SANT NISCHAL SINGH PUBLIC SCHOOL, YAMUNA NAGAR



HOLIDAYS ASSIGNMENT

SESSION (2025-26)

CLASS: XII

Dear Students

Holidays are eagerly anticipated as a time to unwind, rejuvenate, and explore new interests. To make your summer vacation both enjoyable and enriching, your mentors have thoughtfully crafted homework aligned with the school's vision of "Fun and Learn."

These art-integrated and activity-based assignments are designed to spark curiosity, nurture creativity, and deepen knowledge. They will inspire a love for learning and help you return as a more confident, capable, and well-rounded individual.

Have a great

VaCation!

RECREATIONAL ACTIVITIES

- * "A healthy mind resides in a healthy body"- pay attention to your health, go for morning and evening walks, avoid consumption of junk food, eat healthy and stay healthy.
- Meditation and Yoga: Meditation and yoga practices can help you relax, reduce stress, and improve mental focus. You can follow guided meditation videos or attend local yoga classes if available.
- Outdoor Recreation: Spend every day some time outdoors by engaging in activities like cycling, hiking, swimming, or simply enjoying picnics in nature. Fresh air and physical activity can promote relaxation and well-being.
- * Open your mind for reading newspapers, novels, blogs and stories that will help you in increasing your vocabulary.
- Indulge yourself into activities like cooking, singing, dancing aerobics, cycling, trekking, swimming, art and craft and gardening.
- * Creative Art: Engage in creative art activities like painting, drawing, or crafting.
- Online Courses: You can enroll in online courses or virtual workshops that align with your academic interests or help you explore new subjects. Platforms like Coursera, Khan Academy, or Udemy offer a wide range of courses across various disciplines.
- Virtual Museum Tours: Many museums offer virtual tours, explore art, history, and science exhibits from the comfort of your homes. You can learn about different cultures, historical events, or scientific discoveries.



GENERAL INSTRUCTIONS THAT ARE TO BE FOLLOWED

- * Revise the syllabus thoroughly covered till May.
- * Use eco friendly material to prepare Models or Projects .
- Make the Project/ Models independently. Ask Parents for guidance and assistance only.
- * Maintain the quality of work done.
- Write about your Project in a Project File(word limit -200 to 300 words)
- * Minimize the use of gadgets.
- Develop a skill or hobby. Click photographs, record videos and note your achievements in your Portfolio File.

ENGLISH

Common for All:

Book Review:

1. To Kill a Mockingbird" by Harper Lee

2."The Alchemist" by Paulo Coelho

(A) After reading the above two books, write a short review describing the main plot, your favorite character, and what you liked or didn't like about the story. Would you recommend it to others? Why or why not?"

(B)"Design a formal invitation card for your school's Investiture Ceremony. Include all essential details such as the name of the event, date, time, venue, chief guest and the name of the inviting authority. Ensure the tone and layout are appropriate for a formal occasion."

Roll no: 1-10

Watch a film "Predestination" (2014), which dives deep into time travel paradoxes and identity. After watching the movie, write a diary entry from the perspective of John or Jane at a key moment in the film. How do they feel about their identity and fate?" Also include following points in your diary.

- 1. Do you think the time travel logic in the movie is consistent? Why or why not?
- 2. How realistic is the film's portrayal of time travel based on what you know from science?

Roll Numbers 11-20 Travel Brochure

Design a travel brochure titled "Explore Antarctica." Include illustrations, tourist attractions, fun facts and precautions for travelers.

Roll No. 21-30

Make an awareness documentary on the topic: "Environmental and Health impacts of rising air pollution levels in Indian cities."

Roll no: 30 onwards

Make PPT on Child labour depicting how it impacts the physical, emotional and educational development of children. What measures can be taken to effectively combat it?

