



## ARMY PUBLIC SCHOOL, BIRPUR, DEHRADUN

### WINTER BREAK HOLIDAY HW

CLASS:X

SESSION - 2022-2023

### ENGLISH

INSTRUCTION : Do Question 1 and 2 in A4 sheets / coloured sheets OR in soft copy in computer and submit the print outs to your subject teacher.

Q1. Collect information about your favourite English poet / author and write about him /her using the following hints :

- Name
- Date of birth
- Education
- Family
- Famous works
- Achievements ( Also paste or draw his/her picture)

Q2. Make your profile by using the following hints :

- Name , Date of birth ( also paste or draw your picture )
- Information about your family
- Your friends
- Your interests and hobbies
- Your strengths and weakness
- Your aim in life

Q3. Revise the syllabus for upcoming Board exams.

### HINDI

❖ निर्देशानुसार निम्नलिखित प्रश्नों के उत्तर दीजिए।

प्रश्न-1 अपने पुस्तकालय में हिंदी की पत्रिकाओं की कमी की ओर ध्यान आकर्षित करते हुए अपने विद्यालय की प्रधानाचार्या को पत्र लिखिए।  
(हिंदी की उत्तर पुस्तिका में)

प्रश्न-2 अपने विद्यालय के वार्षिकोत्सव में नाटक मंचन हेतु इच्छुक छात्रों को जानकारी देने हेतु एक सूचना तैयार कीजिए। (हिंदी की उत्तर पुस्तिका में)

प्रश्न-3 निम्नलिखित में से किन्हीं दो विषयों पर आकर्षक विज्ञापन बनाइए।

(ए-4 शीट पर)

- उत्तराखंड पर्यटन निगम की ओर से पर्यटकों को आकर्षित करने हेतु विज्ञापन ।
- आधुनिक सुविधाओं से युक्त किसी मोबाइल फोन का विज्ञापन ।
- पुराने घर को बेचने के लिए विज्ञापन ।

## MATHS

### ART INTEGRATED LEARNING ACTIVITY- MATHS INTEGRATED WITH POLITICAL SCIENCE. (TO BE DONE IN A4 SIZE PAPER)

#### CASE STUDY:

Political survey questions are questions asked to gather the opinions and attitudes of potential voters. Political survey questions help you identify supporters and understand what the public needs. Using such questions, a political candidate or an organization can formulate policies to gain support from these people.

A survey of 100 voters was taken to gather information on critical issues and the demographic information collected is shown in the table. One out of the 100 voters is to be drawn at random to be interviewed on the India Today News on prime time.

	MEN	WOMEN	TOTAL
REPUBLICAN	17	20	37
DEMOCRAT	22	17	39
INDEPENDENT	8	7	15
GREEN PARTY	6	3	9
TOTAL	53	47	100

- What is the probability the person is a woman or a Republican ?
- What is the probability the person is a Democrat ?
- What is the probability the person is an Independent man ?
- What is the probability the person is an Independent man or green party man

### **ART INTEGRATION PROJECT: UTTARAKHAND AND KARNATAKA** **( TO B DONE IN A BEAUTIFUL FILE)**

- Apply Mathematical concepts on temples , monuments and Architectural designs of Karnataka and Uttarakhand.
- Include the study the vernacular Architecture in Uttarkashi- An example of earthquake resistant design.
- Include the architectural designs present in Virupaksha temple , Hampi Karnataka.

#### **LAB ACTIVITY:**

**(to be done in Lab file)**

- To verify tangent ratio Theorem and Equal tangent length theorem experimentally.

## SCIENCE

PREPARE ONE WRITE UP ON THE CONCEPT OF LESSON 16 SUSTAINABLE MANAGEMENT OF NATURAL RESOURCES

-SOLVE FIVE SAMPLE PAPERS OF PREVIOUS YEARS (IN A COPY)

-WRITE FOLLOWING PRACTICALS

1-Studying the properties of acids and bases (HCl & NaOH) on the basis of their reaction with:

a) Litmus solution (Blue/Red)

b) Zinc metal

c) Solid sodium carbonate

2-Observing the action of Zn, Fe, Cu and Al metals on the following salt solutions: Unit-I

i)  $ZnSO_4(aq)$

ii)  $FeSO_4(aq)$

iii)  $CuSO_4(aq)$

iv)  $Al_2(SO_4)_3(aq)$

Arranging Zn, Fe, Cu and Al (metals) in the decreasing order of reactivity based on the above result.

