



LOYOLA CONVENT SCHOOL

HOLIDAY HOMEWORK 2025-26

(DURGA PUJA & DIWALI)

CLASS- XII

ENGLISH:

1. Interview based research
2. Podcast, interview, radios or TV documentary and prepare a report of 800-1000 words
3. To create their own video or audio after writing a script
4. Present a theatrical production/ one act play

The above-mentioned topics have to be written in the form of a project in hard bound file. Write / do any one of the following. To be done creatively with pictures and images. Refer to the CBSE SYLLABUS for a detailed view.

MATHS:

Complete the following activities in Lab Manual Book and submit by 06.10.2025
(Part of your Internal Assessment)

Lab Activity 1:

To verify whether a given relation is reflexive, symmetric and transitive.

Lab Activity 2:

To demonstrate a function which is one-one but not onto.

Lab Activity 3:

Understanding conditional probability through an experiment using pair of dice.

Lab Activity 4:

To find analytically the limit of a function $f(x)$ at $x = c$ and to check the of the function at that point.

Lab Activity 5:

To evaluate a given definite integral as the limit of a sum and verify it by actual integration.

Lab Activity 6:

To measure the shortest distance between two skew lines and verify it analytically.

Lab Activity 7:

To verify that angle in a semicircle is a right angle, using vector method.

Lab Activity 8:

To construct an open box of maximum volume from a given rectangular sheet by cutting equal squares from each corner.

Lab Activity 9:

To understand the concepts of absolute maximum and minimum values of a function in a given closed interval through its graph.

Lab Activity 10:

To sketch the graph of $\sin^{-1} x$ using the graph of $\sin x$.

PHYSICS:

Complete following experiments in physics record book:

Section- A

1. To determine resistivity of two/three wires by plotting graph for potential difference versus current.
2. To find resistance of a given wire/standard resistor using meter bridge.

3. To verify the combination of (series and parallel) resistances using meter bridge.
4. To determine resistance of a galvanometer by half-deflection method and to find its figure of merit.

Section-B

5. To determine angle of min. deviation for a given prism by plotting graph
6. To draw the I-V characteristics curve for a p-n junction diode in forward and reverse bias.
7. To find the focal length of a convex lens by plotting graph between u and v or $1/u$ and $1/v$.
8. To find the value of v for different values of u in case of convex mirror and to find the focal length.

CHEMISTRY:

1. Write all the laws with mathematical interpretation from chapter - Solution, Electrochemistry and Chemical Kinetics.
2. Write all name reactions with chemical equations from chapters : (a) Halo alkanes and Haloarenes (b) Alcohol Phenol and Ethers (c) Aldehyde, Ketones and Carboxylic acid.
3. Solve the numerical: 1.15,1.16,1.17,1.18,1.19,1.20,1.21,1.22,1.32,1.33,1.34,1.35,1.36,1.39,1.40 & 1.41
4. Solve the problems: 2.4,2.5,2.6,2.8,2.9,2.12,2.13,2.14,2.15 & 2.16
5. Do solve the numericals : 3.6,3.8,3.10 ,3.13,3.14,3.15,3.18,3.19,3.20,3.21,3.23,3.24,3.25 & 3.26
6. Complete the practical copy with remaining Experiments: Details by whatsapp group.
7. Complete one project work prescribed from CBSE syllabus with neat and clean having complete description.

BIO:

A. Complete the following practical's

1. Study the plant population density by quadrat method.
2. Study the plant population frequency by quadrat method.
3. Prepare a temporary Mount of onion root tip to study mitosis.

B. Study and observe the following spotting.

1. Flowers adapted to pollination by different agencies. (wind, insect, birds)
2. Meiosis in onion bud cell or grasshopper's testes through permanent slides.
3. Mendelian inheritance using seeds of different colours, sizes of any plant.
4. Controlled pollination emasculation tagging and bagging.
5. Common disease causing organism like Ascaris ,Entamoeba, Plasmodium any fungus causing ringworm through permanent slides, models or virtual images or specimen comment on symptoms of disease that they cause.
6. Models, specimens, showing symbiotic association in lichens, root nodules of leguminous plants and parasitic mode of nutrition shown by cuscuta on host.

