



# **BRILLIANTS' CONVENT**

## **CLASS-XII**

**2023-24**

# **Summer Holiday Homework**



## Class-XII

### Physics

Q1. Investigatory Projects on any one topic

1. To study various factors on which the internal resistance/EMF of a cell depends.
2. To study the variations in current flowing in a circuit containing an LDR because of a variation in (a) the power of the incandescent lamp, used to 'illuminate' the LDR (keeping all the lamps at a fixed distance). (b) the distance of a incandescent lamp (of fixed power) used to 'illuminate' the LDR.
3. 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.
4. 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.
5. To investigate the dependence of the angle of deviation on the angle of incidence using a hollow prism filled one by one, with different transparent fluids.
6. 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.
7. To study the factor on which the self-inductance of a coil depends by observing the effect of this coil, when put in series with a resistor/(bulb) in a circuit fed up by an A.C. source of adjustable frequency.
8. To study the earth's magnetic field using a compass needle -bar magnet by plotting magnetic field lines and tangent galvanometer

### Chemistry

Q1) Do investigatory project on the topic assigned(roll no wise):

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 Bi-sulphate 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), Elaichi (cardamom).
- Study of common food adulterants in fat, oil, butter, sugar, turmeric power, chilli powder and pepper.

Note: Any other investigatory project, which involves about 10 periods of work, can be chosen.

Q2. Revise Ch 8 And 9 with all CBSE 2012- 2022 question to be done in class Chemistry Registers.

Q3. Complete the Special Assignment On Hots / CBSE Questions

### Biology

Q1. Complete your biology investigatory project and practical file.

Q2. Revise all the syllabus covered so far and prepare well for special Examination.

### Mathematics

Q1. A entrepreneur produces three products x, y, z which he sells in two markets. annual sales are indicated below:

Market

Market	Products		
I	10,000	2,000	18,000
II	6,000	20,000	8,000

a) If unit sale prices of x, y and z are Rs 2.50, Rs 1.50 and Rs 1.00, respectively, find the total revenue in each market with the help of matrix algebra.

(b) If the unit costs of the above three commodities are Rs 2.00, Rs 1.00 and 50 paisa respectively. Find the gross profit.

Q2. Make a questionnaire of at least two question on G20 submit and relate it with any of the chapter.

Q3 Revise Syllabus for the upcoming exams.

## Economics

Q1. Revise the chapters covered in class.

Q2. Prepare project file as per the assigned roll numbers and topics

- Digital India  
XII A
- Micro and small scale industries  
XII B - Roll No.s 1,9  
XII C -Roll Nos-1,9,17
- Contemporary employment situation in India  
XII B - Roll No.s 2,10  
XII C -Roll no.s2,10,18
- Human development Index-  
XII B Roll No.s 3,11  
XII C Roll no.s3,11,19
- Cashless economy  
XII B - Roll No.s 4,12  
XII C Roll No.s-4,12,20,25
- G-20 Inclusive and action oriented  
XII B - Roll No.s 5,13  
XII C Roll No.s-5,13,21
- Sustainable development goals  
XII B - Roll No.s 6,14  
XII C Roll No.s-6,14,22
- Aatmanirbhar Bharat  
XII B - Roll No.s 7,15  
XII C Roll No.s-7,15,23
- Make In India  
XII B - Roll No.s 8,16  
XII C Roll No.s-8,16,24

## Accountancy

Q1. Prepare project file consisting of specific project taking into consideration two tools of analysis.

Q2. Revise the chapters covered in class.

## Business Studies

- Q1. Revise the chapters covered in class.
- Q2. Prepare project file as per the assigned roll numbers and topics  
Principles of Management - Roll No.s 1,2,11,14 and 16  
Business Environment - Roll No.s 3,6,7,9 and 13  
Stock Exchange - Roll No.s 10 and 12  
Marketing Management - Roll No.s 4,5,8 and 15

## English

- Q1. Prepare a beautiful chart along with pictures on any poem from your NCERT textbook.
- Q2. Prepare the project file as per the assigned roll numbers and topics.  
Lost spring (Part 1) - Roll nos.- 1, 5,7,18  
The Rattrap- Roll nos.- 2,8,17,20,28  
Keeping Quiet- Roll nos.- 3,10,15,24  
A thing of Beauty- Roll nos.- 4,11,23,27,30  
Lost spring (Part 2)- Roll nos.- 6,12,16,22  
The Third level- Roll nos.- 13, 17,21,26  
Deep Water- Roll nos.- 9,14,19,25,29

Note-

The Project file should contain students details, Acknowledgement, certificate, index, cover page (Title/chapter/poem name), Theme, Synopsis, character sketch/ Central idea, bibliography, signature page for teacher.

- Q3. Revise all the work done in the class so far.

## Political Science

REVISION WORKSHEETS

### THE END OF BIPOLARITY

1. Highlight any one major distinction between the Soviet economy and the capitalist economy
2. Highlight any one consequence of 'Shock Therapy'.
3. How was the US benefited by the Soviet disintegration?
4. For how many years did the Civil War continue in Tajikistan? When did it come to an end?
5. Highlight any one feature of the multi-polar world as visualized by both Russia and India.

### CHALLENGES OF NATION BUILDING

1. Why were the States reorganized on linguistic basis in India in 1956?
2. Explain any two causes of the partition of India in 1947
3. What is meant by the two-nation theory?
4. Name the leader of the freedom movement of India who was popularly known as Frontier Gandhi.
5. Which four Princely States of Indian initially resisted to join the Indian Union?
6. Name the states which are called Seven sisters.
7. Two Muslim majority provinces of British India
8. Where was Gandhiji during Independence Day celebrations?

