



# DELHI PUBLIC SCHOOL, PAKUR (JH)

## Dear Students,

Vacations are the most attractive and desirable part of school life! It is time again for a fun filled and relaxing summer break. However, during the scorching summer month, when you are locked up inside your homes, time must be spent meaningfully and interestingly. Keeping this in view, we have assigned Holiday Homework for you so that you remain connected with your studies. Also have lots of fun by pursuing your hobbies and enjoying yourselves with the family.



## SUGGESTED DO'S IN SUMMER BREAK:

### ✓ Do's:

- Have Fun with your family at home.
- Try to engage yourself with some indoor games.
- Try to develop a kitchen garden on your own with the help of your parents.
- Try to indulge in your hobby like music, dance, painting, collection of leaves, making kites, etc.
- Eat healthy and nutritious food and drink lots of water and hydrating liquids.
- Eat Vegetables and one Fruit minimum every day.
- Wash your hands with soap, before and after taking food.
- Give some time to your grandparents. Find out about your family tree, roots and culture from them.
- Get up early and go for jogging everyday with your Papa and Mummy or Grand Parents.
- Help your parents in doing their house hold work.
- Read Newspaper if possible in English every day.
- Learn how to make minimum 3 dishes at your home from your mummy (Not for Nur To class II).
- Make a rough N.B. Learn and write 5 typical words of English their meaning and their usages.
- To improve your handwriting kindly write one page of English and Hindi cursive Handwriting.
- Complete your holiday Home work in a very neat and clean Handwriting.
- Trim your Hair and Nails at regular Interval.



### ✗ Don'ts:

- Consume oily and junk food.
- Spend too much time with computer and mobile games.
- Lend your note books/books to others.
- Waste your time roaming here and there in scorching heat.



### Note:-

1. This Holiday Home Work will be taken into consideration as a subjective enrichment activity. Hence, everyone is mandatory to submit the assignments after the reopening of the school.
2. The summer vacation commences from **15th May 2026** to **14th June 2026**. The School will re-open on **15th June 2026** with summer timings i.e. **7:00 a.m. to 1:00 pm** till further notifications.



**HAPPY HOLIDAYS**

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## **Holiday Homework: Class: XII**

### **PHYSICS (Subject code: 042)**

#### **(A) INVESTIGATORY PROJECT (Session: 2026-27)**

***Choose any one topic and write clearly in A4 sheet.***

1. To study various factors on which the internal resistance/EMF of a cell depends.
2. To find the refractive indices of (a) water (b) oil (transparent) using a plane mirror, an equiconvex lens (made from a glass of known refractive index) and an adjustable object needle.
3. To investigate the relation between the ratio of (i) output and input voltage and (ii) number of turns in the secondary coil and primary coil of a self-designed transformer.
4. To estimate the charge induced on each one of the two identical Styrofoam (or pith) balls suspended in a vertical plane by making use of Coulomb's law.
5. To study the earth's magnetic field using a compass needle -bar magnet by plotting magnetic field lines and tangent galvanometer.

#### ***Project must contain:***

1. A cover page (which contain School name, school logo, registration no., session, subject, topic, student's name, class, stream, roll-no., submitted to)
2. Certificate
3. Index
4. Acknowledgement
5. Introduction
6. Main topic (included Diagrams)
7. Conclusion
8. Bibliography

**(B)** Solve the exercise questions from chapter 1 and chapter 2 (except Capacitance) from NCERT book and the question that will be given by me.

## CHEMISTRY

### INVESTIGATORY PROJECT (Session: 2026-27)

***Choose any one topic and write clearly in A4 sheet.***

- \* Scientific investigations involving laboratory testing and collecting information from other sources A few suggested Projects.
- \* Study of the presence of oxalate ions in guava fruit at different stages of ripening.
- \* Study of quantity of casein present in different samples of milk.
- \* Preparation of soybean milk and its comparison with the natural milk with respect to curd formation, effect of temperature, etc.
- \* Study of the effect of Potassium Bisulphate as food preservative under various conditions (temperature, concentration, time, etc.)
- \* Study of digestion of starch by salivary amylase and effect of pH and temperature on it.
- \* Comparative study of the rate of fermentation of following materials: wheat flour, gram flour, potato juice, carrot juice, etc.
- \* Extraction of essential oils present in Saunf (aniseed), Ajwain (carum), Illaichi (cardamom).
- \* Study of common food adulterants in fat, oil, butter, sugar, turmeric power, chilli powder and pepper.

***[Project must contain:***

1. A cover page (which contain School name, school logo, session, subject, topic, student's name, class, stream, roll-no., registration no., submitted to)
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## **SUBJECT: BIOLOGY (044)**

### **INVESTIGATORY PROJECT FOR CLASS XII (Session: 2026-2027)**

#### **For Board Examination**

Prepare a brief write up on the concept in your project. This is for internal assessment and credit will be given in the Year End Examination. As per CBSE guidelines based on new syllabus students must take it positively.

Make a project from any one of the following topics:

#### **1. HUMAN GENOME PROJECT**

Or

**2. BIOTECHNOLOGY APPLICATIONS** (Explore the use of biotechnology in agriculture, such as genetically modified organisms (GMOs) and their impact on food security).