PHYSICS

PREPARE A WORKING MODEL ON THE FOLLOWING TOPIC:

| • To build simple electric motor or electromagnetic crane and understand the working of electromagnetism. | Roll No. 1,11,21 |
|---|---------------------|
| To generate hydro power and understand its working principle | Roll No.2,12,22 |
| To understand working of a rectifier | Roll No.3,13,23,31 |
| To find resistivity of wires in different metals by using OHM'S LAW | Roll No. 4,14,24 |
| • To study parallel and series combination in capacitors | Roll No. 5,15,25 |
| • To study charging and discharging of a capacitor | Roll No. 6,16,26 |
| Optical Fiber | Roll No. 7,17,27 |
| Wireless Power Transmission | Roll No. 8,18,28,32 |
| AC Generator | Roll No. 9,19,29 |
| • Telescopes | Roll No. 10,20,30 |

CHEMISTRY

Roll no 1-12

Project Title: Planet Vs Plastics -Investigating Impact Watch the documentaries on Plastic and explore the multifaceted issue of plastic pollution,

analyzingits impacts on water bodies, human health, and wildlife, while evaluating government policies. DO internet-based research and critically analyze the situation of India, USA, UK & Singapore around the following topics

Assignment Overview

1. Research water body degradation caused by plastic contamination

2. Investigate domestic plastic recycling and disposal methods Each group Shall take up an area and after research, shall present their reflections in form of PowerPointpresentation (PPT)

Documentaries to watch: https://youtu.be/iO3SA4YyEYU?si=Yc-

R3PQ4RvqAURdI https://youtu.be/9GMbRG9CZJw?si=Q2WrHiRUwlDMzzKa

https://youtu.be/IA9O9YUbQew?si=C3Kvwisd4-f8kGHr

Roll no 13 -24

The Story of a Functional Group: Choose a functional group (e.g., aldehydes, carboxylic acids, amines). Research its occurrence in nature, industrial applications, synthesis methods, characteristic reactions, and its impact on society. Present this as a story, a presentation, or an infographic.

Roll no 25-33

Mechanism Mania: Pick a few important organic reactions (e.g., SN1, SN2, addition, elimination). Illustrate their step-by-step mechanisms using hand-drawn diagrams or digital tools. Explain the role of intermediates, transition states, and reaction conditions. You could even create a short animated video.

NANP

Note Project report must include 4- pages.

MATHS

List of Projects/Models for Holidays Homework

✤ Roll No. 1 to 5:- Make a project report/working model on the topic: Relations and Functions.

- Roll No. 6 to 10:- Make a project report/working model on the topic: Trigonometric / Inverse Trigonometric functions.
- ♦ Roll No. 11 to 15:- Make a project report/working model on the topic: Probability.
- Roll No. 16 to 20:- Make a project report/working model on the topic: Three Dimensional Geometry.
- ✤ Roll No. 21 to 25:- Make a project report/working model on the topic: Pascal Triangle.
- ✤ Roll No. 26 to 30:- Make a project report/working model on the topic: Conic sections.
- Roll No. 31 onwards:- Make a project report/working model on the topic: Matrices and Determinants.

APPLIED MATHS

Make a project report/working model by choosing any one of the topics mentioned below:

i) Analysis of career graph of a cricketer (batting average for a batsman and bowling average for a bowler). Conclude the best year of his career. It may be extended for other players also – tennis, badminton, athlete.

ii) Vehicle registration data - correlating with pollution and the number of accidents.

iii) Weather prediction (prediction of monsoon from past data).

iv) Visit Kirana shops near your home and collect the data regarding the sales of certain commodities over a month. Try to figure out the stock of a particular commodity which should be in the store in order to maximize the profit.

v) Stock price movement.

- vi) Risk assessments by insurance firms from data.
- vii) Predicting stock market crash.
- viii) Predicting the outcome of an election exit polls.
- ix) Predicting mortality of infants.
- x) Matrices and Determinants.

