

# Guru Amar Dass Public School, Goindwal Road, Kapurthala



## Grade: XI Science Summer Holidays' Homework Session 2025-26



### Important Instructions

- Neatness and presentation are common parameters for most of the activities assigned. Please maintain the quality of work done.
- Holiday's homework will be assessed on certain parameters and marks/grade will be awarded accordingly.
- To score well in your upcoming exams strike a balance between your leisure time and studies.
- Marks of Holidays Homework will be added in your Mid-Term Examination.

### BE A WONDERFUL HUMAN BEING: KEEP IN MIND TO

- Do the homework independently, only ask for assistance from your parents or guardians
- Remember to have a wide mouth container filled with water outside your house for the birds to get respite from the scorching heat.
- Pray to almighty daily and thank for the blissful life that you enjoy.
- Be a helping hand to your parents and learn the skill of shared responsibility.
- Do the work by following the guidelines given with each work or activity
- Spend time with your parents and grandparents, their rich experience will help you overcome challenges with ease.

### HEALTHY LIFESTYLE BE YOUR PRIORITY

- Give prime importance to your health. Eat lots of fruits, do exercise and get into yoga
- Pledge for "Eat Right -Less Sugar, Less Oil and Less Salt"
- Wash hands frequently, especially before and after meal.
- Avoid sharing of towel, handkerchief, brush with others.
- Drink plenty of water.

### REQUEST TO PARENTS

- Summer vacation time is an opportunity to spend the quality time with your child and make him/her feel special of his unique identity.

### So just spare sometime and do the following:

- Talk about Omni presence of **God** and humility being developed with regular prayers and doing good deeds as to offer best prayer to the God. Take them some religious places.
- Let them feed the poor and share things with needy people with love, let them enjoy the **Art of Giving**.
- Talk about the importance of parents and elders.

# ENGLISH

## Questionnaire Making

**1 Literature (a).** Prepare 10 multiple choice questions from the each lesson

i) The Birth

ii) The summer of the beautiful white horse.

iii) We're afraid to die.....

iv) A portrait of a lady.

**(b)** Prepare 10 multiple choice questions for the Poem:- A Photograph

## 2. Writing : Notice Writing

Write a notice informing students about a Blood Donation Camp being organized in your school.

By: Riya Sharma, School Head Girl / Amanpreet Singh, School Head Boy

2. Write a notice informing the school about the closure of the library for renovation.

By: Kavita Verma, Library Prefect / Rohit Mehta, Library Prefect

3. Write a notice inviting students to participate in the Annual Sports Day.

By: Simran Kaur, Sports Captain / Arjun Singh, Sports Captain

4. Write a notice informing students about a Workshop on Career Counseling for senior students.

By: Pooja Sharma, Student Council Secretary / Rahul Kumar, Student Council Secretary

5. Write a notice informing students about a school cleanliness drive and requesting volunteers.

By: Neha Singh, Environment Club Secretary / Karan Mehta, Environment Club Secretary

## 3. Letter Writing

1. You are Amit Sharma / Amita Sharma of 123, Model Town, Chandigarh – 160001. Write a letter to the editor of a newspaper about the increasing traffic problems in your city and suggest measures to reduce congestion.

2. You are Raj Singh / Riya Singh of 45, Rose Street, Patna – 800001. Write a letter to the editor complaining about the poor condition of roads in your locality and urging the authorities to repair them.

3. You are Rahul Kumar / Reena Kumar of 78, Gandhi Nagar, Jaipur – 302001. Write a letter to the editor highlighting the issue of rising child labor in your area and suggesting ways to eradicate it.

4. You are Sahil Verma / Pooja Verma of 56, Church Road, Mumbai – 400020. Write a letter to the editor expressing concern over the excessive use of plastic and its harmful effects on the environment.

5. You are Karan Mehta / Simran Mehta of 90, Sector 12, Noida – 201301. Write a letter to the editor about the lack of proper sanitation facilities in your school and requesting immediate action.

## 4. Report Writing

1. You are Amit Sharma / Amita Sharma of 123, Model Town, Chandigarh – 160001. Write a letter to the editor of a newspaper about the increasing traffic problems in your city and suggest measures to reduce congestion.

2. You are Raj Singh / Riya Singh of 45, Rose Street, Patna – 800001. Write a letter to the editor complaining about the poor condition of roads in your locality and urging the authorities to repair them.

3. You are Rahul Kumar / Reena Kumar of 78, Gandhi Nagar, Jaipur – 302001. Write a letter to the editor highlighting the issue of rising child labor in your area and suggesting ways to eradicate it.

4. You are Sahil Verma / Pooja Verma of 56, Church Road, Mumbai – 400020. Write a letter to the editor expressing concern over the excessive use of plastic and its harmful effects on the environment.

5. You are Karan Mehta / Simran Mehta of 90, Sector 12, Noida – 201301. Write a letter to the editor about the lack of proper sanitation facilities in your school and requesting immediate action.

