

# **ST.GREGORIOS SCHOOL, DWARKA**

## **Holiday Homework-2021-2022**

### **Class X**

#### **Science**

#### **BIOLOGY**

As you all have studied the chapter Life Processes hence to explore further and to be well informed, **prepare a Project file using simple A4 sized sheets** compiling the following information after adequate research.

#### **Project content**

**Compare the structure and functioning of the digestive system of :**

- a. Humans.**
- b. Frogs and**
- c. Fishes.**

Support your comparative study **with neat ,labelled and colourful self explanatory diagrams.**

**(This Project will be evaluated under the internal assessment criteria as well as for art integration ,hence the work should be done neatly.)**

#### **CHEMISTRY**

1. Create a concept map on types of reactions covering the following points:  
All different types of reactions with at least two examples and related picture on separate A4 sheet.
2. Write short note on corrosion of any four different metals.
3. Revise Ch:1
4. Write a poem related to Chemistry ( at least 10 to 15 lines )

**(Do all written work on A4 sheets and make a folder )**

#### **PHYSICS**

#### **Time to show your creativity and innovation**

1. Draw a **mind map** in A4 size sheet of chapter 12 – Electricity. You can use colourful pens, decorative materials easily available at your home.

**Note: Only handwritten creativity accepted.**

#### **2. Perform and learn -**

Perform an activity in your home demonstrating ‘**refraction of light**’ and record a video of your demonstration explaining the process (maximum duration 1min, only use materials which are available at your home.).

.....

## ENGLISH

1. Create ten dialogues between a Covid Patient and their care taker talking about their state of mind and their feelings in the current situation.
2. Diary entry about personal experience of someone close being infected by the Corona Virus.
3. Write an article for National Daily about How to keep yourself and your surroundings calm and positive amidst all the negativity surrounding us! Give the suitable title.
4. Try a recipe while in lockdown/ summer vacations that you had fun making and also write your our own review about it.

\*\*\*\*\*

## MATHEMATICS

Taking your present age as 'x' years and your mother/father age as 'y' years .Form first equation taking ages five years ago and second equation taking ages after three years.

1. Write the equations using above mentioned conditions .
2. Draw the graph for above equations formed.

Solve the holiday homework in A4 size sheet and PDF of above should be submitted google class room whenever it is assigned for.

### Worksheet Based On Pair Of Linear Equations In Two Variables and Statistics Of Mathematics For Class 10 (2021-2022)

1. During the medical check up of 35 students of a class ,their weights were recorded as follows :

Weight( in kg)	No. of students
38-40	3
40-42	2
42-44	4
44-46	5
46-48	14
48-50	4
50-52	3

Draw a “less than type” and a “more than type” ogive from the given data. Hence obtain the median weight from the graph.

2. Find the missing frequencies distribution if it is known that mean of the distribution is 1.46.

No. of accidents (x)	Frequency (f)
0	46
1	x
2	y
3	25
4	10
5	5
Total	200

3. Find the mean, mode and median of the following data:

Class Interval	0-10	10-20	20-30	30-40	40-50	50-60	60-70
Frequency	5	10	18	30	20	12	5

4. Find the solution of equation using graphical representation:

$$2x-y+1=0 \quad \text{and} \quad x-2y+8=0$$

5. Find the solution of equations using substitution method:

1.  $2y=4x-6$  and  $2x=y+3$
2.  $x+3y=6$  and  $2x-3y=12$

6. Solve the worksheet given in your register.

PDF of above work should be submitted in google class room whenever it is assigned for.

\*\*\*\*\*

## Social Science

### Summer Vacation Project 2021-22

Objectives of the project

The project has been carefully designed so as to-

- a) Create awareness in learners.
- b) Enable them to understand and to relate all aspects of Disaster Management.
- c) Relation of different aspects with life.
- d) Provide hands on experience.