BIOLOGY

1. Prepare the project report on the assigned topic.

Topics for Biology project

Roll No 5 and 12. Pollination adaptations

- Roll No 13 and 14. Seed dispersal mechanisms and significance of dispersal
- Roll No 15 and 16 Colourblindness and Haemophilia
- Roll No 17 and 18. Reproductive health/ Sexually Transmitted Diseases
- Roll No 19 and 20. Deviations from Mendelian Genetics
- Roll No 21 and 22. Medicinal drugs that are banned across the world
- Roll No 23 and 24. Drugs and their abuse
- Roll No 25 and 26. Cancer
- Roll No 27 and 28 AIDS
- Roll No 29 Malaria

2. Prepare the working model of biological concept.

Roll No 5 and 12. DNA Replication fork Roll No 13 and 14 .Protein synthesis Roll No 15 and 16 Pollination mechanism Roll No 17 and 18. DNA fingerprinting Roll No 19 and 20.Ribosome Roll No 21 and 22.Menstrual cycle Roll No 23 and 24.DNA Roll No 25 and 26. Human genome project Roll No 27 and 28 Sewage treatment plant Roll No 29 Biogas plant

Model Requirements:

Choose a topic relevant to your curriculum Use creative and innovative materials Ensure the model is working and interactive Write a short description or report about your model

ACCOUNTANCY

Prepare Assignment on the following topics

- 1. Define partnership concept and formats on chart (Roll no 1 to 10)
- 2. Define method of goodwill and factor affecting goodwill formulas in project file (Roll no 11 to 20)
- 3. Prepare chart on format of balance sheet with their components(Roll No 21 onwards)

BUSINESS STUDIES

Roll No. 1–7

Prepare a project report on the applicability of Principles of Management by visiting any Bank or Mall.

Roll No. 8–14

Prepare a project report on the applicability of Scientific Techniques by visiting any Industrial Unit.

Roll No. 15–21

Prepare a project report on the applicability of Scientific Principles by visiting any Industry.

Roll No. 22–28

Prepare a project report on the applicability of Dimensions of Business Environment by visiting any Mall or Industry.

Roll No. 29-36

Prepare a project report on the applicability of Principles of Management by visiting any Bank or Mall.

ECONOMICS

Project Report Assignment

Class- XII C Roll no. (1-20) Topics - Banking only, Foreign Exchange, Rural development, Balance of Payment Roll no. (21-31) Topics - Govt. Budget, Balance of Payment, Human capital, Banking Roll no. (32-44) Topics - Money, Banking, (India-China-Pakistan) Development strategies, Balance of payment

Class – XII D

Roll no. 1 to 10 (Foreign exc., circular flow of Income, Banking, and Rural Development).

Roll no. 11 to 20 (Banking, Money, Govt. Budget, BoP).

Roll no. 21 to 30 (Human capital formation, Govt. Budget, Banking, Circular flow of income).

Roll no. 31 to 36 (Money, Banking, Govt. B., FE, development strategies of India, Pakistan, China).

HINDI

निम्नलिखित विषयों में से किन्ही चार विषयों पर रचनात्मक लेख लिखिए :

- 1. मेरी पहली हवाई यात्रा
- 2. जल रहेगा ;हम रहेंगे
- 3. प्रकृति का वरदान, पेड़ पौधे
- 4. अपने नए घर में प्रवेश
- 5. कोचिंग संस्थानों का बढ़ता जंजाल
- 6. मेरी मां की ममता
- 7. जब भूचाल आया
- 8. परीक्षा भवन का दृश्य
- 9. नदी किनारे बरसात से घिर जाना
- 10. लोकतंत्र में मीडिया की भूमिका
- 11.झरोखे से बाहर
- 12.दिया और तूफान

निम्नलिखित विषय पर 15-20 पृष्ठ की सचित्र प्रोजेक्ट फाइल बनाएं Roll No 1-5

1. महादेवी वर्मा वर्मा जी का जीवन परिचय एवं उनकी रचनाएं Roll No.6-10

2.पहलवान की ढोलक

Roll No.11-15

3.अतीत में दबे पांव(मोहनजोदड़ो और हड़प्पा सभ्यता')

Roll No 16-20

4. ऑपरेशन सिंदूर

कक्षा में करवाए गए पाठ्यक्रम की दोहराई करें।

POL. SCIENCE

Roll no 1 to 7

Prepare a PPT on the role of international organisations in global politics(Eg UN, EU, NATO)

Roll no 8 to 14

Use origami or paper craft to make symbols of National Political Parties and pair each with a small placard showing their ideology, leaders and history

Project File Compulsory for all

Prepare a handwritten Project file on the Topic

Partition of India: Theory behind it and its legacy OR United Nations and it's Agencies

