



**HOLIDAY HOMEWORK
CLASS – XI (SCIENCE STREAM)
(2024-25)**

Dear Students,

*In the realm of rest and play,
Learning thrives in its own way.
With each endeavour and every quest,
May growth and discovery be at its best...*

The summer vacation brings with it ample opportunities to engage in various enriching activities. To help you stay organized and focused during this time, we have outlined a few engaging and interesting research based tasks and activities for you.

Explore the suggestions given below to ensure timely completion of the assigned tasks:

Plan Your Schedule: Before you begin your holiday homework, take some time to plan out your schedule. Set aside specific blocks of time for studying, completing assignments, and relaxing.

Prioritize Tasks: Identify the most important tasks that need to be completed and prioritize them accordingly. Focus on completing these tasks first before moving on to the less urgent ones.

Stay Consistent: Try to maintain a consistent study routine throughout the holidays to prevent procrastination and ensure that you stay on track with your goals.

Take Breaks: Remember to take regular breaks while studying to avoid fatigue. Taking short breaks can help you stay refreshed and focused when you return to your work.

Seek Help When Needed: Don't hesitate to reach out to your teachers or classmates if you need assistance with any homework assignments. Collaboration and support from others can make the learning process more enjoyable and effective.

Stay Organized: Keep all your study material, notes, and assignments organized in a designated workspace to minimize distractions and maximize productivity.

The attached Holiday Homework document contains all the relevant details pertaining to the tasks, links of the online resources to be referred to, and the modes of submission. A journey of discovery awaits as you delve into these assignments.

Enjoy your break, and remember to balance your academic pursuits with plenty of rest and relaxation.



HOLIDAY HOMEWORK

General Activities for Holiday Homework

Bonafide Bookworms!

During the Summer Break, select any one non-fiction book from the following four, and prepare a book review on the same.

- 1) Things Fall Apart- Chinua Achebe
- 2) To Kill a Mockingbird- Harper Lee
- 3) Animal Farm- George Orwell
- 4) To Sir With Love- E.R. Braithwaite

Here are some sample questions that can help you think critically about the book:

- 1) Thesis or Argument- What is the central thesis—or the main argument of the book? What has the book accomplished? Is the argument clearly stated and does the research support this?
- 2) Topic - What exactly is the subject or topic of the book? Is it clearly articulated? Does the author cover the subject adequately? Does the author cover all aspects of the subject in a balanced manner? Can you detect any biases?
- 3) Evidence - How does the author support his/her argument? What evidence does the author use to prove his/her point? Is the evidence based on an appropriate application of the method chosen to gather information?
- 4) Structure - How does the author structure his/her argument? Does it follow a logical order of analysis? What are the parts that make up the whole? Does the argument make sense to you? Does it persuade you? Why or why not?
- 5) Take-aways - How has this book helped you to understand the research problem? Would you recommend the book to others? Why or why not?

Chronicle Your Thoughts!

Create a routine of reading newspapers daily. Maintain a newspaper scrapbook by putting together interesting articles, creative advertisements, comic strip series, and standalone photos published in the newspaper. Additionally, you can also pen down your thoughts on any one news item by delving deep into the news.



BAL BHARATI PUBLIC SCHOOL, PITAM PURA, DELHI-110034

HOLIDAY HOMEWORK

RIDS Holiday Homework (Class - XI)

Dear Students

Monuments stand as silent witnesses to the passage of time, reminding us of our past and guiding us towards our future. Every year, International Day for Monuments and Sites is celebrated on 18th April. Let us explore and learn about the monuments of a few countries to get a deeper understanding of their heritage and history.

Research and make a presentation, using any digital tool, on one monument each of the two countries allotted to you as per your roll number. The presentation must focus on the interesting facts about the monuments and their historical importance.

Also write a short paragraph highlighting the similarities and differences between the two monuments chosen by you (material used/ structure/ legend associated with it etc).

Please note the countries allowed roll number wise:

- R. No 1 to 12 - India and UAE
- R. No 13 to 25 - USA and Australia
- R. No 26 to 38 - UAE and USA
- R. No 39 onwards - Australia and India

You will also present your research to your peer group after the Summer Break.