General instructions :

- 1) Use only eco- friendly products, no plastic covers.
- 2) Project report should be handwritten.
- 3) It should be of 10-15 pages only.
- 4) Sequence of the project
  - a) Project cover- Name of the project:  
Name of the student:  
Class and section:
  - b) Index-with page numbers.
  - c) Acknowledgment
  - d) Introduction
  - e) Main content
  - f) Conclusion (Your views)

**Any One** Project on the following topics:

Consumer Awareness

OR

Social Issues

OR

Sustainable Development

\*\*\*\*\*

## **ARTIFICIAL INTELLIGENCE**

Q1. Read Unit – 1 carefully and complete worksheet 1 to 7 given in Unit – 1 ( Introduction to AI) in your registers.

Q2. Application Based ( A4 size sheet)

Read carefully and give answer :

AI Bias Another aspect to AI Ethics is bias. Everyone has a bias of their own no matter how much one tries to be unbiased, we in some way or the other have our own biases even towards smaller things. Biases are not negative all the time. Sometimes, it is required to have a bias to control a situation and keep things working.

When we talk about a machine, we know that it is artificial and cannot think on its own. It can have intelligence, but we cannot expect a machine to have any biases of its own. Any bias can transfer from the developer to the machine while the algorithm is being developed.

Now Think and write the answer of the followings :

1. Majorly, all the virtual assistants have a female voice. It is only now that some companies have understood this bias and have started giving options for male voices but since the virtual assistants came into practice, female voices are always preferred for them over any other voice. Can you think / write of some reasons for this?

2. If you search on Google for salons, the first few searches are mostly for female salons. This is based on the assumption that if a person is searching for a salon, in all probability it would be a female. Do you think this is a bias? If yes, then is it a Negative bias or Positive one?

Q3. Practical work : Do practice the following questions in Python and save code and output in word file.

1. To calculate Area and Perimeter of a rectangle.

2. To calculate Area of a triangle with Base and Height.

3. To calculating average marks of 6 subjects.

4. To calculate discounted amount with discount %

5. Check if the number is positive, then print an appropriate message

6. A program to check if a person can vote.

7. To check the grade of a student

\*\*\*\*\*

ग्रीष्मकालीन गृहकार्य (2021-22)

विषय - हिंदी , कक्षा - दसवीं

- 1) अपनी पसंद के किन्हीं दो विषयों पर विज्ञापन - रचना करें।
- 2) कोरोना महामारी के समय में कुछ घटनाओं ने आपके दिल को छुआ होगा, उनमें से किन्हीं दो घटनाओं को लघु कथा रूप में लिखिए। कथा लेखन की शब्द सीमा है 100 - 125 शब्द।  
नोट -- पूरा कार्य एक फाइल में करें तथा सुंदर - सा कवर पेज भी बनाएँ।

\*\*\*\*\*

Subject - French

Class – X

- Ecrivez le reportage sur **la système éducatif de France et Inde.**  
( Comparer la système educative de deux pays)
- Préparez un PPT sur la culture française .
  - Ecrivez tout le travail dans les feuilles et preserver dans un dossier.

\*\*\*\*\*

विषय - संस्कृत  
कक्षा - दशमी

- ① पाठ 2 और पाठ 5 का "पुस्तक पठन क्रियाकलाप" के लिए पढ़ने का अभ्यास करें। (शेमुषीभाष्य)
- ② पाठ 2 और पाठ 5 में क्लृप्ताक्षरों को A पंक्ति के शीट पर बनाकर 3-3 वाक्य संस्कृत में लिखें।  
(केवल लट् लकार का प्रयोग करें)
- ③ लट् लकार, लृट् लकार, लङ् लकार, पहलवानु का चर्चानाकर दिए गए वाक्यों का संस्कृत में प्रयोग करें।
- ④ ऊपर गई सभी कार्य सम्पूर्ण व्याकरण तथा पहलवानु का परीक्षा के लिए अभ्यास करें।
- ⑤ किसी छोटी संस्कृत कहानी का 'कथावाचन' क्रिया कलाप के लिए अभ्यास करें।

नोट - ① सभी कार्य A पंक्ति शीट में करना है।

② ग्रीष्मकालीन गृहकार्य SEA के लिए मूल्यांकित किया जायेगा।

\*\*\*\*\*