HISTORY

Prepare a handwritten Project File Consisting 15-20 pages on the topic

- 1. "The Indus Valley Civilisation- Archeological Excavation and New Perspectives"
- 2. Prepare a PPT on the topic " Mahatma Gandhi and the Nationalist Movement "

COMPUTER SCIENCE

Creative Research Work

1. Poster Creation (On A4 Sheet or Canva):

Design a colorful poster/chart on "Types of Python Functions" showing: Built-in functions

Functions from modules

User-defined functions

(Use flowcharts, colors, images, or examples)

2. Concept Map:

Create a concept map of Exception Handling in Python with keywords like: try, except, else, finally (Use arrows, boxes, and examples)

Practical Work (Non-Coding Based)

1. File Handling Case Study (in notebook):

Imagine you are designing a student result processing system. Write: Which file types (text, binary, csv) will you use?

What kind of data will be stored in each?

How will functions help in this process?

2. Interview a Python Learner:

Ask any senior or YouTuber (or use ChatGPT) about: Why is file handling important in real-world Python projects? What errors do beginners make while using functions? Write the summary of your interview in 8-10 lines.

WEB APPLICATION

Title: My Future Tech World – A Digital Portfolio

- Create a presentation/website showcasing:
- Introduction to You (HTML page or Slide 1)
- How Emerging Technologies (AI, IoT, Cloud) will shape the future
- A JavaScript-powered interactive feature (like a quiz or calculator)
- Career Plan and Digital Resume
- Submission must include screenshots, code (if applicable), and file printouts.

PSYCHOLOGY

(Compulsory) Exploring Human Behavior Through Case Study Development (Project File)

Objective: To deepen your understanding of psychological principles and the methods used to study human behavior in a real-world context.

Task:During your summer break, you are required to develop a hypothetical case profile based on a psychological area of interest. This project will allow you to apply the research methods we have learned in class.

Steps:

- 1. Choose a Psychological Area of Interest: Select a specific area of psychology that you find intriguing (e.g., adolescent peer influence, the impact of social media, coping mechanisms for stress, personality differences, learning styles).
- 2. Develop a Hypothetical Individual/Scenario: Create a fictional individual or scenario relevant to your chosen area. Give them a name, a brief background (age, general context), and some initial presenting information related to your area of interest. Remember, this is a hypothetical exercise; you are not studying real individuals.
- 3. Outline Potential Methods of Investigation: For your hypothetical case, describe how you would use the following methods to gather information:
- a. Interview: What types of questions would you ask to gain insights into their experiences and perspectives?
- b. Observation: What specific behaviors would you look for and how would you record them?
- c. Psychological Tests: Identify at least one type of psychological test (e.g., personality inventory, aptitude test, attitude scale name a specific example if possible) that could be relevant to your chosen area and briefly explain what information it might provide.

4. Construct a Preliminary Case Profile: Based on your hypothetical individual/scenario and the outlined methods, create a written profile (approximately 800-1200 words) that includes the following sections:

- a. Introduction: Briefly introduce your chosen area of interest and the purpose of your hypothetical case study.
- b. Background Information: Describe your hypothetical individual/scenario.
- c. Potential Methods and Data Collection: Detail the interview questions, observational strategies, and psychological tests you would hypothetically employ and the type of data you anticipate gathering.
- d. Preliminary Analysis (Hypothetical): Based on the information you've presented, offer some initial hypothetical psychological interpretations or potential explanations related to your chosen area.

Conclusion: Summarize your learning from this exercise and any further questions it raises for you.

PHYSICAL EDUCATION

Part A (Compulsory for all)

- 1. Strand of I (Make a project file on your favorite game / sports (5-6 pages))
- 2. Draw a layout of 400 mt track on a drawing sheet (Color A3 (white or any other))
- 3. Draw a layout of Long Jump pit on drawing sheet.
- 4. Write few lines about long jump techniques

B: TEAM GAMES

- 1. Roll no 01 to 10 Draw a Badminton court
- 2. Roll No 11 to 20 Draw cricket ground
- 3. Roll No 21 to 30 Football ground
- 4. Roll No 31 to above Volley ball court

SEWA PROJECT

- 1. Roll no 01 to 15 Dignity of Labor
- 2. Roll No 16to 30 Care for Homeless Children.
- 3. Roll No 31 to above Family Budget.

