

RAMAKRISHNA SENIOR SECONDARY SCHOOL
SUMMER HOLIDAY HOMEWORK
CLASS XII (SCIENCE) (2024-25)

Dear Parents

Greetings from the RKS !

The Academic Session 2024--25 has begun in full swing and students have settled well in their classes. Now is the time for Summer Break. The School will be closed for Summer Break from May 23, 2024 to June 25, 2024. The school will reopen on June 26, 2024. In order to keep our students well engaged, we are sending the Summer Holiday Homework.

General Instructions:-

1. Revise the syllabus covered so far in the class to prepare for Periodic Tests, which will be held in the month of July.
2. Do all the work as specified by the subject teacher.
3. Submit your Holiday Homework in the first week of July as per the teacher's instructions.
4. The students must do their work neatly in their own handwriting. Marks of Internal Assessment will be awarded only if the students do the work in their own handwriting.

Summer Vacations are the most awaited holidays by the students. It is also a time to enjoy those little pleasures of life that get overlooked during the busy school routine. They get a positive bounce back when they rejoin school after this much-needed break. There are a few things that students can keep in mind to utilize this break fruitfully.

- **Go for educational trips and excursions.**
- **Spend quality time with family and friends**
- **Pursue your hobbies and interests**
- **Sharpen your skills and develop new ones**
- **Follow a fitness regime to stay agile both mentally and physically**
- **Learn and explore new things**
- **Relax your body and mind because, "A Healthy Mind Lives in a Healthy Body."**

Have a delightful and productive Summer Break!

ENGLISH:

1. Prepare a General Studies Project on the topic 'Science and Society' on A4 sized white ruled sheets.

Resources such as newspapers, books, magazines, TV Channels and the internet (relevant websites) can be used.

The project should include the following:

- **Title of the topic**
 - **Introduction to the topic/ Nature of Science**
 - **How science and society are related / Science as a social enterprise**
 - **Role of science in society**
 - **Role of science in developing society**
 - **What will be your contribution or an appeal to the people for the topic you have been allotted**
 - **Conclusion (clearly mentioning if you want to strengthen a move or you want to condemn it- depending on the topic)**
 - **Bibliography/ list of resources used.**
2. Attempt the following Comprehension Passages in Evergreen Practice Papers:
 - **Evergreen Test Assignment-3**

- Evergreen Test Assignment 4
 - Evergreen Test Assignment 10
3. Attempt the following Notice Writing questions in C W. Notebook:
- Exercise for Practice (Evergreen Test Assignment) page no. 51
- Q. 2, 3, 6, and 9.
4. Read the chapter - 'The RATTRAP' from Flamingo Book and write brief character sketches of the following:
- The Vagabond
 - Edla- Ironmaster's Daughter
5. Taking ideas from the lesson "Lost Spring", write an article on "Child Labour should be eliminated" in about 120-150 words.
6. After reading the poem 'Keeping Quiet' from the Flamingo Book, do the following:
- write the synopsis of the poem in 80-100 words
 - Enlist the poetic devices used in the poem, giving examples.
7. Revise the syllabus covered so far in the class for the PT-1 Examination.

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CHEMISTRY

1. Prepare a **GENERAL STUDIES PROJECT** (as per CBSE guidelines)

Topic : Contemporary problems of Indian Society-

3. Sub topics to be covered in the project

- Issues related to women
- Health care system
- Contemporary phase

Instructions to be followed:

1. Maximum pages: 8- 10
2. Use white A4 sized ruled sheets(one side) only

2. **CHEMISTRY INVESTIGATORY PROJECT** (as per CBSE guidelines)

Instructions to be followed:

1. Use white A4 sized ruled sheets(one side) only.
2. Pattern to be followed while preparing the project:

Page 1 : Title of the project

Page 2: Certificate

Page 3: Acknowledgement

Page 4: Index

Page5-6: Introduction/Theory

Page 7: Reagents and apparatus used

Page 8-9: Experimental studies/Procedure

Page 10: Observations and results

Page 11: Conclusion

Page 12: References

3. Prepare a working model, explanatory chart for science exhibition on the following topics :

Roll No: 1-7 - Pyrolysis of Plastic waste

8-15- Electrochemical Cell

16-21- Nanotechnology and its application in the field of agriculture, industries etc

4. a) Do the following questions of NCERT in your C.W/H.W notebook Back exercise - Chapter-8 - Q.8.1, 8.4, 8.12 ,8.13

5. Write the practicals done so far in the practical file

(i) Quantitative analysis:

(1) (a) Preparation of the standard solution of Oxalic acid of a given volume (b) Determination of molarity of KMnO_4 solution by titrating it against a standard solution of Oxalic acid.

(2) The above exercise [(a) and (b)] to be conducted using Ferrous ammonium sulphate (Mohr's salt) .

(ii) Tests for the functional groups present in organic compounds:

(1) Aldehydes and Carboxylic groups.

6 . Practice the assignment and Question Bank of PT-1

QUESTION BANK OF CHEMISTRY CLASS 12 (PT-1)

and revise the syllabus of PT-1 (Ch-6,7 and 8) .

