3, 5, 15, 25 and 75. What is HCF (525, 3000)? Justify your answer.

3. Explain why $3 \times 5 \times 7 \times 11 + 7$ is a composite number.

4. Can two numbers have 18 as their HCF and 390 as their LCM? Give reason

5. Find the zeroes of the polynomial $x^2 + 1/6x - 2$, and verify the relation between the coefficients and the zeroes of the polynomial.

6. Find a quadratic polynomial, the sum and product of whose zeroes are 2 and $-3/2$ respectively. Also find its zeroes.

7. Given that the zeroes of the cubic polynomial $x^3 - 6x^2 + 3x + 10$ are of the form a, a + b, a + 2b for some real numbers a and b, find the values of a and b as well as the zeroes of the given polynomial.

8. For which values of p and q, will the following pair of linear equations have infinitely many solutions? $4x + 5y = 2$. $(2p + 7q) x + (p + 8q) y = 2q - p + 1$.

9. Solve the pair of linear equations:$21x + 47y = 110, 47x + 21y = 162$.

10. Draw the graphs of the pair of linear equations $x - y + 2 = 0$ and $4x - y - 4 = 0$. Calculate the area of the triangle formed by the lines so drawn and the x-axis.

11. Find the roots of the $6x^2 - \sqrt{5}x - 5 = 0$ using the quadratic formula, factorisation method. 12. Find the roots of $6x^2 - \sqrt{2} x - 2 = 0$ by the factorisation of the corresponding quadratic polynomial.

13. Check whether the equation $6x^2 - 7x + 2 = 0$ has real roots, and if it has, find them by them.

14. Had Ajita scored 10 more marks in her mathematics test out of 30 marks, 9 times these marks would have been the square of her actual marks. How many marks did she get in the test?

15. A train travels at a certain average speed for a distance of 63 km and then travels a distance of 72 km at an average speed of 6 km/h more than its original speed. If it takes 3 hours to complete the total journey, what is its original average speed?

SCIENCE

BIOLOGY
1- Complete the class register.
2- Do practice of diagrams given in nutrition and respiration part of ch. Life processes
PHYSICS
1. Solve the numericals done in CW in your HW copy.
2. Draw any concept related topics on following topics on A3 sheet .
   Light

Human eye and colourful world
Electricity
Magnetic effect of electric current

3. Make portfolio on any one of the topic in syllabus.
   Light
   Human eye and colourful world
   Electricity
   Magnetic effect of electric current

4. Make your practical file with 5 practical's written.

   a) Studying the dependence of potential difference (V) across a resistor on the current (I) passing through it and determine its resistance. Also plotting a graph between V and I.
   b) Determination of the equivalent resistance of two resistors when connected in series and parallel.
   c) Find focal length of:
   - Concave mirror
   - Convex lense by obtaining the image of a distant object.
   d) Tracing the path of a ray of light passing through a rectangular glass slab for different angles of incidence. Measure the angle of incidence, angle of refraction, angle of emergence and interpret the result.
   e) Tracing the path of the rays of light through a glass prism.

CHEMISTRY

1. Prepare a Portfolio on the topic –
   a. Chemicals as weapons of mass destruction.(Roll No 1-20)
   b. Importance of esters in our day to day living.(Roll NO 21-40)
2. Prepare a newsletter highlighting all the important facts about" Role of Chemistry in environment".
   a. Prepare the newsletter on A3 sized coloured sheets
   b. Use your creativity to present the information in the form of witty articles, interesting and eye catching captions, slogans and headlines.
   c. Add illustrations, drawings, doodles and cartoons to explain concept wherever required.
3. Write the following Chemistry Practicals in Practical File.

1. A. Finding the pH of the following samples by using pH paper/universal indicator

(i) Dilute hydrochloric acid
(ii) Dilute NaOH solution
(iii) Dilute ethanoic acid solution
(iv) Lemon juice
(v) Water
(vi) Dilute hydrogen carbonate solution

B. Studying the properties of acids and bases (HCl & NaOH) on the basis of their reaction with:
a) Litmus solution (Blue/red)
b) Zinc metal
c) Solid sodium carbonate

2. Performing and observing the following reactions and classify them into:
   A. Combination reaction
   B. Decomposition reaction
   C. Displacement reaction

D. Double displacement reaction

    (i) Action of water on quicklime

    (ii) Action of heat on ferrous sulphate crystals

    (iii) Iron nails kept in copper sulphate solution

    (iv) Reaction between sodium sulphate and barium chloride solutions

3. Observing the action of Zn, Fe, Cu and Al metals on the following salt solutions:

    i) $ZnSO_4(aq)$

    ii) $FeSO_4(aq)$

    iii) $CuSO_4(aq)$

    iv) $Al_2(SO_4)_3(aq)$

Arranging Zn, Fe, Cu and Al (metals) in decreasing order of reactivity based on the above result.

