

GREEN VIEW PUBLIC SCHOOL
HOLIDAYS HOME WORK
SESSION (2025-2026)
CLASS XII

| SUBJECT | HOLIDAY HOMEWORK |
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| ENGLISH | <p>1. Revise the entire syllabus done in class. 2. Prepare your project file on the assigned topic.</p> <p>CONTENT OF THE PROJECT FILE: The project file may include the following:</p> <ul style="list-style-type: none"> • Cover page, with the title of the project, school details and details of the student. • Certificate of Completion under the guidance of the teacher. • Objectives of the topic. • Action Plan for the completion of assigned tasks (steps involved in doing the project). • The 800-1000 words essay/report. • Student reflections (what new learning experience/outcome you have achieved after completing the project) • If possible, photographs that capture positive learning experience of the students (collages/pics from various online sources) • List of Resources/Bibliography (Last page of the project file) |
| BIOLOGY | <p>1) Complete your Biology Investigatory project file under the headings given below and submit it after the summer break.</p> <p>1. Cover page, 2.Index, 3.Introduction of Topic 4. Principle, 5.Theory, 6.Procedure 7. Observation table,8. Result, Conclusion &9.Bibliography.</p> <p>Investigatory project report should be on any topic from the given list which is relevant with biology curriculum. I am sharing few topics with you.....</p> <p>A) Isolation of lactose and casein from different types of milk. B) Quantitative analysis of iron, spinach and apple. C) Analysis of vegetable juice ex: coconut, cucumber and tomato. D) Bio diesel from chicken feather. E) How to cure cancer from home remedy, F) To study the action of various antiseptic soaps on growth of bacteria. G) To test the pregnancy by chromatographic immune assay method. H) Formation of paper by bagasse fibre. I) Presence of plastic in milk. J) To show the presence of caffeine in different tea samples for ex : Tata tea , Lipton tea , Green tea etc.</p> <p>2) Complete your Experiment file (provided by school) from the PDF that will be shared in your class Whatsapp group and submit the same after the break.</p> <p>3) Complete the given assignments of chapter : 6 & 7 in your assignment register.</p> <p>Do complete assignments of unit-1</p> |

PHYSICS

1. What is the angle between the direction of the electric field at any axial point and equatorial point due to an electric dipole?
2. What is the effect of introducing a dielectric slab between the plates of a parallel plate capacitor?
3. How the electric field inside a dielectric does decreases when it is placed in an external electric field?
4. An electric of dipole moment $20 \times 10^{-6} \text{C}$ is enclosed by a closed surface. What is the net electric flux coming out of this surface?
5. What does $q_1 + q_2 = 0$ signify in electrostatics?
6. Two point charges of unknown magnitude and sign are placed at a distance d apart. The electric intensity is zero at a point, not between the charges but on line joining them. Write the essential conditions for this to happen.
7. The work done in moving a charge 2C between two points is 100 J . What is the potential between the points?
8. A certain region has cylindrical symmetry of electric field. Name the charge distribution producing such a field.
9. Represent graphically the variation of electric field with distance, for a uniformly charged plane sheet.
10. Two conducting spheres of radii r_1 & r_2 are at the same potential. What is the ratio of charges on the spheres?
11. Why do we use nitrogen and methane gas in Van-de-Graaff generator?
12. An electric charge q is placed at one of the corner of a cube of side a . What will be the electric flux through its one end of the face?
13. The distance of the field point on the equatorial plane of a small electric dipole is halved. What factor will the electric field change for the dipole?
14. A copper wire of resistivity ρ is stretched to reduce its diameter to half its original value. What will be the new resistivity?
15. If the potential difference applied across a conductor is increased from V to $2V$, How would the drift velocity of the electrons change?
16. When the wheatstone bridge most sensitive?
17. Two wires one of maganin and the other of copper have equal length and equal resistance. Which one of these wire is thicker?
18. A carbon resistor is marked in colour bands of red, orange and silver. What is the resistance and tolerance value of the resistor?
19. Two wires X and Y have the same resistivity but their cross sectional areas are in the ratio $2:3$ and lengths in the ratio $1:2$. They are first connected in series and then in parallel to a D.C. source. Find out the ratio of drift speed of the electrons in the two wires of the two cases.
20. You are given n resistors each of radius r . They are first connected to get the minimum possible resistance. In the second case, these are again connected differently to get the maximum possible resistance. Calculate the ratio between minimum and maximum values of resistance so obtained.
21. A cylindrical metallic wire is stretched to increase its length by 10% . Calculate the % increase in its resistance.
22. Draw graphs showing the variation of resistivity with temp. for (i) nichrome (ii) silicon (iii) copper (iv) carbon
23. The P.D. V is applied across the ends of the copper wire of length L and diameter D . What is the effect on drift velocity of electrons if (i) L is doubled (ii) D is doubled.
24. Why very small resistance can't be measured accurately using meter bridge?

