

**RAMAKRISHNA SENIOR SECONDARY SCHOOL**  
**SUMMER HOLIDAY HOMEWORK**

**CLASS XI (2025-26)**

Dear Parents

Greetings from the RKS Fraternity!

The Academic Session 2025-26 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 24, 2025 to June 30, 2025. The school will reopen on July 1, 2025. In order to keep our students well engaged, we are sending the Summer Holiday Homework.

General Instructions:-

1. Do all the work as specified by the subject teacher.
  2. Submit your Holiday Homework in the first week of July as per the teacher's instructions.
  3. 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
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**ENGLISH:**

**1. Project Work**

Prepare a General Studies Project on the topic ‘Science and Technology’ on A4 sized white ruled sheets.

The project should be prepared under following headings

- Application of Science and Technology
- Emerging Technologies
- Science and Technology in the Social Context
- ‘Science and Society’

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

The project should include the following:

Cover Page ( Name, Class, Section)

Title of the topic

Index

Certificate of Completion

Acknowledgement

Introduction to the topic

How science and technology are related

Role of advancing technology in the society

Application of technology benefitting the society

Enumerate the emerging technologies

What will be your contribution towards the simultaneous development of society and technology

Conclusion

Bibliography/ list of resources used

2. Attempt Unseen Comprehension (to be done in the book- Evergreen Practice Papers)

a. Evergreen Practice Papers 1,2, and 3

3. Grammar Practice (to be done in the book- Evergreen Practice Papers)

– Gap Filling : Exercises 1 to 4

--Editing: Exercises 1 to 4

4. Creative Reflection Task (to be done in English register)

a. Write a short narrative or personal account (150–180 words) on a moment when effective communication helped resolve a problem or misunderstanding.

5. Reading & Literary Enrichment: (to be done in English register)

a. Read the Chapter: “The Address” (Hornbill)

• Write character sketches of:

i. Mrs. Dorling      ii. The Narrator

6. Revision:

a. Revise all the topics covered so far.

7. Reading and Reflection Assignment

Read the book Wise & Otherwise by Sudha Murty.

After reading, do the following in English register:

Write a brief review (120–150 words).

Choose one story you liked and write a short reflection.

### **Submission Guidelines:**

Submit your project in a neatly bound file with a cover page.

Project should be Handwritten only.

Diagrams, illustrations, and photos (if used) must be pasted neatly.

Date of Submission: July 2, 2025

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## **PHYSICS**

1.Prepare a general studies project on the following topic

"Workforce education skills"

- Soft skills

- Digital skills

- Industry specific skills

- Financial skills

2. Revise all the topics done in the class till now.

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## **CHEMISTRY**

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

Topic : **Current trends in Socio-Economic Structure**

Prepare a project report on the above topic.

### **Instructions to be followed:**

i. Maximum pages: 10-12

ii. Use white A4 sized ruled sheets(one side) only

3 Sub topics to be covered in the project report:

- Current trends in socio economic structure
- Socio Economic Structure
- Implementing Social Protection Strategies
- Limitations and uncertainties of Socio economic structure

## 2. Do the following textbook questions of CH-1 in CW/HW Register

- Calculate the molar mass of the following: (i)  $\text{H}_2\text{O}$  (ii)  $\text{CO}_2$  (iii)  $\text{CH}_4$
- Calculate the mass per cent of different elements present in sodium sulphate ( $\text{Na}_2\text{SO}_4$ ).
- Determine the empirical formula of an oxide of iron, which has 69.9% iron and 30.1% dioxygen by mass.
- Calculate the amount of carbon dioxide that could be produced when
  - 1 mole of carbon is burnt in air.
  - 1 mole of carbon is burnt in 16 g of dioxygen.
  - 2 moles of carbon are burnt in 16 g of dioxygen
- Calculate the mass of sodium acetate ( $\text{CH}_3\text{COONa}$ ) required to make 500 mL of 0.375 molar aqueous solution. Molar mass of sodium acetate is  $82.0245 \text{ g mol}^{-1}$ .
- Calculate the concentration of nitric acid in moles per litre in a sample which has a density,  $1.41 \text{ g mL}^{-1}$  and the mass per cent of nitric acid in it being 69%.
- How much copper can be obtained from 100 g of copper sulphate ( $\text{CuSO}_4$ )?
- Determine the molecular formula of an oxide of iron, in which the mass per cent of iron and oxygen are 69.9 and 30.1, respectively.
- In three moles of ethane ( $\text{C}_2\text{H}_6$ ), calculate the following:
  - Number of moles of carbon atoms.
  - Number of moles of hydrogen atoms.
  - Number of molecules of ethane.
- What is the concentration of sugar ( $\text{C}_{12}\text{H}_{22}\text{O}_{11}$ ) in  $\text{mol L}^{-1}$  if its 20 g are dissolved in enough water to make a final volume up to 2L?
- If the density of methanol is  $0.793 \text{ kg L}^{-1}$ , what is its volume needed for making 2.5 L of its 0.25 M solution?
- Express the following in the scientific notation:
  - 0.0048
  - 234,000
  - 8008
  - 500.0
  - 6.0012
- How many significant figures are present in the following?
  - 0.0025
  - 208
  - 5005
  - 126,000
  - 500.0
  - 2.0034
- Round up the following upto three significant figures:
  - 34.216
  - 10.4107
  - 0.04597
  - 2808
- Which one of the following will have the largest number of atoms?
  - 1 g Au (s)
  - 1 g Na (s)
  - 1 g Li (s)
  - 1 g of  $\text{Cl}_2(\text{g})$
- How are 0.50 mol  $\text{Na}_2\text{CO}_3$  and 0.50 M  $\text{Na}_2\text{CO}_3$  different?
- Calculate the molarity of a solution of ethanol in water, in which the mole fraction of ethanol is 0.040 (assume the density of water to be one).

