



L.R.S. ACADEMY

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

SUMMER HOLIDAY HOMEWORK

**CLASS
XII (PCM)**



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 summited 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 –XII (PCM)

English Core (301)

1. Missing Scene Activity – The Third Level

Imagine Charley really reached Galesburg in 1894.

Write a short conversation between Charley and Sam when they meet there.

2. Design a Book Cover – Lost Spring

Make a creative book cover for Lost Spring.

Include:

- Title
- One slogan
- Drawings or symbols related to child labour and hope

3. Invitation Writing – The Last Lesson

Draft an invitation card for a “Language and Culture Day” organized in memory of M. Hamel.

4. Character Instagram Profile

Create an imaginary Instagram profile for ONE character:

- Saheb
- Franz
- Charley

Include:

- Username
- Bio
- 3 post captions
- Favourite quote

5. News Reporter Activity

Imagine you are a news reporter visiting the bangle makers of Firozabad from Lost Spring.

Write a short news report describing their life and working conditions.

6. Picture Quote Activity

Choose any one chapter — The Third Level, The Last Lesson, or Lost Spring.

Draw one simple picture related to the chapter and write 4–5 lines explaining it.

1. Note: Do all the work in a project file with Introduction, Acknowledgment, Certificate & Index.

MATHEMATICS (041)

Make an assignment for these two LPP solve graphically.

1. A company manufactures three kinds of calculators: A, B and C in its two factories 1 and 2. The company has got an order for manufacturing at least 6400 calculators of kind A, 4000 of kind B and 4800 of kind C. The daily output of factory 1 is of 50 calculators of kind A, 50 calculators of kind B and 30 calculators of kind C. The daily output of factory 2 is of 40 calculators of kind A, 20 of kind B and 40 of kind C. The cost per day to run factory 1 is Rs. 12000 and of factory 2 is Rs.15000. How many days do the two factories have to be in operation to produce the order with the minimum cost? Formulate this problem as an LPP and solve it graphically.
2. A manufacturer makes two products A and B. Product A sells at Rs. 200 each and takes $\frac{1}{2}$ hour to make. Product B sells at Rs. 300 each and takes one hour to make. There is a permanent order for 14

numbers of product A and 16 numbers of product B. A working week consists of 60 hours of production and the weekly turnover must not be less than Rs. 10,000. If the profit on each of product A is Rs 20 and product B is Rs 30, then how many of each should be produced so that the profit is maximum? Also, find the profit.

PHYSICS (042)

1. Make activity file as instructed in lab
2. Solve at least 5 questions from ncert exemplar from each chapter
Electric force and field,
Electrostatic potential and capacitance and electric current

CHEMISTRY (043)

Complete the Following Organic Chemical Equations

1. C_2H_5Cl —alc. KOH→ _____
2. C_2H_5Cl —aq. KOH→ _____
3. CH_3CH_2Br —KCN→ _____
4. CH_3CH_2Br —AgCN→ _____
5. C_2H_5Cl — NH_3 → _____
6. CH_3CH_2OH —conc. H_2SO_4 , 443K→ _____
7. CH_3CH_2OH —conc. H_2SO_4 , 413K→ _____
8. CH_3CH_2OH —Cu, 573K→ _____
9. $(CH_3)_2CHOH$ —Cu, 573K→ _____
10. $(CH_3)_3COH$ —Cu, 573K→ _____
11. $CH_3CH_2OH + CH_3COOH$
—conc. H_2SO_4 → _____
12. CH_3CH_2OH — PCl_5 → _____
13. CH_3CH_2OH — $SOCl_2$ → _____
14. $C_6H_5OH + Br_2(aq)$ → _____
15. $C_6H_5OH + dil. HNO_3$ → _____
16. $C_6H_5OH + conc. HNO_3$ → _____
17. $C_6H_5OH + Zn$ → _____
18. CH_3CH_2OH —HI (limited)→ _____
19. CH_3CH_2OH —excess HI→ _____
20. $CH_3COOH + NH_3$ → _____
21. CH_3COOH — $LiAlH_4$ → _____
22. CH_3CHO — H_2/Ni → _____
23. CH_3CHO —Fehling's solution→ _____
24. CH_3COCH_3 — H_2/Ni → _____
25. $CH_3NH_2 + HNO_2$ → _____
26. $C_6H_5NH_2 + Br_2(aq)$ → _____
27. $C_6H_5NH_2 + CHCl_3 + alc. KOH$ → _____
28. $C_6H_5NH_2 + NaNO_2 + HCl$ (273–278K) → _____
29. $CH_3COOH + PCl_5$ → _____
30. $CH_3COCl + NH_3$ → _____

