



# L.R.S. ACADEMY

A Senior Secondary English Medium School, Nagina (Bijnor)  
(Affiliated to C.B.S.E. New Delhi)

# SUMMER HOLIDAY HOMEWORK

CLASS

X



*Laying the foundation of excellence*



# MESSAGE FROM PRINCIPAL'S DESK

**Dear Students,**

Holidays are a wonderful opportunity to pause, relax, and rejuvenate your mind and body. It is a time to spend quality moments with your family, strengthen relationships, explore new interests, and create beautiful memories that will stay with you forever.

While you enjoy your break, I encourage you to use this time wisely. Complete your holiday homework with sincerity and creativity. It is not just an assignment, but a chance to learn, discover, and express yourself. Every small effort you put in today builds your knowledge, boosts your confidence, and prepares you for a brighter tomorrow.

**Remember, discipline today shapes your future.  
Be curious, be consistent, and always do your best.**

Read good books, stay active, observe your surroundings, learn new skills, and help your parents and elders. Take care of your health and practice kindness in your words and actions. These small habits build strong character and lead you towards a successful and meaningful life.

I look forward to welcoming you back with happy faces, refreshed minds, and renewed energy. Let us continue our journey of learning, growing, and achieving greater heights—together.

**Wishing you a joyful, safe and enriching holiday!**



Learn with curiosity.  
Work with sincerity.  
Shine with character.

**Mrs Noopur Chandra**  
Principal  
LRS ACADEMY, NAGINA

**Instructions to do holiday homework -:**

- 1. Take separate thin notebook for each subject, cover each notebook & label properly.**
- 2. Take care of your handwriting.**
- 3. Cover the notebook properly & label it.**
- 4. school will reopen on 01/07/2026 & Holiday homework will be submitted at the same date.**
- 5. Holiday homework marks will be added in the next exam.**



# L. R. S. ACADEMY, NAGINA

HOLIDAY HOME WORK- 2026-27

Class –X

## हिन्दी

### 1. पोर्टफोलियो निर्माण

एक सुंदर पोर्टफोलियो फाइल तैयार करें। फाइल में कम से कम 10 पृष्ठ होने चाहिए।

2. पाठ "बालगोबिन भगत" और "लखनवी अंदाज़" को ध्यानपूर्वक पढ़ें तथा पढ़ते समय आने वाले कठिन शब्दों को अपनी कॉपी में लिखें और उनके अर्थ भी लिखें।

## ENGLISH

### 1. Letter to the Editor – A Letter to God

Write a letter to the Editor on the problems faced by farmers due to natural disasters and lack of support.

### 2. Pet Care Chart – A Triumph of Surgery

Prepare a small "Healthy Pet Care Chart" for dogs.

Include:

Healthy food

Exercise

Cleanliness

Do's and Don'ts

### 3. Creative Writing – Fire and Ice

Write 5–6 lines on:

"Which is more harmful – Anger or Hatred?"

### 4. Nature Reflection – Dust of Snow

Observe nature around you and write 4–5 lines about a small moment that changed your mood or made you happy.

### 5. Letter to the Editor – A Tiger in the Zoo

Write a letter to the Editor on the need to protect wildlife and stop cruelty towards animals.

### 6. Fun Character Activity

Choose any one character:

Lencho

Mandela

Tricki

Write:

### 3 qualities of the character

One thing you admire about them

One lesson you learnt from them.

**NOTE : DO ALL THIS WORK IN A PROJECT FILE WITH INTRODUCTION, ACKNOWLEDGEMENT, CERTIFICATE AND INDEX.**

## MATHS

Solve the following questions in file sheet paper

Q1-Prove that  $\sqrt{11}$  is an irrational number.

Q2-Find the greatest number of six digits exactly divisible by 15, 24 and 36.

Q3-Find the zeroes of the quadratic polynomials and verify the relationship between the zeroes and the coefficients

:  $4\sqrt{3}x^2 + 5x - 2\sqrt{3}$

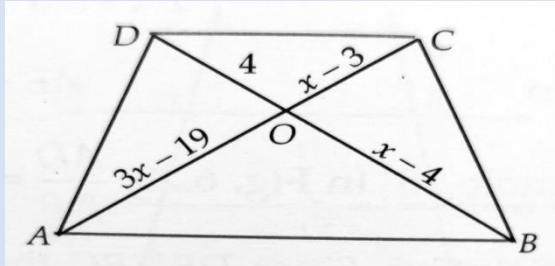
Q4-If  $\alpha, \beta$  are the two zeroes of the polynomial  $3x^2 + 2x + 1$ , find the quadratic polynomial whose zeroes are  $\frac{1-\alpha}{1+\alpha}$  and  $\frac{1-\beta}{1+\beta}$

Q5-Nine times a two-digit number is the same as twice the number obtained by interchanging the digits of the number. If one digit of the number exceeds the other number by 7, find the number.