SOCIAL SCIENCE

I. ALBUM

Make an album on any ten endangered species .

Write their names, regions where they are found, total population and required population and measures taken by the government for their survival .

II. ATLAS

Make a beautiful atlas of all the maps given in Geography textbook.

III. PROJECT

Prepare a project on any one of the following topics:

1. Consumer Awareness (Meaning, Need , Events, Impact, ways to protect)

2. Social Issues (Like Gender Inequality, Untouchability, Casteism or any other – Meaning, Need to study Social issues, Causes , Measures by Government for eradication)

3. Sustainable Development (Meaning, Need, Current Scenario, Benefits, Ways to achieve etc.)

Following are the guidelines for the project:-

1. The total length of the project report should not be more than 10-15 A-4 size plain white ivory sheets.

2. The project report should be handwritten and credit will be awarded to original drawings, illustrations and creative use of materials.

3. The project report will be presented in a neatly bound file.

4. The project report should be framed in the following order:

i. Cover page showing: School Name, Name of Student, Class & Section, Session.

ii. Topic

iii. Acknowledgement

iv. List of contents with page numbers.

v. Introduction

vi. Explanation of all the sub topics given

vii. Conclusions based on your findings.

viii. Bibliography: Should have the name of the author and the book referred to, and in case of a website the name of the website must be mentioned.

ix.All the photographs and sketches should be labelled.

x. All the written work should be on right side of the page and pictures, diagrams etc on left side.

III.Revise all the chapters done in the class .

4 Prepare a character sketch of any one Historical character for class activity (Oral).

5 Read the newspaper during the holidays and prepare for inter class newspaper quiz.

INFORMATION TECHNOLOGY

DIGITAL PRESENTATION

1. Prepare a power point presentation on the following topics:
   - a. Artificial Intelligence.
   - b. Entrepreneurial Skills (Roll No. 1- 15).
   - Emerging Trends (Roll No. 16 onwards).

NOTE: Make at least 15-18 slides. Insert Images, Insert tables, Insert Charts, Insert Movie Clip, Audio Clip, Use Word Art/, Use Smart Art, Insert Objects, Insert transition Effects.

DBMS

Q1. Write the SQL commands on the basis of the given table:

Table:-Supplier

SNo	Pname	Sname	Qty	Price	City
S1	Bread	Britannia	150	8	Delhi
S2	Cake	Britannia	250	20	Mumbai
S3	Coffee	Nescafe	170	45	Mumbai
S4	Chocolate	Amul	380	10	Delhi
S5	Sauce	Kissan	470	36	Jaipur

- a. Identify the primary key and display data types from the table.
- b. Create table Supplier and insert all the record in the table.
- c. To select all the columns of the above table.
- d. To select the Pname, Sname and Price from the above table.
- e. Display data for all products sorted by their price in descending order.
- f. Increase the price by 10% of Sauce.
- g. Display only Delhi city Suppliers.
- h. Display only Product name, price reduced to 20% from the table.
- i. Delete the record from the table whose SNo is S10.
- j. Prepare a report and form.

Q2. Write the SQL commands to answer the queries based on Hospital table:

SNO	Name	Age	Dept	Charges	Gender
1	Sandeep	65	Surgery	500	M
2	Kanika	24	Orthopedic	600	F
3	Zubin	36	ENT	450	M
4	Ankita	30	ENT	450	F
5	Kush	29	Surgery	500	M

- a. Create a table hospital.
- b. Name the primary key of the table.
- c. Display all the information of the table Hospital.
- d. To list the names of female patients who are in orthopedic department.
- e. To list names of all patients with their charges in descending order.
- f. Increase the charges of ENT by 10%.
- g. To display the list of doctors whose age is greater than 30 and less than 50.
- h. Delete the record of Zubin.
- i. Change the department of ankita to Surgery.
- j. Prepare a report and form of the table.

