

ST. COLUMBUS SCHOOL
DAYAL BAGH, FARIDABAD
CLASS – XII (SCIENCE)
HOLIDAY HOMEWORK (2025-26)

General Instructions:-

Revise the completed syllabus of all the subjects for the Test to be held in July.

SUBJECT – ENGLISH

Part A – Watching/ Listening and Critical Thinking

Watch and Reflect on the following TED Talks:

- https://youtu.be/7Lc_dIVrg5M?si=IQSaUpCd4cxKkX2f
- https://youtu.be/vacGRuHDtO0?si=pr4_P0mO3sQnKnwy
- <https://youtu.be/aDG1T0kJnd4?si=JcZPUUWUCr4L2RXi>

Part B – Speaking Task

Choose any one topic and prepare it for speaking task.


- Smart Phones –Applications and Adverse Effects
- Declining Water Table- Causes and Effects
- Alternative Resources of Energy and its Benefits
- Coaching Centers- will new guidelines work?
- Gadgets have consumed the Pleasures of Reading
- Driving v/s Cycling- Ease has Compromised Health
- Fast Food is Fast Entry into Unhealthy Zones
- Youth falling Prey to Vaping in Guise of Modernization
- My Trash-How can it be Converted into Cash
- Online shopping has Opened Avenues of Online Frauds


Part C – PROJECT WORK (Survey/Interview Based)

PROJECT LAYOUT

- Cover Page with title, school details, details of students
- Statement of purpose/ Objective/ Goal
- Certificate of Completion under the guidance of the teacher.
- Action Plan
- 3-4 lines about the project.
- Research Tools and Methodology.
- Supporting Material-AV Aids/ PPT

CONTENTS OF PROJECT

 Introduction of the Project

 Body of the Project

- Supporting Material
- Questionnaire
- Case Study

 REPORT

- 800-1000 word essay/script/report

STUDENT REFLECTION

- 100-150 words paragraph about the experience and learning outcomes

PHOTOGRAPHS

LIST RESOURCES/ BIBLIOGRAPHY

LIST OF TOPICS/THEMES

I) THE LAST LESSON- FREEDOM OF SPEECH AND EXPRESSION

- Linguistic chauvinism
- Importance of Language
- Globalization of Language
- Franco-Prussian War
- Historical References of Events wherein linguistic identity was threatened/snatched

II) LOST SPRING-LIFE IN A SLUM

- Research and case study of a slum.
- Life of the people in a slum
- Education
- Health and Infrastructure
- Government Initiatives
- Role of youth in the upliftment of the weaker sections of the society
- Comparative Study of Slums
- Slums of yesterday turned to cities of today.

III) DEEP WATER- PHOBIA

- Phobias and fears of people.
- Psychological and emotional impact.
- How to overcome.
- Impact on one's life and society
- Case Study

IV) RATTRAP-THE STUDY OF CRIME AND CRIMINALS

- Circumstances that lead to crime.
- Case Study
- Corrective Measures
- Impact of Criminal Behaviour on Society
- How to bring them into mainstream.
- Attitude of society towards criminals.

V) INDIGO

- Condition of Farmers in Champaran-Then and Now
- Farm Bill Agitation
- Gandhi's Contribution
- Other Political Leaders who brought about a change in the lives of farmers.
- Farmer Protection Laws in India
- Condition of Farmers in India
- Future Prospects-Growth-Suggestions

VI) THE ENEMY- WAR AND PEACE

- To maintain peace we need to go to war.
- Impact of War on Society
- Predicament of War
- Escapism and Depression due to war.
- Stance of the Political Lobby and Civilians.

VII) ON THE FACE OF IT- DISABILITY

- Coping with disability
- Society's attitude towards disability
- Struggles of a disabled person
- Laws for the disabled
- Government policies for the betterment of the disabled.
- Need of inclusion of the disabled in the mainstream society.

VIII) TOPICS BEYOND BOOKS

- The Population Control Bill is the Right Step Forward.
- Unrestrained Freedom of Speech and Expression is the Pillar of Progressive Society.
- Fulfilment of new woman in India is a Myth.
- Where Humanity Fails, Pandemic Occurs
- Peace is Both a Right and Duty.

SUBJECT- PHYSICS

Prepare a ppt and project report on any one of the following (minimum 20 pages)

- Optical Instruments
- Moving Coil Galvanometer
- Generators
- Rectifiers

SUBJECT – CHEMISTRY

I. INVESTIGATORY PROJECT (ANY ONE FROM GIVEN TOPIC)

- 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 (carom), Illaichi (cardamom).
- Study of common food adulterants in fat, oil, butter, sugar, turmeric power, chili powder and pepper.

II. Complete your practical file as instructed in the class.

SUBJECT – MATHEMATICS

- To understand the concepts of absolute maximum and minimum values of a function in a given closed interval through its graph.
- To construct an open box of maximum volume from a rectangular sheet by cutting equal squares from each corner practically.
- To verify that amongst all the rectangles of the same perimeter, the square has the maximum area.

NOTE-Do all these activities in file.

SUBJECT : BIOLOGY

I. INVESTIGATORY PROJECT

Prepare a detailed research paper, in Spiral bound file from the topic of your choice.

Complete the Investigatory project with case study and Compile it according to the prescribed format.

- Cover page
 - Certificate
 - Acknowledgment
 - Index
 - Introduction
 - Content (including pictures/graphs/tables/survey report etc.)
 - Case Study
 - Bibliography
 - Assessment Criterion- Content, Research Work, Case study, Viva-voce
- It is an individual activity and marks will be awarded in Half yearly and Annual Practical Examination during practical Examination.

II. Complete your practical file as instructed in the class.

SUBJECT –ARTIFICIAL INTELLIGENCE

- Prepare a Power Point Presentation on any issue faced by consumers using all the steps of Capstone Project .

SUBJECT –MUSIC

प्रोजेक्ट: पाठ्यक्रम में दिए गए रागों में से किसी एक की बंदिश और उस पर आधारित एक बॉलीवुड गीत को प्रैक्टिकल फाइल में लिखें। साथ ही उस राग का परिचय दें।

Be Happy By Doing Good

1. Spare some time and help your mother in household work. Talk to your parents and elders and learn values.
2. Adopt the habit of reading newspaper and learn new words and expressions.
3. Read at least two books (Hindi & English) apart from prescribed syllabus.
4. Respect flora and fauna (Plants and Animals). Keep your home and surroundings clean. Plant at least 5 saplings.
5. Keep water for birds and stray animals outside your house or in balcony.
6. Food is equal to God. So avoid wasting of food.
7. Try to share your knowledge and donate old books and notebooks to the underprivileged and deprived children of your locality.
8. Maintain a diary in English & Hindi and write your experience along with daily routine during summer break. It will help you in enriching your vocabulary and writing skills.

ENJOY YOUR SUMMER BREAK.....