**5. Reading :** Solve 5 descriptive comprehensions (Evergreen Practice Paper).

## CHEMISTRY

- Q1.** A measured temperature on Fahrenheit scale is 200°F. What will this reading be on Celsius scale?
- Q2.** What will be the molarity of a solution, which contains 5.85 g of NaCl(s) per 500 mL?
- Q3.** If 500 mL of a 5 M solution is diluted to 1500 mL, what will be the molarity of the solution obtained?
- Q4.** One mole of any substance contains  $6.022 \times 10^{23}$  atoms/molecules. Number of molecules of H<sub>2</sub>SO<sub>4</sub> present in 100 mL of 0.02 M H<sub>2</sub>SO<sub>4</sub> solution is \_\_\_\_\_
- Q5.** What is the mass per cent of carbon in carbon dioxide?
- Q6.** The empirical formula and molecular mass of a compound are CH<sub>2</sub>O and 180g respectively. What will be the molecular formula of the compound?
- Q7.** One mole of oxygen gas at STP is equal to \_\_\_\_ .
- Q8.** Sulphuric acid reacts with sodium hydroxide as follows:  
$$\text{H}_2\text{SO}_4 + 2\text{NaOH} \rightarrow \text{Na}_2\text{SO}_4 + 2\text{H}_2\text{O}$$
When 1 L of 0.1 M sulphuric acid solution is allowed to react with 1 L of 0.1 M sodium hydroxide solution, the amount of sodium sulphate formed and its molarity in the solution obtained is?
- Q9.** What will be the mass of one atom of C-12 in grams?
- Q10.** How many significant figures should be present in the answer of the following calculations?  
 $2.5 \times 1.25 \times 3.5 / 2$
- Q11.** What is the symbol for SI unit of mole? How is the mole defined.
- Q12.** What is the difference between molality and molarity?
- Q13.** Calculate the mass per cent of calcium, phosphorus and oxygen in calcium phosphate Ca<sub>3</sub>(PO<sub>4</sub>)
- Q14.** 4 L of dinitrogen reacted with 22.7 L of dioxygen and 45.4 L of nitrous oxide was formed. The reaction is given below:  
 $2\text{N}_2(\text{g}) + \text{O}_2(\text{g}) \rightarrow 2\text{N}_2\text{O}(\text{g})$ Which law is being obeyed in this experiment? Write the statement of the law.
- Complete the lab manual of Chemistry.  
Revise PT – I syllabus.

## PHYSICS

1. What is physical quantity?
2. What are the different system of units?
3. What are significant figure?
4. Dimensional formula of various physical quantities?
5. Convert 20J into ergs?
6. Obtain an expression for time period of a simple pendulum using dimensional analysis.
7. Obtain equations of motion for constant acceleration using method of calculus.
8. What is triangle law of vector addition?
9. What is parallelogram law of vector addition?
10. What do you mean by resolution of force?
11. What are dot product and cross product of two vectors?
12. A projectile is fired at angle ' $\theta$ ' with horizontal f. find the expression for
  - (i) maximum height attained
  - (ii) horizontal range
  - (iii) Maximum horizontal range.
13. Complete the lab manual of physics.
14. Revise PT – I syllabus including motion in plane.

**Make a working model on the topic:- Pulley crane project, Arduino based toll tax system.**

## BIOLOGY

1. What is taxonomic hierarchy? Explain
2. Write scientific names of- (a) Mango (b) Wheat (c) Potato (d) Housefly
3. Write 5 benefits and 5 harmful effects of Heterotrophic bacteria?
4. How viruses are different from viroids.
5. Differentiate between-
  - (a) Gymnosperms and angiosperms
  - (b) Bryophytes and Pteridophytes
  - (c) Dicot and monocot root and stem
6. Define: -
  - (a) Conjoint Vascular bundle
  - (b) Heterospores
  - (c) Stele
  - (d) Testa
7. Explain the structure of Monocot and Dicot leaf.
8. Draw labelled diagrams of-
  - (a) Monocot and dicot seeds
  - (b) Viruses
  - (c) Blue-green algae

Complete the lab manual

Revise PT – I syllabus.

## PHYSICAL EDUCATION

Make a practical file (SP Publisher)

- ❖ Make a model on any Game or Athlete event .
- ❖ Physical Fitness Test : SAI Khelo India test.

## ART & CRAFT

- ✓ **Make something creative using waste material.**
- ✓ **Make two paintings on landscape on A2 sheet.**
- ✓ **Make two paintings on still life on A2 sheet.**

## HINDUSTANI MUSIC VOCAL

1. Write the brief study of the following:-
  - a) Alankar
  - b) kan
  - c) Meend
2. Describe the historical development of time theory of raga.
3. Description of prescribed talas along with talas narration-Jhap taal
4. Writing in notation the composition of prescribed ragas :- Bhairav



## CELEBRATIONS

### World Environment Day Activity

Let's nurture the nature so that we can have a better future. Hurray! its time to celebrate the World Environment Day on 5<sup>th</sup> June.. Even a small change can make a huge difference to our world. Are you up for the change challenge? Plant trees on the eve of World Environment Day. Click the photographs and send to your Form Educators



### FATHERS' DAY CELEBRATION

**"A father's love is eternal,  
unconditional, and irreplaceable"**

On the account of Fathers' Day Celebration on 15 June, 2025, Make a favourite dish of your father with the help of your mother and serve it to your father.



### INTERNATIONAL YOGA DAY

Yoga brings the body and mind together and is built on three main elements – movement, breathing and meditation.

We celebrate Yoga Day on 21st June every year, so to keep you and your family members fit it's important to do Yoga Daily

