CLASS- XII A
SUMMER ACTIVITIES

# Indorama Public School, Jagdishpur UP

# SUMMER HOLIDAY Assignments Class – XII A (2026- 2027)

These activities /assignments, covering all subjects, aim to keep your child engaged in learning and prepare them for the upcoming academic year. They offer opportunities for exploration, skill development, and maintaining a learning routine during the break.

NAME OF CLASS TEACHER -**Nikhat**

CONTACT NUMBER-941523379

# INDORAMA PUBLIC SCHOOL

, E-Mail: irps-jag.principal@in.indorama.com • Website: www.indoramaschool.org
Industrial Area Indorama Township , Kamrouli, Jagdishpur UP-227817

**Dear Parents,**

*Warm greetings from IRPS Family!*

We trust this letter finds you and your family in good health. As the summer break nears, we're delighted to share that our dedicated team, under the guidance of the Principal, has curated summer activities for your child.

These activities /assignments, covering all subjects, aim to keep your child engaged in learning and prepare them for the upcoming academic year. They offer opportunities for exploration, skill development, and maintaining a learning routine during the break.

Your support in ensuring your child completes and submits these **activities to be done by your child with your support to the respective class teacher on the first week of July of school reopening after the break** is i.e. **1st July to 6th July 2026** will be greatly appreciated. It will contribute to a positive start to the academic year and reinforce the knowledge acquired during the break.

For any queries or concerns, please reach out to the class teachers.

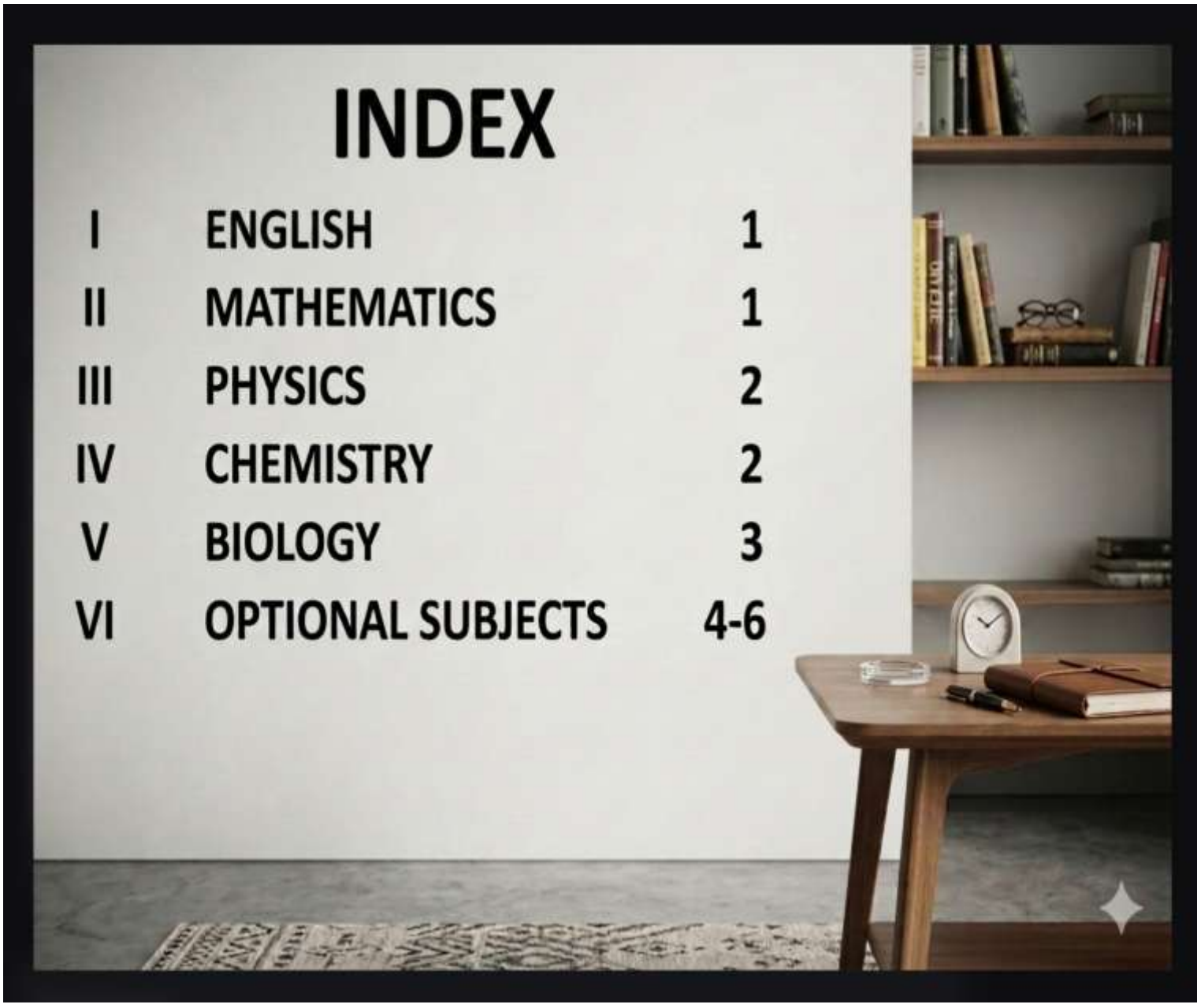
Thank you for your ongoing support and involvement in your child's education. We eagerly anticipate a productive and successful academic year ahead.