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PHYSICS

1. Do the following questions from NCERT

Chapter 1 – Electrostatics

Example – 1.6, 1.7, 1.8, 1.9, 1.11, 1.12

Exercise – 1.6, 1.7, 1.8, 1.9, 1.12, 1.14, 1.15, 1.18, 1.22, 1.23

Chapter 2 – Electric potential and capacitance

Example – 2.1, 2.3, 2.4, 2.9, 2.10

Exercise – 2.1, 2.3, 2.4, 2.8, 2.11, 2.12, 2.21, 2.25

2. Make a project on General Studies on the topic. "Career Pathways "

- **Goal setting**
 - **Common carrier path**
 - **Internship as a medium of transition from schools to universities.**
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BIOLOGY

Q1. Make project on Topic – "Social Responsibility" which must include :

- Types of social responsibility.
- Role of students within a group.
- Principles of Socially Responsible behaviour

Q2. Do all the experiments in the file as discussed in class . Complete your practical file.

Q3. Make investigatory project of biology as per CBSE guidelines on loose sheets .

Q4. Do exercise of lesson 4 Principles of inheritance and variation in class work notebook.

Q5. Revise syllabus of PT 1 .

Chapter-1: Sexual Reproduction in Flowering Plants

Chapter-2: Human Reproduction

Chapter-3: Reproductive Health

Chapter-4: Principles of Inheritance and Variation

Chapter-5: Molecular Basis of Inheritance

Q5. Do practice from question bank uploaded in Google classroom.

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MATHEMATICS

1. Do the Following questions from Together with Mathematics

Page number 92 (Integrated Exercise)

Question Number 01 to 06, 08 to 17, 20 to 22, 25 to 33, 35 to 49, 51 to 71, 73, 74, 76 to 90, 95, 96 and 100 to 103.

2. Make the project on general studies on the topic "Human Rights"

The universal declaration of Human Rights and its significance

The responsibility of individuals, communities, and business in promoting Human Rights.

The relationship between Human Rights and sustainable development.

COMPUTER SCIENCE [All HHW to be submitted on 26 th June]

- Revise the syllabus of PT 1 for the exam in July. (Ch1, 2, 3, 4, 5 and 8)
- Do the work given for Ch 8: Computer Network - I
- Do Q33 (Pg 241), Q35 (Pg 242), Q48 (Pg 246), Q10 (Pg 252) in CW/HW register.
- Do the following questions on Python IDLE and write the code with output in your CW/HW

register:-

1. WAP to take a no. from user & calculate and print Factorial of it using Function fact().
2. WAP to take a no. from user & calculate and print reverse of it using Function reverse().
3. Write a Python program to multiply all the numbers in a list by 10 and display.
4. Arun is a class XII student of computer science. The CCA in-charge of his school wants to display the words form a text files which are less than 4 characters. Do the needful by creating a function FindWords().
5. A binary file “Toy.dat” has structure [TID, Toy, Status, MRP].
 - i. Write a user defined function CreateFile() to input data for a record and add to “Toy.dat”;
 - ii. Write a function OnOffer() in Python to display the detail of those Toys, which has status as “ON OFFER” from “Toy.dat” file.
6. Write a user defined function in python that displays the number of lines starting with ‘H’ in the filepara.txt
7. Make a General Studies Project for the given topic covering the given sub points.The project must include 10-12 pages.

Social Responsibility

- i) Types of Social Responsibility
- ii) Role of Students within a group
- iii) Principles of Socially Responsible behaviour

PHYSICAL EDUCATION

1.File Work

1. Yoga as Preventive Measure for Lifestyle Diseases

- 1) Obesity
- 2) Diabetes
- 3) Asthma
- 4) Hypertension
- 5) Back Pain

*Meaning

*List of Preventive Asanas and Pranayamas are helpful to cure.....

(explain any two from list)

2.Write detailed explanation of any one GAME of your choice in Physical Education file out of the list below:

*Basketball, Volleyball, Kho-Kho, Football, Kabaddi, Hockey, Cricket, Badminton, Gymnastics and Handball.

Including:

1. History of the game
2. Labelled diagram of field/court paste/draw.
3. Equipment used

- 4. Fundamentals Skills
- 5. Terminologies
- 6. Basic Rules

3. Make the project on general studies on the topic "Human Rights"

- The universal declaration of Human Rights and its significance
- The responsibility of individuals, communities, and business in promoting Human Rights.
- The relationship between Human Rights and sustainable development.

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PAINTING

- 1. Make two compositions with three human figures and complete with water colors or pencil colors.
- 2. Make two beautiful Landscapes with pastel colors or water colors.

Size : Half Ivory sheet or cartridge sheet

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WORK EXPERIENCE (SEWA PROJECT)

Prepare a Project on Old Age Home and organise the activities for the aged people.
Title of Project file: Visit to an Old Age Home.
Need to be included : Title Page, Acknowledgement , Introduction , Aim, Objective , Report, Activities and Bibliography.