HOLIDAY HOMEWORK

SUBJECT	ENGLISH
ASSESSMENT PARAMETER	Multiple Assessment
TOPIC-PROJECT / ACTIVITY	<p>‘Fast Food Dilemma Poster Challenge’</p> <p>1)Each student will research about fast food, its popularity, types, nutritional value, and its effects on health.</p> <p>2)Write catchy headlines, slogans, and informative text to convey the message effectively. Utilize images, graphics, and illustrations to enhance the visual appeal of the poster.</p> <p>3)Compare the nutritional value of different fast food items and their healthier alternatives and present the findings graphically on the poster.</p> <p>4)Include case studies or real-life examples highlighting the consequences of excessive fast food consumption on individuals' health and well-being.</p> <p>5)Incorporate an interactive element into the poster, such as a QR code linked to additional information or a quiz about fast food facts.</p>
LEARNING OUTCOME/SKILL ENHANCED	<p>The students will be able to -</p> <ul style="list-style-type: none">● effectively communicate information through visual mediums by selecting appropriate images, text, and layout for their posters.● develop critical thinking skills by conducting research on their chosen topic and selecting relevant information .● express their creativity through the design and composition, incorporating original ideas and artistic elements.. <p>Skill enhanced:</p> <p>Critical Thinking Creativity</p>
RESOURCES	<p>https://www.successcds.net/learn-english/writing-skills/poster-making-format-tips-tricks.html</p> <p>https://unacademy.com/content/cbse-class-11/study-material/english/posters/</p>
MODE OF SUBMISSION	Online Presentation - To be uploaded on the Google Classroom
RUBRICS	<p>Layout/Format-1 mark Content-2 marks Coherence of Ideas-1 mark Expression-1 mark</p>



HOLIDAY HOMEWORK

SUBJECT	PHYSICS
ASSESSMENT PARAMETER	MULTIPLE ASSESSMENT
TOPIC-PROJECT / ACTIVITY	<p>Conduct action research on the following with reference to the Food Delivery Apps</p> <ol style="list-style-type: none">1. How do food delivery apps utilize insulation material to maintain food temperature during transit?2. What role does thermodynamics play in determining the optimal packaging design for food delivery?3. What are the key heat transfer mechanisms involved in keeping food warm or cold during transportation? <p>Research Methodology You could explore academic journals, research articles, and industry reports on thermodynamics, heat transfer, and food delivery logistics. Analyze case studies of food delivery companies to understand their strategies for optimizing food temperature during transit. Conduct interviews with food delivery drivers and restaurant owner regarding means to maintain food temperature at the time of delivery to consumer. Experiments: Test and investigate heat transfer properties of different packaging material commonly used in food delivery.</p> <p>Present your findings in the form of a wakelet tool containing at least 25 items. You can include pictures of the delivery person you interviewed and packaging material used or any other relevant information.</p>
LEARNING OUTCOME/ SKILL ENHANCED	<p>LEARNING OUTCOMES: Understanding the principles of thermodynamics and heat transfer and their application in food delivery logistics, such as temperature control during transportation.</p> <p>SKILL ENHANCEMENT: 1 Developing language skills through research, writing, and presentation of findings on the topic of 'Food Delivery Apps'. 2 Enhancing critical thinking and argumentation skills through the analysis of articles, essays, and opinion pieces related to food delivery trends. 3 Practising communication skills by conducting interviews with stakeholders in the food delivery industry, such as restaurant owners, delivery drivers, and app developers.</p>
RESOURCES	<p>Refer to this link to know how to use Wakelet https://youtu.be/S-0Njai8gjQ?si=vVzlog1TimJopnHL</p> <p>Refer to the following articles https://www.sciencedirect.com/science/article/abs/pii/S221428941830396X</p>

	https://www.researchgate.net/publication/338763736_Exhaust_Gas_Heat_Utilization_To_Keep_Food_Delivery_Item_Warm		
MODE OF SUBMISSION	Digital - To be uploaded on the Google Classroom		
RUBRICS	PARAMETER	MARKS (5)	
	Clarity of the concept	2	
	Relevance of the content	2	
	Overall effectiveness	1	