## 3. Revise the classwork done so far and practice the questions given in the Question Bank link in the activity sheets (A-4, Ruled)

 CLASS - XI\_PRACTICE QUESTIONS

### MATHS

- Make the presentation of the chapter sets.
- Make the general studies project on the topic, "Nation buliding"
  - \* Meaning and importance of National Internation.
  - \*Historical context of Nation Building.
  - \*The role of education and media in Nation Building
  - \*Challenges and Limitations of Nation Building.

## **COMPUTER SCIENCE [All HHW to be submitted on 1st July]**

- Revise CH 1, 2 and 3.
- Do the following questions from Text Book in Computer Science CW/HW register:
  1. Ch 1: Computer System Overview (Pg 20)  
Q3, Q8, Q11, Q24, Q27
  2. Ch 2: Data Representation (Pg 44)

Q3 part b, Q4 part a, Q5 part a, Q6 part c, Q7 part c, Q8 part a, Q10 part b, Q11 part a, Q14 part b, Q16 part a, Q18 part b

3. Ch 3: Boolean Logic

Pg 71: Q3 (all parts)

Pg 76: Q1, Q2, Q3, Q4, Q5, Q15, Q16, Q17, Q18

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## **BIOLOGY**

**A) Do all the experiments on big sheets as per your file size (green colour) one side plain and other side ruled. For diagrams used plain side only. (Refer Biology Lab Manual)**

**Exp 1: Study and describe locally available common flowering plants, from family Solanaceae (Pg no.24)**

**Exp 2: Preparation and study of T.S. of dicot and monocot roots and stems (primary). (Pg no. 34-38)**

**Exp 3: Study of osmosis by potato osmometer. (Pg no.40)**

**Exp 4: Study of plasmolysis in epidermal peels (e.g. Rhoeo/lily leaves or flashy scale leaves of onion bulb). (Pg no. 42-43)**

**Exp 5: Study of distribution of stomata on the upper and lower surfaces of leaves. (Pg no.45)**

**Exp 6: Comparative study of the rates of transpiration in the upper and lower surfaces of leaves. (Page no.48)**

**Exp 7: Test for the presence of sugar, starch, proteins and fats in suitable plant and animal materials. (Page no. 51-52)**

**Exp 8: Separation of plant pigments through paper chromatography. (Page 55)**

**Exp 9: To test for presence of urea, sugar, albumin, bile salts in urine sample( Page no. 62-66)**

**Exp 10: To study parts of a compound microscope. (Page no. 69)**

**Exp 11: Specimens/slides/models and identification with reasons - Bacteria, Oscillatoria, Spirogyra, Rhizopus, mushroom, yeast, liverwort, moss, fern, pine, one monocotyledonous plant, one dicotyledonous plant and one lichen. (Page no.73-85)**

**Exp 12: To study the various animal specimens/slides/models and identifying features of - Amoeba,**

**Hydra, liver fluke, Ascaris, leech, earthworm, prawn, silkworm, honey bee, snail, starfish, shark, rohu, frog, lizard, pigeon and rabbit. (Page no. 86-100)**

**Exp 13: Mitosis in onion root tip cells and animal's cells (grasshopper) from permanent slides. (Page no. 102-107)**

**B) Make a General Studies Project for the given topic covering the given sub points. The project must include 10-12 pages.**

**\*Promoting Global Understanding\***

**i) Global Conflict analysis and resolution**

**ii) Global Voices**

**iii) Global Environmental Ethics**

iv) Global Understanding through Travel

C) Revise all the topics done in the class till now. ( Ch-1 to 4)

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**PHYSICAL EDUCATION**

File Work

1. Yoga

Write down any 10 Asanas- procedure, benefits and contraindications explain them and paste their picture in front of them.

2. Game

Proficiency in Games and Sports (Skill of any one IOA recognized Sport/Game of your choice. 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

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

- The universal declaration of Human Rights and it's 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 Landscapes with water colours.
2. Make two compositions with three human figures with water colours.

Note: Do your homework in your Sketch Book.

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**WORK EXPERIENCE**

Prepare a Project on

Visit an Old Age Home and organise the activities for the aged people.

Title of Project file: Visit to an Old Age Home.