Q3. Write the SQL commands on the basis of the given table:

Table: Student

Sid	Sname	Class	Sec	Sage	Scity	Per
S12	RAM	X	A	15	Delhi	85
S13	RADHIKA	X	B	15	Delhi	95
S45	AMAN	IX	C	14	Pune	85
S66	SUBHAM	IX	A	13	Pune	75
S23	KRITIKA	X	C	16	Delhi	53
S98	AMITA	X	A	16	Agra	49
S78	SUMIT	IX	B	15	Delhi	99
S90	RAJ	X	B	15	Agra	82
S22	ANIL	IX	C	14	Pune	63
S33	HIMANSHI	X	C	15	Delhi	45

a. Identify Primary Key and data types of the table student.
b. Write the query to create a table.
c. Add any 3 records in the table and Display full table.
d. Display studentid, students name and age in ascending order of age.
e. Display all the student details those who belongs to Delhi City.
f. Display all the student details that belong to Delhi and Pune of class X.
g. Display all the student details who scored in the range of 40 to 60.
h. Show the details according to the age in ascending order.
i. Show the details according to the age in descending order.
j. Increase the Percentage of class IX students to 3%.
k. Change the percentage of S33 to 48.
l. Show the details of only class X sec B students.
m. Update the city of Raj to Pune.
n. Delete the details of Anil student.
o. Prepare a form and report of the same.

Q4. Write the SQL commands on the basis of the given table: TABLE: Toy

Sno	Toy_Name	Category	Price	Qty
S1	Popeye	Stuff toy	150	12
S2	Rapid Fire	Two Players	600	25
S3	Teddy	Stuff Toy	300	40
S4	Creative	Building Block	800	18
S5	Ping Pong	Two Players	500	53

a. Create a table Toy
b. Add records in the table.
c. Write the data types used in the table.
d. Display full table.
e. Display Toy Name, Category and double of Price.
f. To display toys in ascending order of Price.
g. To display the table in the descending order of Quantity.
h. To display all the toys whose quantity is more than 20 and < to 30.

i. Decrease the Qty of Ping Pong to 5%.

j. Remove the record of S3.

Q5. Write the SQL commands to answer the queries based on Fabric Table:

FabricId	Fname	Type	Disc
F001	Shirt	Wollen	10
F002	Suit	Cotton	20
F003	Tunic	Cotton	10
F004	Jeans	Denim	5
F006	Shorts	Cotton	7

a. Display full table Fabric

b. To display only those fabrics whose disc is more than and equal to 10 of cotton category.

c. To display FabricId, and Double the discount.

d. To modify the fabric shirt by increasing discount of 10.

e. To delete the record of fabric F003 from table.

ART INTEGRATED PROJECT WORK ON LAKSHADWEEP, ANDAMAN AND NICOBAR ISLANDS

Make a common project file of Art Integration of all the subjects according to the instructions given below:

1.The project report should be handwritten and credit will be awarded to original drawings, illustrations and creative use of materials.

2.. The project report will be presented in a neatly bound file.

3. The project report should be framed in the following order:

i. Cover page showing: School Name, Name of Student, Class & Section, Session.

ii. Topic

iii.Index- s.no, subject, topic, page no,

iv.All the photographs and sketches should be labelled.

v. All the written work should be on right side of the page and pictures, diagrams etc on left side.

ENGLISH

1. Make a travelogue on Andaman and Nicobar Islands.

2. Write a detailed paragraph on culture, tradition, literature and languages spoken in Lakshadweep. Paste related pictures.

हिन्दी

1) अंडमान – निकोबार अथवा लक्षद्वीप की भाषा तथा त्योहारों का **सचित्र** विवरण लिखिए।

2) अंडमान – निकोबार अथवा लक्षद्वीप की **वेषभूषा का नमूना (sample)** रंगीन पेपर या अनुपयोगी वस्त्रों द्वारा बनाइए।

MATHEMATICS

Draw a histogram and a pie chart depicting at least 6 regions in Andaman and Nicobar Islands and Lakshadweep on the basis of population density recorded as per data of last 5 years.

SCIENCE

BIOLOGY

Impact of global warming on biodiversity of Andaman and Nicobar

PHYSICS
Find and write data related to the following :
i)power generation in Andaman and Nicobar and Lakshadweep
ii)power consumption comparison in Andaman and Nicobar and Lakshadweep to that in Delhi

CHEMISTRY
Elaborate about-
1. Minerals found in Andaman and Nicobar Islands.
2. Plastic pollution in Lakshadweep Islands.

SOCIAL SCIENCE

Write about any five tribes and paste their pictures, names, original inhabitat of the which area they belong to in the island, food habits ,occupation, festivals and religion.

ECONOMICS
What is the economic importance of these islands for India. Revenue, employment and infrastructure to be explained.