3. Studying the dependence of potential difference (V) across a resistor on the current (I) passing through it and

determine its resistance. Also plotting a graph between V and I.

4. Determination of the equivalent resistance of two resistors when connected in series and parallel.

5. Experimentally show that carbon dioxide is given out during respiration.

6. Study of the following properties of acetic acid (ethanoic acid):

i) Odour

ii) solubility in water

iii) effect on litmus

iv) reaction with Sodium Hydrogen Carbonate

7-Studying (a) binary fission in Amoeba, and (b) budding in yeast and Hydra with the help of prepared slides.

8-Identification of the different parts of an embryo of a dicot seed (Pea, gram or red kidney bean).

## **S.SCIENCE**

a) Do atleast one sample paper in a day at home.

b) Practice the map work from the chapters Nationalism in India , Minerals and Energy Resources, Lifelines of National Economy.

c) Focus on answer writing practice.

d) Revise each and every chapter and make power notes out of them and to be checked by the teacher in the school when the school reopens.

## **AI/IT**

### **SUBJECT- ARTIFICIAL INTELLIGENCE**

#### **AIP- Make an Art Integrated Project**

##### **TOPIC- Animated Video about Karnataka**

**Instructions-** Create your project by using Scratch Programming. Your module should be of 5-6 minutes and providing information about Karnataka.

**Group I-** Lifestyle of people of Karnataka.

**Group-II-** Food & Festival of Karnataka.

#### **2. Write the following Python Programs:**

**Instructions-** Write all the given python programs in AI Practical File. Program output to be written with Pencil only. Practical file should be completely covered and presentable.

1. Write a Program to input Four numbers and find their sum and product.

2. Write a Program to calculate S.I. by inputting the value of Principal Amount, rate from the user and time period of 3 years.

3. Write a Program to accept Marks in 5 Subjects and their average marks also.

4. Write a Program to find the perimeter of Triangle.

5. Write a Program to Input a number and print its Square & Cube.

6. Write a Program to traverse a list and print each element.

[2,4,5,7,9,11,15,19]

7. Write a Program to Input the age of a person and check whether a person is eligible to caste the vote or not.

8. Write a Program to Input a number and check whether a number is palindrome or not.

9. Write a Program to check whether the followings are Leap year or not.

(YEARS - 2020, 2021, 2033, 2037, 2041)

10. Write a Program to take marks as input from users and calculate the grade based on the following criteria.

MARKS	GRADE
GREATER THAN 95	A+
90 <= MARKS < 95	A
80 <= MARKS < 90	B
70 <= MARKS < 80	C
60 <= MARKS < 70	D
BELOW 60	E

### IT

**Under Art Integration Project: (To be done in groups as directed in class)**

I. Design an open office document on any of the following:

- Silicon valley
- Dance forms of Karnataka
- Flora and fauna of state Karnataka

II. Create a relational database on population of state Karnataka and perform queries based on it.

**Practical File:**

*To be done in the practical file using OpenOffice Base. Paste the picture of the output window for every practical.*

I. Table: Student

Rollno	Class	Name	Phone_no
1	XII	Sumit	1234565
2	X	Amit	3564583
3	X	Anuj	1236589
4	XI	Mini	5869542

- Write the command to create the table "Student". Make Rollno as the primary key.
- Write the command to display all the records of table Student.
- Write the command to insert one record of your choice.
- Display record of student whose roll number is 3.
- Display the record of 'Anuj'.

### ART AND CRAFT

Holiday Home work : - Make one beautiful 3 D concrete creative craft

For Eg.: Statue ,paper mache items , decorative show piece etc

Of your choice