PAINTING

Prepare the following paintings on A3 paper:

1. Composition with Water Color: Create a composition using watercolors, exploring color harmony, balance, and emotional expression.

2. Still Life with Pencil: Set up a still life composition and draw it using pencils, focusing on proportions, shading, and textures.

3. Landscape with Oil Pastel/Water Color: Create a landscape painting using one of the specified mediums, experimenting with color, composition, and atmosphere.

- Use A3 paper for all assignments.
- Experiment with different techniques and mediums.
- Pay attention to composition, proportions, and details.
- Showcase your creativity and individuality.

MUSIC VOCAL

Prepare Music vocal practical file on the following topics

Definition - Alankar, kan Raag - Raag bhairav (Description, Notation, Alap, Taans) Taal - Rupak taal (Thah, dugun, Tigun, Chaugun) Biography - Ustad faiyaz khan (with headings and picture) Tanpura - Draw a picture of tanpura and give the detailed description of its parts Practice sa swar and aaroh-avaroh of raga bhairav every day for 15 minutes and find atleast 5 songs based on raga bhairav.

Make one composition of raga Bhairav in 8 beats keharwa tala.

MUSIC PERCUSSION

Class XII -A

- 1. Draw a picture of Tabla and gives the details description of its part .
- 2. Give details of Ek taal with notation system.
- 3. Write aad laykari with notation system in any taal
- 4. Write punjab ghrana.

Class XII -B

- 1. Draw a picture of Tabla and gives the details description of its part .
- 2. Give details of chautaal with notation system.
- 3. Write kuaad laykari with notation system in any taal
- 4. Wirte banaras gharana.

Class XII -C

- 1. Draw a picture of Tabla and gives the details description of its part .
- 2. Give details of jhaptaal with notation system.
- 3. Write biaad laykari with notation system in any taal.
- 4. Write banaras gharana.

Class XII - D

- 1. Draw a picture of Tabla and gives the details description of its part .
- 2. Give details of sultaal with notation system.
- 3. Write history of Tabla.
- 4. Write ajrada gharana.

DAYS TO REMEMBER

WORLD ANTI TOBACCO DAY 31 MAY

Make a poster on "Say No to Tobacco"

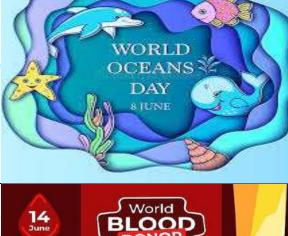




Prepare Vertical Garden using waste plastic bottles.

WORLD OCEAN DAY **8 JUNE**

Write "My Ocean pledge"-one thing you will do to protect ocean.



JUNE 05

Reduce, Reuse, Recycle

ENVIRO

WORLD BLOOD DONATION DAY **14 JUNE**

Write a "Thank you Card" to real life blood donors and send it to a local blood bank. (If Possible)



FATHER'S DAY 15 JUNE

0

Make your father feel special by making any dish for him. Click photographs.





Make Book Mark- Write a quote on "Reading"

INTERNATIONAL YOGA DAY 21 JUNE

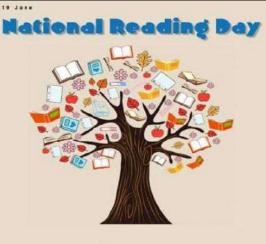
Perform the Asan as of Surya Namaskar, click your photographs

INTERNATIONAL DAY AGAINST DRUG ABUSE 26 JUNE

Take a pledge-against drug abuse "Write this pledge using beautiful calligraphy"

WORLD DOCTOR'S DAY 1 JULY

Write a Thank you note or email to your Doctor for his/her services.







Χ.

INTERNATIONAL PLASTIC BAG FREE DAY 3 JULY

Make a beautiful cloth bag for groccery



NOTE: All photographs & A4 sheets are to be added to portifolio.

HUNA NP