COMPUTER:

- Write a function that takes a sentence as an argument, splits it into words, and returns:
- The number of words
- The list of words in reverse order
- A list of words that start with a vowel
- Define a function that accepts five strings as arguments (or from user input inside the function), stores them in a tuple, and returns:
- The number of palindromes
- The list of words that contain more than three vowels
- Write a function that takes a sentence from the user and returns:
- A list of words longer than 5 characters
- A tuple of the lengths of these words

- The average word length (calculated using a loop)
- Create a function that takes marks of six subjects as a list, calculates total and percentage, assigns a grade using conditional statements, and returns a tuple of marks greater than 75.
- Write a function that takes a string as input, converts it to lowercase, removes spaces, and:
- Returns the number of unique characters
- Prints all characters that appear more than once
- Define a function that takes a list of 10 numbers, identifies prime numbers, and returns:
- A tuple of all prime numbers
- The highest and lowest prime number
- A list of numbers divisible by both 3 and 5
- Write a function that accepts a list of words. For each word:
- Print its length
- Check if it's a palindrome
- If length is even, store in a tuple; else in a list
- Finally, return both the list and tuple
- Create a function that accepts a list of integers. For each number:
- If even, convert to string and add to a list
- If odd, square it and add to a tuple
- Return both structures, and check if string '4' exists in the list
- Define a function that takes a sentence as input, splits it into words, sorts them alphabetically without using built-in sort functions, and:
- Returns the sorted list
- Returns a tuple containing the first three and last three words
- Write a function that takes a paragraph as input, splits it into words, and:
- Returns the count of unique and duplicate words
- Uses conditionals to return whether unique words are more than duplicates

ACCOUNTANCY:

- **Complete the Project Work as per instructions given.**

BST:

1. Read the chapter FINANCIAL MARKET and answer the following:-

- Explain the Trading Procedure on a Stock Exchange
- Explain DEMATERIALISATION and DEPOSITORIES

2. COMPLETE THE BST PROJECT FILE ON THE ASSIGNED TOPICS AND SUBMIT IT ON 6.10.25

ECONOMICS:

1. Read the chapter THE GOVERNMENT BUDGET AND THE ECONOMY taking reference of UNION BUDGET 2025-26 and complete the following:
2. Define Fiscal Deficit, Revenue Deficit, Primary Deficit. Show how they differ using recent budget data.
3. Evaluate whether the government is meeting its fiscal responsibility targets (e.g. under FRBM) in recent budgets.
4. Complete the Economics project file on the assigned topics.

HISTORY:

- **Complete the Practical File as per the guidelines of CBSE for your Final Assessment.**

POLITICAL SCIENCE:

- Prepare Board Examination Practical File as per the CBSE guidelines

GEOGRAPHY:

1. Describe in detail with pictures and different stations located on:-
 - A) Trans Siberian Railway
 - B) Trans Canadian Railway
 - C) Trans Australian Railway
2. Explain the different approaches of Human Development.
3. Describe the commercial dairy farming of the world with relevant pictures and maps.
4. Explain any five international airports of India with relevant pictures.

HINDI:

निम्नलिखित दिए गए विषयों पर लगभग 120 शब्दों में रचनात्मक लेख लिखिए -

1. जनसंचार के विविध साधन
 2. दिया और तूफान : मानव जीवन का सत्य
 3. लोकतंत्र में मीडिया की भूमिका
 4. आपके विचार में एक आदर्श विद्यार्थी कैसा होना चाहिए?
 5. यातायात के साधनों ने मनुष्य जीवन को आरामदायक बना दिया है। यदि ये साधन न होते तो मनुष्य को किन-किन परेशानियों को झेलना पड़ता?
- * भूमिका-विचित्र कल्पना, यातायात का महत्व।
 - * मध्य- 1. समय और स्थान की दूरी में कमी।
 - * सुविधा, प्रगति, सभ्यता, संस्कृति, 'वसुधैव कुटुम्बकम्' की भावना का विकास।
 - * अगर ये साधन न होते - कूपमण्डूकता, अज्ञान, अवनति, दुःखमय जीवन, विद्या के प्रसार में बाधा, विषमताओं की वृद्धि, अनुसंधानों में अवरोध।
 - * उपसंहार - यातायात के साधनों का भविष्य, विज्ञान का योगदान, सभ्यता और सुख का विकास।

PHYSICAL EDUCATION:

Prepare a record file.

- 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: Anyone one IOA recognized Sport/Game of choice. Labelled diagram of Field & Equipment. Also mention its Rules, Terminologies & Skills.