Or,

**3. STUDY OF ANTIBIOTIC RESISTANCE IN BACTERIA** (Investigate the resistance patterns of bacteria to various antibiotics, which is crucial for understanding public health issues).

Or,

#### **4. ALCOHOL AND DRUG ABUSE**

☐ \*\*\*\*\*Project/portfolio must contain a cover page (which include School name, School logo, CBSE logo, subject, concept, session and submitted by) → acknowledgement → certification → Index → introduction → Main content → Bibliography.

Instructions

1. Cover page, acknowledgement, certification, contents and Bibliography page must be in Typed and printed form.
2. Introduction, Main topic must be handwritten.
3. Images and data, wherever required can be downloaded from any sources and in printed form.
4. Students can take help from internet, Books, Magazines or from any other resources.
5. Use A4 papers for your investigatory project and submit in cover files.

## ENGLISH

### INVESTIGATORY PROJECT (Session: 2026-27)

#### *Project topics for Classes XII (Any One)*

Project topics for Classes XII

(Any One)

#### **A. Interview-Based Research Topics**

**(Encourages listening, speaking, data collection & reporting)**

Changing Food Habits in Urban and Semi-Urban India

Impact of Mobile Phones on Family Communication

Life During and After the COVID-19 Pandemic: Voices from My Neighbourhood

Mental Health Awareness among Adolescents

Women and Work: Balancing Home and Career

Traditional Values vs Modern Lifestyle: A Generational Perspective

Role of Social Media in Shaping Teen Opinions

Environmental Awareness among Local Residents

Career Aspirations of Youth in Small Towns

Importance of Spoken English in Today's Job Market

#### **B. Listening-Based Analytical Topics**

**(Based on podcasts, interviews, documentaries)**

Online Education: A Boon or a Barrier?

Climate Change: Are We Doing Enough?

Artificial Intelligence and the Future of Jobs

Social Media: Information or Misinformation?

Gender Equality in 21st-Century India

Stress and Competition among Students

Digital India: Reality vs Promise  
Freedom of Speech in the Modern World  
Youth Power in Nation Building  
Mental Health: Breaking the Social Stigma

### **C. Audio / Video Creation Topics**

**(Script writing + speaking skills)**

A Day Without the Internet  
Voices of Youth: Dreams, Pressures and Expectations  
If I Were the Education Minister of India  
Life Lessons Learnt from the Pandemic  
Social Media and Self-Identity  
Theatre as a Tool for Social Change  
The Importance of Listening in Communication  
A Conversation Between Two Generations  
Student Life in the Digital Era  
Art, Literature and Human Emotions

### **D. Theatrical / One-Act Play Topics**

**(Group work, dialogue delivery, expression & creativity)**

The Silent Classroom – pressure, fear, and expression  
Between Marks and Dreams – student expectations  
The Price of Progress – environment vs development  
A World Without Empathy  
The Voice That Was Ignored  
Breaking Stereotypes  
Lost in the Virtual World

Generation Gap: Then and Now

Freedom Beyond Independence

Power of Words

### **E. Literature-Integrated Topics**

**(Based on prescribed texts – adaptable for ALS)**

Relevance of the Theme of Freedom in Prescribed Texts

Human Values Reflected in the Prescribed Poems

Conflict Between Individual Desire and Social Pressure

Portrayal of Youth and Identity in Literature

Role of Communication in Resolving Conflicts in Drama

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## Subject: PHYSICAL EDUCATION

### RECORD FILE / PROJECT WORK

#### Record File shall include:

📍 **Practical-1:** Fitness tests administration. (SAI Khelo India Test)

📍 **Practical-2:** Procedure for Asanas, Benefits & Contraindication for any two Asanas for each lifestyle disease.

📍 **Practical-3:** Any one IOA recognized Sport/Game of choice. Labelled diagram of Field & Equipment. Also, mention its Rules, Terminologies & Skills.

📌 NOTE: These 3 Project will include in one shoeless file.

\*\*\*\*Project file must contain a cover page (which include Name, Roll no, Class & stream, Registration no, subject, session and submitted by) ---> certification --> acknowledgement --> contents --> introduction ----> Main topic ●●● conclusion ●●● bibliography\*\* .

#### Remember!

- The project must be made in a decent and presentable way.
- Be attentive while making the cover page, certificate and acknowledgement.
- This project demands pictures.
- The project work must be kept in a project file. Submission in a stick file/channel file will not be entertained

## Hindi:

1. गोस्वामी तुलसी दास जी का विस्तृत परिचय दिजिए और उनके रचनाओं का संक्षिप्त परिचय दिजिए।
2. हरिवंश राय बच्चन का विस्तृत जीवन परिचय और बच्चन की प्रमुख रचनाओं की आलोचनात्मक समीक्षा किजिए।
3. कोविड-19 का परिचय, कोविड-19 से पूर्व का संसार क्या था और कोविड-19 के बाद विश्व का स्वरूप क्या है?
4. सूर्यकांत त्रिपाठी निराला का जीवन परिचय निराला की साहित्य को देन और साहित्यिक उपलब्धियां क्या थी।