Short Answer Questions (2 or 3 marks)

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| | <p>25. The distance between the plates of a parallel plate capacitor is d. A metal plate of thickness $d/2$ is placed between the plates; what will be the effect on the capacitance?</p> <p>26. A parallel plate capacitor is charged by a battery, which is then disconnected. A dielectric slab is inserted in the space between the plates. Explain what changes, if any will occur in the value of (i) charges on the plates (ii) capacitance (iii) potential difference between the plates (iv) electric field between the plates.</p> <p>27. Two small bobs with equal positive charges q coulombs are suspended by two insulating strings of equal length of 1 metre from a hook to a stand. The whole setup is taken in a satellite into space where there is no gravity. Find the angle between two strings and tension in each string.</p> <p>28. The bob of simple pendulum is a small metal ball of mass m when it oscillates between two uncharged plates of a capacitor. Its time period is T, what would be the effect on the time period if the ball is given opposite charged.</p> <p>Two similarly and equally charged identical metal sphere A and B repel each another with A then placed at the midpoints between A and B. Calculate the net force on C.</p> <p>Prepare a working model (as per the syllabus)</p> |
| CHEMISTRY | <ol style="list-style-type: none"> 1) Do all NCERT exercise, in text and solved problems of chapter no.6,7,8 in subject notebook. 2) Do given assignments of chapter no.6,7,8. 3) Learn complete chapter no.6,7,8. 4) Make a project assigned to you according to your roll no. 5) Complete Practical File. |
| INFORMATICS PRACTICES | <ul style="list-style-type: none"> ● Practice all the MYSQL commands and functions from the Previous year marking scheme and papers. ● Learn and make the notes in your notebook of Networking and Societal Impacts from the Previous year marking scheme and papers. ● Do all the MYSQL commands in your computer and take the printout to make the practical file. |
| HOMESC. | <p>LEARNING WORK</p> <ol style="list-style-type: none"> 1) Learn chapter-1(work,livelihood and career) 2) Learn chapter-2(Clinical nutrition and Dietetics) 3) Read chapter -3(Public Nutrition and Health) <p>PROJECT WORK</p> <ol style="list-style-type: none"> 1) Prepare one short video of 3-4 minutes from the following 3 topics and send it on my mailmaliksuman35 @gmail.com or on my personal no. 9818136891. a) Prepare a recipe that will be good source of energy and protein(vegetable pulao/poha/kheer) b) Prepare any one toy/game for children(3to6 years)using locally available and indigenoumaterial. c) Prepare a video of table manners and laying a dining table. |

Comprehensive Test Series-01

CHAPTER-2(Inverse – Trigonometric Functions)

TIME: 1hr

MM:

General Instructions:

- All Questions are compulsory.
- Marks are given along with the questions individually.
- Use of calculator is not permitted.

