



# St. James School

## HOLIDAY HOMEWORK

CLASS – 12

# Happy Summer Vacation



Summer holiday homework aims to keep students mentally active during long breaks and prevent learning loss, often called the "summer slide". It encourages self-discipline, independent research, and practical learning through creative projects, reading, and hands-on activities, ensuring a smooth transition back to the classroom. So parents are requested to do the students all the work by themselves, you can facilitate them but do not do their work. We wish you a healthy and happy holidays.

### CHEMISTRY

- 1) Complete your investigatory project (except the observation part) in loose sheets including objective, material/chemicals, basic principle, procedure, conclusion and bibliography on the topic assigned in the given topics.
  - A. Investigatory report
    1. Study the presence of oxalate ion in guava fruit at different stages of ripening.(roll 1&2)
    2. Study of casein quality present in different samples of milk(Roll no. 3 &4)
    3. Preparation of soybean milk and its comparison with natural milk. (Roll no. 5 &6)
    4. Chocolate analysis (roll no. 7& 8)
    5. Potassium bisulphate as a food preservative. (Roll no. 9&10)
    6. Study of adulteration in foodstuff. (Roll no. 11& 12)
    7. Comparative study of rate of fermentation of various food materials (Roll no.-13 &14)
    8. Water analysis (hardness, pH, Chlorine content)( Roll no. 15 &16)
    9. Green chemistry applications (Roll no. -17 & 18)
    10. Determination of the concentration of sugar in soft drinks and fruit juices)
- 2) Answer all the questions based on " Organic Chemistry" ( Haloalkanes and Haloarenes, Alcohols, Phenols and Ethers , Aldehydes, ketones and carboxylic acids)) from the last three years and this year CBSE question papers (2019,2020,2021,2022, 2023 , 2024, 2025 and 2026) in your Chemistry register. Short cuts should not be used in Conversion reactions and mechanism part.
- 3) Make a list of all name reactions from the chapters (a) Haloalkanes and Haloarenes (b) Alcohol, Phenols and Ethers (c) Aldehydes, Ketones and carboxylic acids) in alphabetical order and write them in your Chemistry register neatly.
- 4) Read newspaper daily to extract scientific information and also to know what is happening around us .
- 5) Do the following assignment questions in your assignment register.
- 6) Solve the following assignments of chapter 6, the link of which are given below  
<https://ncert.nic.in/pdf/publication/exemplarproblem/classXII/chemistry/leep510.pdf>

### PHYSICS

#### MIND MAP

1. Mind Map of formulas of chapter 1 2 and 3 (Electric charges and field ,Electric potential and capacitance and Current electricity) in physics notebook including short tricks of JEE/NEET.

#### 2. ASSIGNMENT

We are sharing list of important questions of chapter 1, 2 and 3. Learn all these questions with lot of written practice in physics notebook. All questions should be solved once in your notebook.

[https://drive.google.com/file/d/1CM76yeTquq\\_ZjsFH7nSzdilNOAPczXv8/view?usp=drivesdk](https://drive.google.com/file/d/1CM76yeTquq_ZjsFH7nSzdilNOAPczXv8/view?usp=drivesdk)  
<https://drive.google.com/file/d/1CB4paQJNH68XIKqXHcsURNumv3IFf41V/view?usp=drivesdk>  
[https://drive.google.com/file/d/1C2PMc\\_pkI8fOx8UJtIDtPlfgrZVjVnF8/view?usp=drivesdk](https://drive.google.com/file/d/1C2PMc_pkI8fOx8UJtIDtPlfgrZVjVnF8/view?usp=drivesdk)  
<https://drive.google.com/file/d/1C3I5vRs3rYsZANHJUUpMBFCSVWiCRL5rl/view?usp=drivesdk>

## **ECONOMICS**

### Activity work

1. Draw a Colorful diagram of the Circular flow of Income in a two-sector economy.
2. Prepare a chart showing differences and macroeconomics between Microeconomics use Pictures, examples, and diagram

### Project work

Collect newspaper articles related to Inflation GDP Growth. Unemployment. Paste them in your notebook and write a 5-line summary of each.

### Activity

Prepare a collage using Pictures related to agriculture before independence British industries.

Railways, Trade during British Rule.

Creative Section

learn & write 20 Imp. Economics terms.

