

**ST. KAREN'S SECONDARY SCHOOL**  
**Khagaul Road, Danapur, patna**  
**2020 – 2021**

**HOLIDAY HOMEWORK-PROJECT WORK-COPY WORK**

**CLASS – 12 - D**

**GENERAL INSTRUCTION**

**Copy Work**

- Write all the contents and assignments in serial i. e. Content 1 and then assignment 1, next content 2 then assignment 2 and so on... .
- Index of the copy has to be filled.
- Name of the chapter and the date has to be mentioned according to given in the content and assignment.
- Do the work neatly in the copy.
- Writing should be clear and legible.
- All the diagrams has to be drawn and labelled on the white sheet with the pencil.

**Project Work**

- Project has to be done on bio sheets and put in one single bio file only.
- Make a cover page mentioning the name, class, section, roll number, subject, and the name of the teacher.

Example:-

Name: Ankita Kumari

Class/section: 9- G Roll number: 01

Subject: Science

Name of the teacher: Miss. Shalini Kumari

- Index with date, acknowledgement and bibliography should be there in the project.

**Holiday homework:-**

- All holiday homework has to be done in copy only.

**ENGLISH**

**English Summer Vacation Project**

**INSTRUCTIONS :**

- **The following project should be prepared in A4 sized ruled sheets stapled on the left hand side & filed in one stick file.**
- **The word – limit should be strictly followed.**
- **The project should contain the following as per the sequence given below :**
  - ***1. Creative Cover Page should include the Name, Class, Section, Roll No. of the students & the Subject.***
  - ***2. Second Sheet should contain the assignment questions.***
  - ***3. Third page onwards the students can write the ANSWER.***

**TOPIC**

Write an article on - "**SOCIO-ECONOMIC IMPACT OF COVID-19 PANDEMIC AND SIGNIFICANCE OF AWARENESS, SANITATION AND SELF-DISCIPLINE IN**

## CONTROLLING IT".

(250 – 300 words)

### English Summer Vacation Homework

#### INSTRUCTIONS :

- The following questions should be answered in English fair copy. Each question should be written on a new page and then answered properly.
- The word – limit should be strictly followed.

**Q.1.** The poem ‘**Keeping Quiet**’ leaves a message of universal brotherhood and peace. It urges people to stop all sorts of aggression including that towards environment and do a bit of introspection. How is the poem relevant to the present scenario of human existence ? **(200 – 250 words)**

**Q.2.** How can empathy be the best healer ? Answer this question with reference to present scenario and by taking hints from the lesson – ‘*The Enemy*’ in **(200 – 250 words)**

**NOTE :** FOR ONLINE STUDY MATERIAL VISIT –  
<http://ncert.nic.in/textbook/textbook.htm>

## PHYSICS

### **1. CHAPTER: (ELECTRIC CHARGES AND FIELDS)-**

- @ DO ALL IN-TEXT QUESTIONS(Q.N. 1.1 TO 1.13) FROM NCERT BOOK.
- @ DO ALL EXERCISE QUESTIONS (Q.NO. 1.1 TO 1.34) FROM

NCERT BOOK.

### **2. CHAPTER : (ELECTROSTATIC POTENTIAL AND CAPACITANCE)-**

- @ DO ALL IN-TEXT QUESTIONS (Q.NO. 2.1 TO 2.10) FROM NCERT BOOK.
- @ DO ALL EXERCISE QUESTIONS (Q.NO. 2.1 TO 2.37) FROM NCERT BOOK.

### **3. PROJECT WORK:**

- @ MAKE LIST OF 15 ELECTRICAL APPLIANCES USED AT YOUR HOME.
- @ MARK THEIR POWER IN KILOWATT AND VOLTAGE
- @ FIND VALUE OF ELECTRIC CURRENT USED BY THEM USING OHM’S LAW.