### POLITICS OF PLANNED DEVELOPMENT

1. What was 'Bombay Plan'?
2. Who was PC Mahalanobis?
3. What was the main objective of the First and second Five Year Plan?
4. Differentiate between the capitalist and the socialist models of development.
5. What is meant by decentralized planning?
6. Mention any two merits of Green Revolution
7. Which are the two models of development? Which model of development was adopted by India?
8. Evaluate the major outcomes of the Indian model of mixed economy.

OR

Critically examine the major outcomes of the Indian model of mixed economy.

9. Explain any two merits and two demerits each of the Green Revolution.

OR

List any two merits and two demerits of the Green Revolution.

### CS & IP

Q1. Do the following Python programs practically and make a single pdf file.

The format of the file is as follows:

-  **Program heading (Question)**
-  **Code of the program question**
-  **Screenshot of the output**

SNo	Name of Practical
1.	WAP to compute x n of given two integers x and n.
2.	WAP for calculating simple interest.
3.	WAP to accept a number from the user and display whether it is an even number or odd number.
4.	WAP to accept percentage of a student and display its grade accordingly.
5.	WAP to print Fibonacci series up to certain limit.
6.	WAP to display prime numbers up to a certain limit.
7.	P to accept a number, find and display whether it's a Armstrong number or not.
8.	WAP to accept a number and find out whether it is a perfect number or not.
9.	WAP to print the sum of the series $1+x^1/1!+x^2/2!+.....x^n/(n)!$ - exponential series.
10.	WAP to print the following pattern: 1 1 2 1 2 3
11	WAP to accept a string and display whether it is a palindrome.
12.	WAP that counts the number of alphabets and digits, uppercase letters, lowercase letter, spaces and other characters in the string entered.
13.	WAP to accept a string ( a sentence) and returns a string having first letter of each word in capital letter.
14.	WAP to remove all odd numbers from the given list.
15.	WAP to display second largest element of a given list.
16.	WAP to display cumulative elements of a given list.
17.	WAP to display frequencies of all the elements of a list.
18.	WAP in Python to display those strings which are string with 'A' of given list.
19.	WAP in Python to find and display the sum of all the values which are ending with 3 from a list.
20.	WAP to shift the negative number to left and the positive numbers to right.
21.	WAP to swap the content with next value divisible by 7.

22.	WAP to accept values from user and create a tuple.
23.	Write a program to input total number of sections and stream name in 11 <sup>th</sup> class and display all information on the output screen.
24.	Write a Python program to input names of 'n' countries and their capital and currency, store it in a dictionary and display in tabular form. Also search and display for a particular country.

### Hindi

प्रत्येक छात्र/छात्रा अपने अनुक्रमांक के अनुसार दिए गए विषयों से संबंधित एक परियोजना कार्य तैयार करेंगे, जिसमें 2000 शब्द होंगे। परियोजना कार्य बहुत ही स्वच्छ और त्रुटि रहित होना चाहिए।

#### अनुक्रमांक-1,7,13,19,25

1. समाज में लड़कियों की वास्तविक स्थिति को स्पष्ट करते हुए केंद्र सरकार की बेटी बचाओ बेटी पढ़ाओ योजना का उल्लेख एक आकर्षक चित्रात्मक परियोजना द्वारा कीजिए ।

#### अनुक्रमांक-2,8,14,20

2. भारत के विकास को लेकर आप जो सपने देखते हैं उन पर एक आकर्षक चित्रात्मक परियोजना तैयार कीजिए।

#### अनुक्रमांक- 3,9,15,21

3. तुलसीदास के धार्मिक विचारों पर प्रकाश डालते हुए उनके व्यक्तित्व और कृतित्व पर एक आकर्षक चित्रात्मक परियोजना तैयार कीजिए।

#### अनुक्रमांक-4,10,16,22

4. पढ़ाई अथवा नौकरी के लिए घर से दूर रहने पर आप अपने घर की और परिजनों की जिन विशेषताओं को याद करेंगे, उन्हें चित्र सहित एक आकर्षक परियोजना द्वारा व्यक्त कीजिए।

#### अनुक्रमांक -5,11,17,23

5. दृश्य संचार माध्यमों द्वारा कारोबारी दबाव के तहत 'रियलिटी शोज़' के माध्यम से पर्दे पर दिखाई जा रही संवेदनहीनता को रेखांकित करते हुए चित्र सहित आकर्षक परियोजना बनाइए।

अनुक्रमांक-6,12,18,24

6. मैं ऐसे धर्म को मानता हूँ जो स्वतंत्रता, समानता और भाईचारा सिखाता है अंबेडकर के इस कथन के आधार पर श्रम विभाजन और जाति प्रथा तथा मेरी कल्पना के आदर्श समाज के स्वरूप को एक आकर्षक चित्रात्मक परियोजना द्वारा रेखांकित कीजिए।

**परियोजना का.....**

पहला पृष्ठ- विद्यार्थी का नाम, कक्षा, वर्ग, अनुक्रमांक, विद्यालय का नाम एवं विद्यालय का प्रतीक चिह्न (लोगो)

दूसरा पृष्ठ- आभार ज्ञापन

तीसरा पृष्ठ- प्रमाण-पत्र

चौथा पृष्ठ- अनुक्रमणिका

पाँचवा पृष्ठ- भूमिका/प्रस्तावना

छठे पृष्ठ से- संपूर्ण चित्राकर्षक परियोजना

अंतिम पृष्ठ- संदर्भ-ग्रंथ

### **Physical Education**

Q1. Make the project files as per the topics discussed in the class.

Q2. Revise the entire syllabus covered so far in the class.