Q.1 Find the principal value of following:

(i) $\operatorname{cosec}^{-1}(-\sqrt{2})$

Q.2 Find the value of following

(i) $\tan^{-1}(1) + \cos^{-1}\left(\frac{-1}{2}\right) + \sin^{-1}\left(\frac{-1}{2}\right)$

Q.3 Express $\tan^{-1}\left(\frac{\cos x}{1-\sin x}\right)$, $-\frac{\pi}{2} < x < \frac{\pi}{2}$ in the simplest form.

Q.4 Prove that $\tan^{-1} x + \tan^{-1} \frac{2x}{1-x^2} = \tan^{-1}\left(\frac{3x-x^3}{1-3x^2}\right)$, $|x| < \frac{1}{\sqrt{3}}$

Q.5 $\tan^{-1}\left(\frac{3a^2x-x^3}{a^3-3ax^2}\right)$, $a > 0$; $\frac{-a}{\sqrt{3}} \leq x \leq \frac{a}{\sqrt{3}}$

Q.6 $\tan \frac{1}{2} \left[\sin^{-1} \frac{2x}{1+x^2} + \cos^{-1} \frac{1-y^2}{1+y^2} \right]$, $|x| < 1$, $y > 0$ and $xy < 1$

Q.7 If $\sin\left(\sin^{-1} \frac{1}{5} + \cos^{-1} x\right) = 1$, then find the value of x.

Q.8 If $\tan^{-1} \frac{x-1}{x-2} + \tan^{-1} \frac{x+1}{x+2} = \frac{\pi}{4}$, then find the value of x.

Q.9 Find the value $\tan^{-1}\left(\tan \frac{3\pi}{4}\right)$.

Q.10 Show that $\sin^{-1} \frac{12}{13} + \cos^{-1} \frac{4}{5} + \tan^{-1} \frac{63}{16} = \pi$

Q.11 Find the value $\cos^{-1} \frac{4}{5} + \cos^{-1} \frac{12}{13} = \cos^{-1} \frac{33}{65}$.

Q.12 Prove that

(i) $\cot^{-1} \left[\frac{\sqrt{1+\sin x} + \sqrt{1-\sin x}}{\sqrt{1+\sin x} - \sqrt{1-\sin x}} \right] = \frac{x}{2}$, $x \in \left(0, \frac{\pi}{4}\right)$

(ii) $\tan^{-1} \left(\frac{\sqrt{1+x} - \sqrt{1-x}}{\sqrt{1+x} + \sqrt{1-x}} \right) = \frac{\pi}{4} - \frac{1}{2} \cos^{-1} x$, $-\frac{1}{\sqrt{2}} \leq x \leq 1$

(iii) $\frac{9\pi}{8} - \frac{9}{4} \sin^{-1} \frac{1}{3} = \frac{9}{4} \sin^{-1} \frac{2\sqrt{2}}{3}$

Q.13 solving the following equation:

$$2 \tan^{-1}(\cos x) = \tan^{-1}(2 \operatorname{cosec} x)$$

MATHS

Solve the practice problems given below:

1. Using the properties of determinants, prove that:

$$\begin{vmatrix} 1 & x & x^2 \\ x^2 & 1 & x \\ x & x^2 & 1 \end{vmatrix} = (1 - x^3)^2$$

2. Find the inverse of each of the matrices if it exists.

$$\begin{bmatrix} 1 & -1 & 2 \\ 0 & 2 & -3 \\ 3 & -2 & 4 \end{bmatrix}$$

3. Show that the points A(a, b+c), B(b,c+a), C (c, a+b) are collinear.

4. The cost of 4 kg onion, 3 kg wheat and 2 kg rice is Rs 60. The cost of 2 kg onion, 4 kg wheat and 6 kg rice is Rs 90. The cost of 6 kg onion 2 kg wheat and 3 kg rice is Rs 70. Find the cost of each item per kg by matrix method.

5. Find the equation of the line joining A(1, 3) and B(0, 0) using determinants and find k if D(k, 0) is a point such that area of triangle ABD is 3 sq units.