Educationally yours,

**Dr R K Dwivedi**
**Principal &**
**Team IRPS**

# INDEX





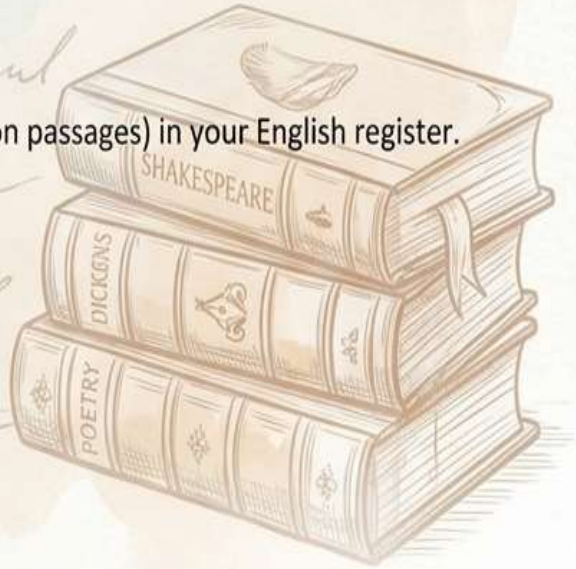
## ENGLISH-

1. Prepare a group project as discussed in class according to the prescribed CBSE Board project work pattern word limit (800-1000 words).

2. Solve and write five unseen passages (comprehension passages) in your English register.

3. Read English Newspaper Daily

4.Revise the syllabus thoroughly for Periodic Test–I.




## MATHS-

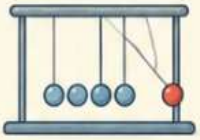
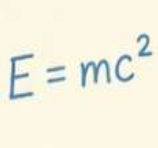
1 Practice 1 question of LPP daily on graph from M L Agarwal

2 Revise domain and range of Inverse trigonometric functions and their graphs

3 Practice questions on solving linear equations using matrix method

4 Practice differentiation from questions discussed in class and from M L Agarwal

## PHYSICS-

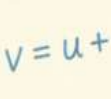

1 Solve all NCERT examples & exercise questions.

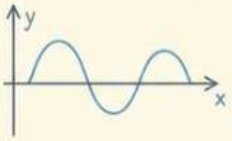
2 Complete notes of chapter 14 semiconductors

3 Do the given Worksheet(s).

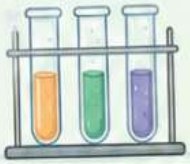
4 Learn and revise for PT-1

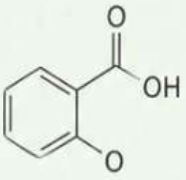
5 Complete your investigatory project with project report (format for the report will be shared to you shortly

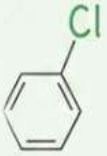




## CHEMISTRY-



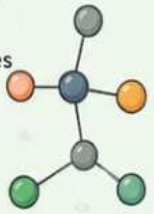



**CH : Solutions Homework Task Solutions Assignment:** Read the chapter thoroughly from the NCERT textbook. Define Molarity, Molality, and Henry's Law, ensuring you understand why aquatic life prefers cold water. Practice deriving the Raoult's Law formula for the relative lowering of vapour pressure. Write short notes explaining the difference between ideal and non-ideal solutions, including minimum and maximum boiling azeotropes. Finally, solve at least 5 numerical problems based on Elevation of Boiling Point and Depression of Freezing Point, remembering to apply the Van 't Hoff factor for electrolyte solutes.