Prepare one chart on :-

GDP Calculation Live year Plan

## **BUSSINESS STUDIES**

### 1. Project Work

Prepare a project file on any one of the following topics:

Principles of Management

Marketing Management

Consumer Rights

Business Environment

Stock Market

Entrepreneurship Development

Instructions:

Use A4 size sheets Include cover page, index, introduction, pictures, and conclusion.

Minimum 15–20 pages. Write neatly and decorate creatively.

### 2. Case Study

Read any business-related news article from a newspaper or magazine and answer the following:

Name of the company

Type of business activity

Management functions involved

Challenges faced by the company

Your suggestions for improvement

### 3. Practical Activity

Visit a nearby market/shop and collect information about:

Types of products sold

Marketing techniques used

Customer dealing methods

Discounts/offers provided

Prepare a short report with pictures if possible.

## **MATHEMATICS**

Solve the following assignments of chapter -1 ,2,3 and 4 the links which are given below.

•Ch 1 Relation and function

•Long questions

[https://drive.google.com/drive/folders/127CZbZro96yNZynyKC\\_xb3XnY5ulc-sb](https://drive.google.com/drive/folders/127CZbZro96yNZynyKC_xb3XnY5ulc-sb)

•Competency based questions

[https://drive.google.com/drive/folders/11qR0DX1f3L-tJ1dbk9\\_i\\_y4E\\_cKsBihh](https://drive.google.com/drive/folders/11qR0DX1f3L-tJ1dbk9_i_y4E_cKsBihh)

•Ch 2 Inverse trigonometry

•Long questions

<https://drive.google.com/file/d/1Aa-0veq0zhxwsqCLK-mJ4fsQxtkU6ixW/view?usp=drivesdk>

•Competency based questions

<https://drive.google.com/file/d/1AGqWeo5DLIM9jINLmswBca6MS9ozV0oX/view?usp=drivesdk>

•Ch 3 Matrices

•Long questions

[https://drive.google.com/file/d/1GM8xmVYcTjAyHS7dnquX-TJWI\\_4z6VLD/view?usp=drivesdk](https://drive.google.com/file/d/1GM8xmVYcTjAyHS7dnquX-TJWI_4z6VLD/view?usp=drivesdk)

•Competency based questions

<https://drive.google.com/drive/folders/1EznATSfn9wEttqF00z6E9NmRm5Ndlwcv>

•Ch 4 Determinant

•Long questions

<https://drive.google.com/file/d/1EN87DZmXIRS-Xy4p3GxWqzJVFqI4NqEM/view?usp=drivesdk>

•Competency based question

<https://drive.google.com/file/d/1EAzfZ3rBwQ8d4xQcVF6aBklGggsMdQQI/view?usp=drivesdk>

## BIOLOGY

1. Solve last five years CBSE BOARD QUESTIONS PAPER from chapter 13, 14 and 15.

2. Solve the following assignments of chapter -13,14 and 15t he links which are given below  
Chapter-13

long question

<https://drive.google.com/file/d/1hOQX4N9b1KHGGCzXDuVcbisKqypaWY4a/view?usp=drivesdk>

Competency type

<https://drive.google.com/file/d/1I4f-vIYF6EUaRhs7I3BPjDEVoYIK53dp/view?usp=drivesdk>

Chapter - 14

long question

<https://drive.google.com/file/d/1sEteIFXZWlqXcdH0I3IQbPvftKbBfMlq/view?usp=drivesdk>

Competency type

<https://drive.google.com/file/d/1s99RYEpDtvoP0aVkJGufTKXvO1NfrqcX/view?usp=drivesdk>

chapter -15

Long question

<https://drive.google.com/file/d/1qzvBdjSbYVHJEf7UzM8qYvO0mmdNIZTv/view?usp=drivesdk>

Competency type

[https://drive.google.com/file/d/1qzu3U4nJ\\_p4JUo8O-coNoAiRivDD\\_o0v/view?usp=drivesdk](https://drive.google.com/file/d/1qzu3U4nJ_p4JUo8O-coNoAiRivDD_o0v/view?usp=drivesdk)

3. Make project of any one topic of the following-

a. I.V.F (test tube baby)

b. Aids

c. Cancer

d. Water pollution

e. Air pollution

f. Uses of biotechnology products

g. Different type of antibodies and its function.

h. human genome projects

i. DNA finger printings and its uses.

j. Uses of microbes in human society

## ENGLISH

ASSIGNMENT Assignment 1: Project topic - Empowerment of women (With reference to poem Aunt Jennifer's Tigers)

Cover the following aspects:

1. Cover page – Title of the project
2. Certificate
3. Acknowledgement
4. Introduction
5. Aim of Women's empowerment
6. Need to empower women
7. Methods for empowering women
8. Health, safety and freedom from violence
9. Educational empowerment
10. Economic and financial empowerment

Assignment 2: Project topic - Child Labour (With reference to the chapter 'Lost Spring')

Cover the following aspects:

1. Cover page – Title of the project
2. Certificate
3. Acknowledgement
4. Introduction
5. Summary of the Chapter –Lost spring

Assignment 3 :

1. You have lost a library book in the school, draft a suitable notice for the school notice board. Invent all necessary details.
2. You are Rohan/Rohini of 48, New Bank Enclave, Lucknow. Write a letter to the Editor of a local daily complaining about the badly maintained parks of your locality.

## HINDI

नोट:- कार्य साफ सुथरी लिखावट में लिखें।

सभी कार्य अलग-अलग रंगों से सजाएं ।

समय पर गृह कार्य पूरा करें।

- 1 किसी महान भारतीय कवि या लेखक पर चित्र सहित एक परियोजना तैयार करें
2. प्रकृति या मित्रता पर 8 से 10 पंक्तियों की कविता लिखो।
3. 'आधुनिक तकनीक और विद्यार्थी' विषय पर लगभग 100 शब्दों में एक सारगर्भित आलेख / निबंध लिखिए।
4. बढ़ती महंगाई की समस्या पर चिंता व्यक्त करते हुए किसी प्रमुख समाचार पत्र के संपादक को एक औपचारिक पत्र लिखिए।
5. निम्नलिखित पंक्तियों में प्रयुक्त अलंकार पहचान कर उनका नाम लिखिए:  
(क) 'चारु चंद्र की चंचल किरणों, खेल रही हैं जल थल में।'  
(ख) 'पीपर पात सरिस मन डोला।'

## PHYSICAL EDUCATION

1. Practical Record File, It should be neat, handwritten, and include the following sections:

- \* Fitness Test: Document the administration of the SAI Khelo India Fitness Test (Age group 9-18 years). Record your own scores for:
- \* BMI (Body Mass Index)
- \* 50m Dash (Speed)

- \* 600m Run/Walk (Endurance)
  - \* Sit & Reach (Flexibility)
  - \* Abdominal Partial Curl-up (Strength)
  - \* Push-ups for boys / Modified Push-ups for girls.
2. Asanas for Lifestyle Diseases: Choose five lifestyle diseases (e.g., Obesity, Diabetes, Asthma, Hypertension, Back Pain).
- For each, write down:
- \* Two corrective Asanas
  - \* The procedure, benefits and contraindications for each Asana.
  - \* Tip: Stick or draw pictures/diagrams for each pose.
- 3\* Major Game: Select one game from the CBSE list (e.g., Basketball, Football, Kabaddi, Volleyball, Cricket, Hockey). including:
- \* History of the game.
  - \* Labeled diagram of the court/field.
  - \* Latest rules and regulations.
  - \* Important tournaments and personalities.

### **ACCOUNT**

1. Solve the questions from the link in your fair account copy.  
<https://cdnbbsr.s3waas.gov.in/s3kv02b8a403ee67072584ba93d62b0951/uploads/2024/06/2024061269.pdf>
2. Prepare Accountancy project as per CBSE guidelines, follow the the following sequence to make the project file:
  1. Meaning of Analysis of Financial Statements
  2. Objectives of Analysis of Financial Statements
  3. Limitations of Analysis of Financial Statements
  4. Tools of Financial Statement Analysis
  5. Select an Indian company and write about its profile in 2 to 3 pages
  6. Take printouts of Balance Sheet and Statement of P&L for the year ending 31st March, 2025 of the selected company.
  7. Write meaning, Objectives, formula of the following ratios
    - a. Liquidity ratios - Current ratio, Quick Ratio
    - b. Solvency ratios - any 2 of these ( Debt to Equity Ratio, Total Asset to Debt Ratio, Proprietary Ratio, Interest Coverage Ratio. Debt to Capital Employed Ratio)
    - c. Turnover ratios - any 2 of these ( Fixed Asset Turnover Ratio, Net Asset Turnover Ratio and Working Capital Turnover Ratio.
    - d. Profitability ratios - Net Profit Ratio and Return on Investment.

# The project is to be done on white ruled punched interleaf sheets (A4 size).

Suggested list of companies

  1. RIL company
  2. Adani enterprises ltd.
  3. Godrej
  4. ITC
  5. TCS