HOLIDAY HOMEWORK

SUBJECT	CHEMISTRY
ASSESSMENT PARAMETER	MULTIPLE ASSESSMENT
TOPIC-PROJECT / ACTIVITY	<p>Create an infographic (A-4 size) titled</p> <p>"The Fat Factor: Navigating Saturated and Unsaturated Fats in Food Delivery Delights"</p> <p>The infographic is to be divided into sections highlighting popular food items from food delivery apps, categorizing them based on their fat content.</p> <p>Also provide information on the health implications of saturated and unsaturated fats (with few examples), along with tips for making healthier choices when ordering. Additionally, you could include visually appealing graphics of common food items with labels indicating their fat content.</p>
LEARNING OUTCOME/SKILL ENHANCEMENT	<ol style="list-style-type: none">1. Developing language skills through research, writing, and presentation of findings on the topic of 'Food Delivery Apps'.2. Enhancing critical thinking and argumentation skills through the analysis of articles, essays, and opinion pieces related to food delivery trends.3. Understanding the nutritional value of food items offered by food delivery apps and their impact on human health. <p>SKILL ENHANCEMENT Critical thinking and analytical skills</p>
RESOURCES	<ul style="list-style-type: none">• https://www.hsph.harvard.edu/nutritionsource/what-should-you-eat/fats-and-cholesterol/types-of-fat/• https://myhealthytreat.in/blogs/blog/difference-between-saturated-and-unsaturated-fats• https://www.healthline.com/health/food-nutrition/saturated-and-unsaturated-fat
MODE OF SUBMISSION	ONLINE-INFORMATION GRAPHICS - To be uploaded on the google classroom

RUBRICS	PARAMETER	MARKS(5)
	Design and Aesthetics-layout and organization, use of colours, typography	2
	Clarity and Readability-Visual Representation of data, text and content, Accuracy	2
	Creativity and Engagement-Innovation	1



HOLIDAY HOMEWORK

SUBJECT	BIOLOGY
ASSESSMENT PARAMETER	Multiple Parameters
TOPIC-PROJECT / ACTIVITY	<p>"From Fast Food to Climate Change: Unveiling the Link Between Fast Food Consumption and Global Warming"</p> <p>Digital Storytelling: Create a digital story or multimedia presentations using tools like Adobe Spark. Combine text, images, audio, and video to create immersive narratives that guide viewers through a series of interconnected ideas or events.</p> <p>Focus on how:</p> <ol style="list-style-type: none">1. The food sector is known as a major source of anthropogenic greenhouse gas emissions, contributing about 30% of the total global emissions.2. Global food consumption can add nearly 1 °C to warming by the end of this century, driven by foods that are high sources of methane, such as beef, meat, dairy and rice <p>You can design a survey questionnaire to collect data on fast food consumption habits, preferences, and factors influencing purchase decisions.</p> <p>(Include questions about the frequency of consumption, favourite fast food, reasons for choosing, and awareness of health and environmental impacts)</p>
LEARNING OUTCOME/ SKILL ENHANCED	<ol style="list-style-type: none">1. Students will be able to analyze how fast-food causes cravings and addiction-like behaviors2. Present findings and insights in a clear, concise, and coherent manner and discuss the potential impact of frequent consumption of high-calorie, high-fat, and high-sodium foods on chronic health conditions such as obesity, diabetes, and cardiovascular disease.3. Communicate options available for individuals with special dietary needs or preferences, such as vegetarian, vegan, gluten-free, or allergen-free diets to peers, educators, and community members. <p>SKILL ENHANCEMENT</p> <p>Critical thinking, analytical skills</p>

RESOURCES	<p>BOOKS:</p> <p>Fast Food Nation: ‘The Dark Side of the All-American Meal’ by Eric Schlosser: Investigates the fast food industry’s influence on food production, health, and the environment.</p> <p>OR</p> <p>‘We are the Weather: Saving the Planet begins at Breakfast’ by Jonathan Safran Foer: Discusses the link between food choices, climate change, and the urgency of adopting sustainable diets.</p> <p>Netflix series:</p> <p>"Our Planet": Provides insights into the effects of climate change on ecosystems and biodiversity, including the role of human activities such as fast-food production and deforestation.</p> <p>https://www.theguardian.com/uk/environment - The Guardian's Environment section cover news and analysis on food policy.</p>								
MODE OF SUBMISSION	Digital Storytelling - To be uploaded on the Google Classroom								
RUBRICS	<table border="1"> <thead> <tr> <th data-bbox="450 1249 983 1355">PARAMETER</th> <th data-bbox="983 1249 1513 1355">MARKS(5)</th> </tr> </thead> <tbody> <tr> <td data-bbox="450 1355 983 1460">Clarity of the message</td> <td data-bbox="983 1355 1513 1460">2</td> </tr> <tr> <td data-bbox="450 1460 983 1565">Relevance of the content</td> <td data-bbox="983 1460 1513 1565">2</td> </tr> <tr> <td data-bbox="450 1565 983 1664">Overall effectiveness</td> <td data-bbox="983 1565 1513 1664">1</td> </tr> </tbody> </table>	PARAMETER	MARKS(5)	Clarity of the message	2	Relevance of the content	2	Overall effectiveness	1
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HOLIDAY HOMEWORK