**CH : Coordination Compounds Homework Task Coordination Compounds Assignment:** Focus on the structural and bonding aspects of coordination chemistry. Practice writing IUPAC names for complex compounds and drawing geometrical (cis/trans) and optical isomers. Use Valence Bond Theory (VBT) to determine the hybridization, geometry, and magnetic behavior of COORDINATION COMPOUND Draw a neat, labeled diagram of d orbital splitting in an octahedral crystal field according to Crystal Field Theory (CFT), and write the electronic configuration for systems in both weak and strong ligand fields.

**CH: Haloalkanes & Haloarenes Homework Task Haloalkanes & Haloarenes Assignment:** Master the foundational mechanisms of organic reactions. Create a comparative table differentiating between SN1 and SN2 pathways based on kinetics, steps, intermediate stability, and stereochemical outcomes (inversion vs. racemisation). Write complete chemical equations and mechanisms for core named reactions, including Finkelstein, Swarts, Wurtz-Fittig, and Sandmeyer's reactions. Write conceptual reasoning answers explaining why haloarenes are less reactive toward nucleophilic attack and why Grignard reagents must be prepared under strictly anhydrous conditions.



# BIOLOGY-

## General Instructions

- Complete all work in loose sheets in a transparent folder.
- Use colored diagrams wherever required.
- Mention date and topic properly.
- Submit holiday homework on the first working day after vacation.

## A. Mini Project (Any One)

Choose any ONE topic:

1. IVF and Test Tube Baby
2. Menstrual Hygiene Awareness
3. Role of Pollinators in Agriculture
4. Population Control Measures in India
5. Assisted Reproductive Technologies (ART)

(5–6 handwritten pages with diagrams/pictures)

**Include:**

- Introduction
- 4/5 pages research
- Relevant pictures
- Conclusion

| Assessment Criteria | |
|---|---|
| **Criteria** | **Marks** |
| Research Work | 5 |
| Data Collection & Analysis | 5 |
| Diagrams & Presentation | 5 |
| Creativity | 5 |
| Viva/Understanding | 5 |
| **Total: 25 Marks** | |

B. Write experiment 3 in the file.

C. Complete notes of chapter Microbes in human welfare.

INDORAMA PUBLIC SCHOOL, JAGDISHPUR

# COMPUTER SCIENCE-

## Section – A

Find the output of the following:

1. 
```
L=[5,10,15,20]
print(L[1:3])
```
2. 
```
L=[1,2,3,4]
print(L[-1:3])
```
3. 
```
M={"x":5,'y":10}
print(M.get('z",0))
```
4. 
```
L = [{"A": [10, 20], {"B": [30, 40]}]
L[0]["A"].append(50)
L[1]["B"][0] = L[0]["A"][1]
print(L)
```
5. 
```
data = {"X": [1, 2, 3], 'Y": [4, 5] }
temp = data["X"]
temp[1] = data["Y"][0]
data["Y"].append(sum(temp))
print (data)
```

## Section B

1. Write a program to display only prime numbers from a list.
2. Write a Python program to remove duplicate elements from a list.
3. Write a program to count positive and negative numbers in a list.
4. Write a program to sort elements of a list in ascending order without using sort ().
5. Write a program to find the largest value in a tuple.
6. Write a program to count occurrence of a value in a tuple.
7. Write a program to display tuple elements in reverse order.
8. Write a program to count frequency of characters in a string using dictionary.
9. Write a program to merge two dictionaries.
10. Write a program to find the highest value in a dictionary.
11. A school stores marks of students in a list. Write a program to display the topper and average marks.
12. An online shopping store stores product-price pairs using dictionary. Write a program to generate total bill.
13. Write a Python program to store temperatures of a week in a tuple and display highest temperature.
14. Assertion: Lists are mutable in Python.
    Reason: Elements in lists can be changed after creation.
15. Assertion: Tuples consume less memory than lists.
    Reason: Tuples are immutable.
16. Assertion: Dictionary keys are unique.
    Reason: Duplicate keys overwrite previous values.