Prepare a project on the topic mentioned below according to the roll number as guided in the class.

Topics for Project for Chemistry

1. Study of oxalate ions present in guava fruit at different stages.
Roll No.: 1, 9, 17, 25, 33, 41, 49,
2. Study of quantity of casein present in different samples of milk.
Roll No.: 2, 10, 18, 26, 34, 42, 50,
3. Preparation of soybean milk and its comparison with natural milk with respect to curd formation, effect of temperature etc.
Roll No.: 3, 11, 19, 27, 35, 43,
4. Study of the effect of potassium bisulphate as food preservative under various conditions (temperature, concentration, time etc.)
Roll No.: 4, 12, 20, 28, 36, 44,
5. Study of digestion of starch by salivary amylase and effect of pH and temperature on it.
Roll No.: 5, 13, 21, 29, 37, 45,
6. Comparative study of the rate of fermentation of following materials: wheat flour, gram flour, potato juice, carrot juice etc.
Roll No.: 6, 14, 22, 30, 38, 46,
7. Extraction of essential oils present in saunf, ajwain, ilaichi.
Roll No.: 7, 15, 23, 31, 39, 47,
8. Study of common food adulterants in fat, oil, butter, sugar, turmeric powder, chilli powder and pepper.
Roll No.: 8, 16, 24, 32, 40, 48,

PHYSICAL EDUCATION (048)

Practical 1st:- Fitness Test- SAI khelo India Fitness Test in school for both the group (Class 1 to 3 & 4 to 12)

Group 1:-

- BMI
- Flamingo Balancing Test
- Plate Tapping Test

Group 2:-

- BMI
- 50 mt Dash (speed)
- 600 mt. Run/walk (aerobic endurance)
- Sit and reach test (flexibility)
- Partial curl -up(abdominal strength)
- Push- up for boys/modified push- up for girls (upper body strength)

Practical 2nd:- Explain all five life style deceases (Obesity, Diabetes, Asthma, Hypertension & Back pain) with their two -2 corrective asans along with procedure, benefits and contraindications with suitable picture and diagrams

- Obesity (vajrasana, trikonasana)
- Diabetes (bhujangasana, paschimottanasana)
- Asthma (sukhasana, shavasana)
- Hypertension (gomukhasana, halasana)
- Back pain (Ardh chakrasana, Bhadrasana)

Practical 3rd:-proficiency in games and sports.

- A well labelled diagram of the field/court
- History of the sports
- Rules and Regulations
- Fundamental skills
- common terminologies used in sports.
- Major tournaments.
- famous personality.

Important questions

Q.1, Define management and explain the parts of sporting events (POSDC).

Q.2, Define the types of tournaments. Draw a fixture of 21 teams on the basis of knockout method and draw a fixture of 8 teams on the basis of cyclic method.

Q.3, Explain in detail the responsibility about these committees (finance committee, transport committee, boring and loading committee, ground and equipment committee, organising committee, technical committee, ceremony committee.)

Q.4 Explain both (Spine and foot related) postural deformities and also their causes and remedies.

- Q.5 Explain special consideration related to the female (menarche, menstrual dysfunction and female athlete triad.).