SUBJECT	ECONOMICS
ASSESSMENT PARAMETER	Multiple Assessment
TOPIC-PROJECT / ACTIVITY	<p>How do food delivery apps contribute to local economies?</p> <ul style="list-style-type: none">• Students can use a case study of any food delivery app like Zomato, Swiggy etc.• Statistical facts and tools of presentation of data like bar graphs, pie charts should also be used.• The article can be created on Canva or using any other technological tool. <p>The word limit of the article should range from 300-400 words</p>
LEARNING OUTCOME/ SKILL ENHANCED	<p>Students will be able to :</p> <ul style="list-style-type: none">• understand how food delivery apps influence local economies.• develop case study analysis skills.• enhance their proficiency in digital media and presentation• develop an awareness of ethical considerations and social responsibility in the digital marketplace. <p>Skills Enhancement Analytical Skills Data Interpretation Critical Thinking</p>
RESOURCES	<p>https://www.livemint.com/companies/start-ups/why-delivery-apps-are-bent-upon-innovating-11664726547889.html</p> <p>https://www.livemint.com/companies/start-ups/food-delivery-fight-grips-small-town-india-1562002126818.html</p>
MODE OF SUBMISSION	Online Canva - To be uploaded on the google classroom
RUBRICS	<p>Understanding of the Economic Impact:1 Case Study Analysis:2 Overall Presentation :2</p>



HOLIDAY HOMEWORK

SUBJECT	MATHEMATICS
ASSESSMENT PARAMETER	Multiple Assessment
TOPIC-PROJECT / ACTIVITY	<p>Conduct a survey of 10 families based on their food preferences and preferred food apps like Zomato, Swiggy, Uber Eats etc. Find out the average cost incurred by the families in a month. Represent the data using the CANVA app. Procedure:</p> <ol style="list-style-type: none">1) Collect and compile the data regarding customer preferences of food items and food apps.2) Tally the responses to find out the most preferred food items and food apps.3) Represent the data using the CANVA app. Include the statistical data and the Pictograph. Choose a template that suits your Project, input your data, and customize the design to effectively communicate your findings. Sample Pictograph is given below: (1 image represents 2 families)
LEARNING OUTCOME/SKILL ENHANCED	<p>Students will be able to develop:</p> <ol style="list-style-type: none">1. Data analysis skills2. Critical thinking and Problem solving skills3. Civic engagement and awareness4. Research and Information Literacy <p>SKILLS ENHANCED</p> <ol style="list-style-type: none">1. Analytical skill2. Data Interpretation Skill3. Critical Thinking and Problem - Solving skills
RESOURCES	<p>Refer to https://www.statista.com/statistics/1149293/india-popular-food-delivery-apps/ https://deonde.co/blog/online-food-delivery-apps-in-india/ for the statistical data</p>
MODE OF SUBMISSION	Statistical Data Representation and Graphical Representation using CANVA app - to be uploaded on the Google Classroom
RUBRICS	<p>Presentation: 2 marks Content and Creativity : 2 marks Analysis : 1 mark</p>



HOLIDAY HOMEWORK

SUBJECT	COMPUTER SCIENCE								
ASSESSMENT PARAMETER	Multiple Assessment								
TOPIC-PROJECT / ACTIVITY	<p>Collect day wise data of Food Orders on various online platforms by any of your 10 friends.</p> <p>Now design a Mobile App showing various food options on different days of the week as per the data collected by you. Also display the calorie count of each food item.</p> <p>How can technology and AI help in food choices or preferences?</p> <p>Record your audio to create a 2-minute awareness video discussing the type of food choices we should make while ordering the food online.</p>								
LEARNING OUTCOME/SKILL ENHANCED	<p>The students will be able to -</p> <ul style="list-style-type: none">• develop critical thinking skills by conducting research and selecting relevant information .• problem solving and designing a solution.• express their creativity through the design , colour schemes.• incorporating original ideas and presentation skills.• learn the skill of video editing and compilation. <p>Skill enhanced:</p> <ul style="list-style-type: none">• Critical thinking• Creativity								
RESOURCES	<p>Softwares: - You can use MIT App Inventor, Canva, Filmora, Clipchamp, Movavi or any other similar platform.</p> <p>Youtube Channel :- The Coding Bus</p>								
MODE OF SUBMISSION	Online - Youtube Link of the video								
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HOLIDAY HOMEWORK