## Section C

1. Do all Type B questions from chapter 13.

IP-

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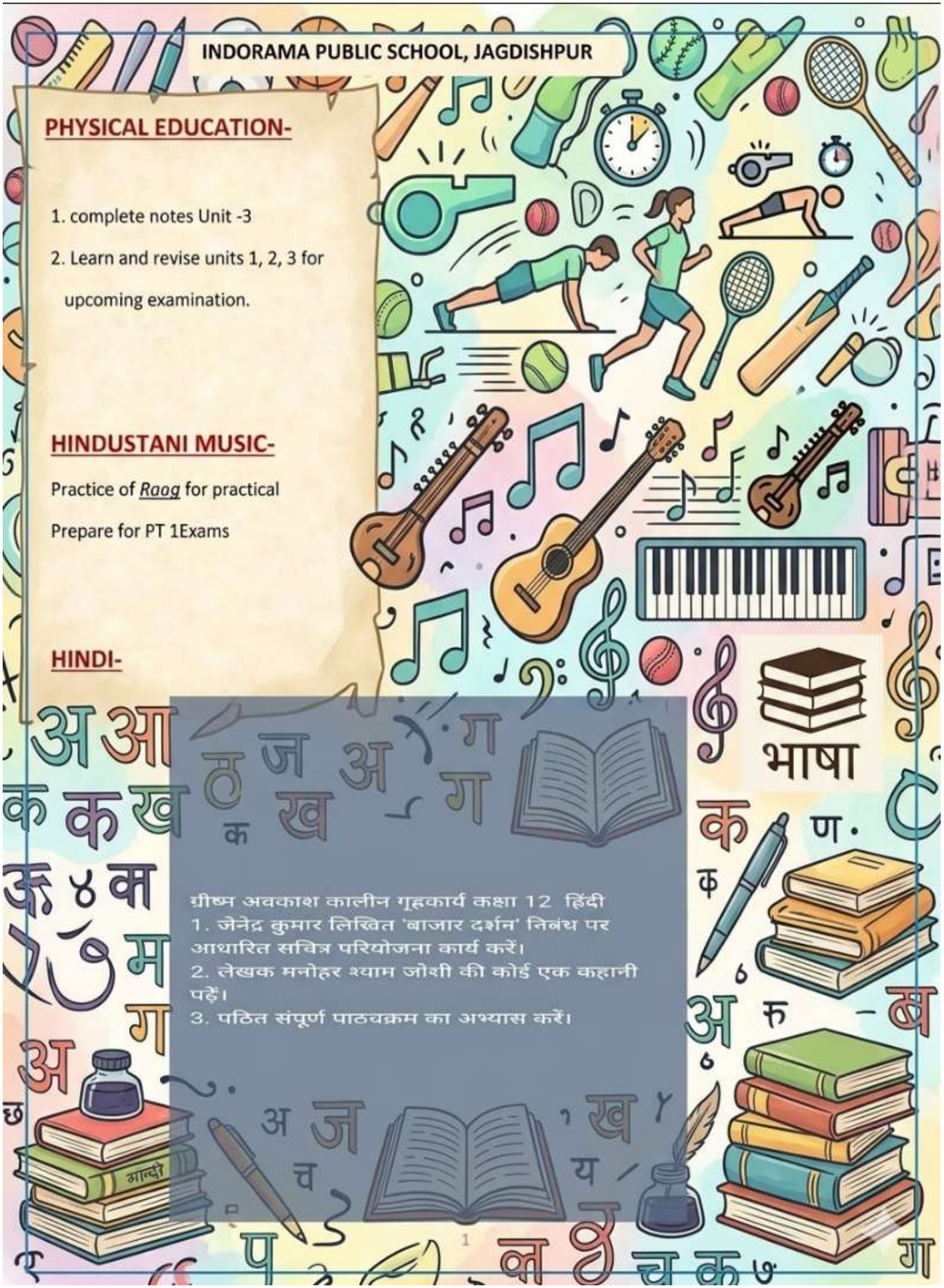
INDORAMA PUBLIC SCHOOL, JAGDISHPUR
PHYSICAL EDUCATION-
1. complete notes Unit -3
2. Learn and revise units 1, 2, 3 for upcoming examination.
HINDUSTANI MUSIC-
Practice of Raag for practical
Prepare for PT 1Exams
HINDI-
भाषा
ग्रीष्म अवकाश कालीन गृहकार्य कक्षा 12 हिंदी
1. जेनेंद्र कुमार लिखित 'बाजार दर्शन' निबंध पर आधारित सचित्र परियोजना कार्य करें।
2. लेखक मनोहर श्याम जोशी की कोई एक कहानी पढ़ें।
3. पठित संपूर्ण पाठचक्रम का अभ्यास करें।

# FOR ANY SUPPORT PLEASE FEEL FREE TO CONTACT SCHOOL



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