## CHEMISTRY

### **PROJECT WORK**

1. Write all formulas related to chapter solution (Unit 2) and The Solid State (Unit 1) on chart paper.
2. Draw a Crystal Lattice diagram of NaCl on Chart paper.

### **NUMERICAL PROBLEMS**

1. Solve some important Numerical Problems from the exercise of Unit – 2 from NCERT. (Q. No. – 2.6, 2.8, 2.20, 2.21, 2.22, 2.35, 2.40.
2. Solve Numerical Problems related to the Solid State (Unit 1) from NCERT. Q. No. – 1.11, 1.15, 1.16, 1.21, 1.24.

## BIOLOGY

**Science operates on the edge of what is known, to discover more about what is not... we have to be a person of what we can do to explore being young scientists.....**

1. Make an investigatory project on any of the following topics: For selection of the topic for the project, you work and read different chapters of your syllabus and also consult scientific literature, magazines, and newspapers, go and use search engines of internet, etc. Then select the topic of your interest.
  - a) Importance and types of various birth control measures.
  - b) Population Explosion and Control.
  - c) Organic Farming / Organic Agriculture.
  - d) Any human disease can be taken as a topic (if possible your work may include covid 19, symptoms and present scenario) and collect the complete information with statistical data and a support of statistical analysis about the same.
  - e) Effect of salinity of water on the growth of one type of plant. f. Effect of pH of water on the growth of one type of plant.
2. Following points should be kept in mind while performing the experiments for the project work.
  - 1) Compare your results with those available in the reference books.
  - 2) Discuss your results in the light of available information about the project and draw out meaningful conclusion.
3. Make use of histograms, graphs, photographs or diagrams to support your observations and conclusions.
4. Give a list of books, magazines/journals and internet sites you have consulted during the course of your project.
5. Make complete revision of unit I (from chapter1 to chapter 4) for which study material, assignment has been provided. These chapters were also supported by online classes.

## **MATHEMATICS**

**Solve the following exercises from NCERT book**

1. Chapter 1-Relation and Function:- Ex 1.1, 1.2, 1.3.
2. Chapter 2- Inverse Trigonometric Function:- Ex 2.1, 2.2.
3. Chapter 3- Matrices:- Ex 3.1, 3.2, 3.3, 3.4.
4. Chapter 4-Determinants:- Ex 4.1, 4.2, 4.3, 4.4, 4.5, 4.6.
5. Project work:-  
Draw the graph of  $\sin^{-1}x$ ,  $\cos^{-1}x$  and  $\tan^{-1}x$  in their principal value branch in graph copy.  
Do summer holiday work in Maths homework copy.

**Note:-** Syllabus for 1<sup>st</sup> unit test- Relation Functions, Inverse Trigonometric functions.

## **COMPUTER SCIENCE**

**Assignment :**

1. Write a python program for n – th Fibonacci number .
2. Write a python program for how to check if a given number is Fibonacci number .

3. Write a program in python to multiply all numbers in the list .
4. Write a program in python to find N largest element from a list .
5. Write a python program to count positive and negative numbers in a list.
6. Write a python program to count Even and Odd numbers in a list .
7. Write a program in python to find the product of unique prime factors of a number .
8. Write a python program to find the vertex , focus and directrix of a parabola .
9. Write the python code for the following pattern :

A	0
ABC	101
ABCDE	21012
ABCDEFG	3210123
ABCDEFGH	432101234

10. Write a python program to input any number from the user then perform the following calculation :

- (i) Sum of digits
- (ii) Product of digits
- (iii) Reverse of the number
- (iv) Check whether the number is Palindrome or not
- (v) Check whether the number is Armstrong Number or not .

11. Project Work : Make a mini Project by taking the help from Loop constructs , String , List , Tuple and Dictionary only .  
 ( Choose Any one Topic from the following ) : Student Management System .  
 Banking System / Bank Transaction  
 Hotel Management System Library  
 Management System School  
 Canteen  
 Salary Management Application  
 Bookstore Management

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