Q6-A man sold a chair and a table together for Rs1520 thereby making profit of 25% on chair and 10% on table. By selling them together for Rs1535 he would have made a profit of 10% on the chair and 25% on the table. Find the cost price of each.

Q7-Solve the system of equations:  $x-4y + 14 = 0$  and  $3x + 2y-14 = 0$  graphically. Shade the area bounded by these lines and the axes. Name the figures so formed.

Q8-In the given figure,  $AB \parallel DC$ . If  $OA = 3x-19$ ,  $OB = x - 4$ ,  $OC = x - 3$  and  $OD = 4$ , find  $x$ .



Q9-A boy of height 120 cm is walking away from the base of a lamp-post at a speed of 87 m/minute. If the lamp-post is 36 m above the ground, find the length of his shadow after 3 minutes.

Q10:-Two poles of height  $p$  and  $q$  metres are standing vertically on a level ground,  $a$  metres apart. Prove that the height of the point of intersection of the lines joining the top of each pole to the foot of the opposite pole is given by  $\frac{pq}{p+q}$  metres.

## Science (Biology)

1. Draw a well labelled diagram to represent sectional view of leaf.
2. Name an enzyme present in following along with its function.  
A. Oral cavity    B. Stomach    C. Pancreatic juice
3. Name an organism which perform fermentation. What are its final products?
4. Write human respiratory pathway.
5. State the structure of nephron.
6. Write 5 ways of excretion by plants.
7. State blood circulation in Amphibians and reptiles.
8. Draw well labelled diagram of human heart.
9. Write two advantages of transpiration for plants.
10. Write the function of following.  
A. Rings of cartilage in throat    B. Haemoglobin    C. Platelets    D. Nasal hair

## Science (Chemistry)

**Q1 Write a balanced equation for the following chemical reactions.**

- i) Hydrogen + Chlorine  $\rightarrow$  Hydrogen chloride
- ii) Barium chloride + Aluminium sulphate  $\rightarrow$  Barium sulphate + Aluminium chloride
- iii) Sodium + Water  $\rightarrow$  Sodium hydroxide + Hydrogen
- iv) Sodium sulphate + Barium chloride  $\rightarrow$  Barium sulphate + Sodium chloride
- v) Lead nitrate + Potassium iodide  $\rightarrow$  Lead iodide + Potassium nitrate

**Q2 A brown colour substance X is heated and gets converted into black colour substance Y . By passing a gas Z through Y it again gets converted into substance X.**

- I. Name the substance X, Y and Z, also write their formulas.
- II. Write both the reactions involved.

Explain Oxidation and reduction with the help of above reactions.

**Q3 A solution of a substance, 'X,' is used for whitewashing.**

- I. Name the substance 'X' and write its formula.
- II. Write the reaction of the substance 'X' named in (i) above with water.

**Q4 Write one balanced chemical equation for each of following type of chemical reactions.**

- I. Combination reaction.
- II. Decomposition reaction as heat , light and electricity.
- III. Displacement reaction .
- IV. Double displacement reaction.

## Science (Physics)

1. Draw ray diagram to show  $m = -1$  for  
A. Converging mirror                      B. Converging lens
2. Write the laws of refraction.
3. show the refraction of a light ray passing from air to glass with the help of ray diagram also represent lateral displacement in it.
4. Define following  
(A) S. I. unit of power of lens                      (B) Centre of curvature of spherical mirror                      (C) Pole
5. Write the name of any two transparent media along with their absolute refractive index. Discuss about their optical density and speed of light in them.
6. A concave mirror of radius of curvature of 40 cm. produces a two times real image. Find the position of object and position of image Draw ray diagram to represent this condition.

## Social Science

- Project Work
    - ❖ Interdisciplinary Project Topics [Anyone]
      - Consumer Rights
      - Social Issues
      - Sustainable development
  - ART INTEGRATION
    - Make a handmade newspaper front page titled with Depletion of resources :- To satisfy the greed of a few individual.
- Use illustrations with bold lines about indiscriminate exploitation of Resources.
- Project File requires sections**
- Cover Page
  - Certificate of Authenticity
  - Index
  - Introduction
  - Main body (6to8 pages)
  - conclusion
  - bibliography
  - backcover teacher's evaluation sheet