SUBJECT	PSYCHOLOGY
ASSESSMENT PARAMETER	MULTIPLE ASSESSMENT
TOPIC-PROJECT ACTIVITY /	<p>The rise of food delivery apps has transformed the way people dine, offering convenience and variety at the tap of a screen. Tech companies providing platforms for ordering and delivering food, rely heavily on a network of delivery partners. However, behind the scenes, delivery persons navigate a myriad of challenges as they hustle through the city streets to deliver orders.</p> <ul style="list-style-type: none">• Design and conduct a survey research (questionnaire or interview) among delivery people working for food delivery apps to gather insights into their psychological experiences. Analyze the survey data to identify various challenges faced by Delivery Staff. Explore factors such as job satisfaction, stress levels, feelings of job insecurity, and overall mental well-being. <p><u>OR</u></p> <ul style="list-style-type: none">• Imagine yourself to be the HR manager of a company working as delivery partners for food delivery apps. Design a training program to equip your delivery staff with the necessary skills, knowledge, and support to enhance their psychological well-being, job satisfaction, and performance while navigating the challenges of their job. Enlist various topics or areas of focus you will cover in the training program giving a brief detail of its content and objective. (Eg. labor policies and regulations related to workers in the food delivery industry, road safety etc.) <p>Present your findings in the form of interactive infographics (8-10 slides) using tools like Canva, Piktochart, or Adobe Illustrator. Use images, graphs etc., to illustrate key points, provide evidence (newspaper articles, interview schedule/questionnaire etc.). Give examples to support your analysis and cite your sources properly. Include clickable elements or animations to engage viewers and provide additional information when necessary.</p>
LEARNING OUTCOME/SKILL ENHANCED	<p>LEARNING OUTCOME</p> <p>Each student will be able to:</p> <ul style="list-style-type: none">• demonstrate proficiency in designing survey instruments (questionnaires or interview schedules)• utilize appropriate data analysis techniques to identify and interpret patterns, trends, and insights from the survey data.• assess the unique challenges and stressors faced by delivery personnel in the food delivery industry.• explore strategies for managing stress and maintaining mental well-being in a high-pressure work environment, including mindfulness techniques, stress management exercises, and seeking social support.

	<ul style="list-style-type: none"> • design a training program through feedback mechanisms and performance metrics, adjusting content and delivery methods as needed to optimize outcomes for delivery staff. • gain proficiency in using Digital Design and Presentation Skills to convey complex information effectively. <p>SKILL ENHANCED</p> <ul style="list-style-type: none"> • Critical Thinking • Problem Solving • Creativity • Empathy • Technical Skills
RESOURCES	<ul style="list-style-type: none"> • https://www.theworkersrights.com/the-7-major-challenges-faced-by-delivery-boys-girls-everyday/ • https://www.iitmnoida.ac.in/training-delivery-boys-for-fast-food-chains/ • https://www.informat.org/researchmethods/researchmethods-2-03.html • https://d1pbny5bq445o3.cloudfront.net/get/wp-content/uploads/2019/09/17075539/GH_Food-delivery-training-101_2019_Final-1.pdf • https://www.enago.com/academy/research-questionnaires/ • Piktochart Tutorial: A Simple Guide to Piktochart for Beginners • How To Make Infographic In Canva 2024 (Step-by-Step)
MODE OF SUBMISSION	Digital submission on the Google classroom
RUBRICS	<p>Total : 5 Marks</p> <p>Content - (2 marks)</p> <p>Integration of Evidence and Examples - (2 marks)</p> <p>Design and Creativity (including Interactivity and Engagement) - (1 mark)</p>



HOLIDAY HOMEWORK

SUBJECT	PHYSICAL EDUCATION
ASSESSMENT PARAMETER	Multiple Assessment
TOPIC-PROJECT / ACTIVITY	Calculate the BMI of your family members and share a tabular form. Prepare a diet plan for each of them using any diet app.
LEARNING OUTCOME/SKILL ENHANCED	Each Student will be able to: <ol style="list-style-type: none">1. enhance the numerical proficiency and accuracy.2. organize and interpret quantitative information.3. gain awareness of healthy weight ranges and the importance of maintaining a balanced lifestyle.4. Identify potential health risks sensitively and clearly which are crucial for encouraging healthy habits.
RESOURCES	Body Mass Index (BMI) Calculator (gigacalculator.com) The ultimate low-carb diet app Keto Diet App Dash Diet Plan & Food Tracker on the App Store (apple.com)
MODE OF SUBMISSION	Scrap File
RUBRICS	Total - 5 marks Content - (2 marks) Design and Creativity (including Interactivity and Engagement) - (2 marks) Integration of Evidence and Examples - (1 mark)