1. If $\begin{bmatrix} x+3 & 4 \\ y-4 & x+y \end{bmatrix} = \begin{bmatrix} 5 & 4 \\ 3 & 9 \end{bmatrix}$, find x and y.

2. If $A = \begin{bmatrix} i & 0 \\ 0 & -i \end{bmatrix}$ and $B = \begin{bmatrix} 0 & i \\ i & 0 \end{bmatrix}$, find AB.

3. Find the value of $a_{23} + a_{32}$ in the matrix $A = [a_{ij}]_{3 \times 3}$

$$\text{where } a_{ij} = \begin{cases} |2i - j| & \text{if } i > j \\ -i + 2j + 3 & \text{if } i \leq j \end{cases}$$

4. If B be a 4×5 type matrix, then what is the number of elements in the third column.

5. If $A = \begin{bmatrix} 5 & 2 \\ 0 & 9 \end{bmatrix}$ and $B = \begin{bmatrix} 3 & 6 \\ 0 & -1 \end{bmatrix}$ find $3A - 2B$.

6. If $A = \begin{bmatrix} 2 & -3 \\ -7 & 5 \end{bmatrix}$ and $B = \begin{bmatrix} 1 & 0 \\ 2 & -6 \end{bmatrix}$ find $(A+B)'$.

7. If $A = [1 \ 0 \ 4]$ and $B = \begin{bmatrix} 2 \\ 5 \\ 6 \end{bmatrix}$ find AB.

8. If $A = \begin{bmatrix} 4 & x+2 \\ 2x-3 & x+1 \end{bmatrix}$ is symmetric matrix, then find x.

9. For what value of x the matrix $\begin{bmatrix} 0 & 2 & -3 \\ -2 & 0 & -4 \\ 3 & 4 & x+5 \end{bmatrix}$ is skew symmetric matrix.

10. If $A = \begin{bmatrix} 2 & 3 \\ 1 & 0 \end{bmatrix} = P + Q$ where P is symmetric and Q is skew-symmetric matrix, then find the matrix Q.

PHYSICAL ED.

COMPLETE YOUR PRACTICAL FILE.

ACCOUNTS

Complete project work of accountancy (hand made file) comprehensive project1:

1. Use financial statements live data or 2022-2023 data of any company and

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| | <p>prepare journal, ledger, trial balance and balance sheet</p> <p>Also write down detailed conclusion on behalf of company's performance and non performance and suggest ways to improve financial health of a company.</p> <p>Students should write this project at least in 12 to 15 pages (a4 colour or a4 plain paper).</p> |
| BST | <p>Projectwork:</p> <p>Prepare project on henry fayol's 14 principles of management also do field visit to any commercial brand(any) and observe the fayol's principles are being followed Or not and write down your observation in your file in context of fayols management principles.</p> <p style="text-align: center;">Or</p> <p>Prepare project on marketing management, choose your own brand and do promotion, price, place, product etc.</p> <p>Note: student's need to write this project in a4 colour sheet and limit of pages not less than 15 pages.</p> |
| ECONOMICS | <p>COMPLETE PROJECT WORK OF ECONOMICS (HAND MADE FILE)</p> <p>FOLLOWING POINTS FOR PROJECT RELATED</p> <ol style="list-style-type: none"> 1) Minimum 40 pages Maximum 50 pages (Excluding certificate acknowledgement, conclusion, bibliography and index. 2) Use white A-4 sheets don't use colour sheets 3) File must be decorative use colour full papers use art and craft for file decoration 4) Diagram, and schedule should draw by colour pencils 5) Covid impact is mandatory 6) Case studies as per discussion in class 7) No any overwriting is allowed 8) Use colour full pen and sparkle pen for writing the content. |
| HISTORY | <p><u>General Instructions:-</u></p> <p>Students should prepare individual dummy projects of about 50 pages for CBSE assessment. The project should be prepared according to the guidelines already issued in class. Present the following in your project report:</p> <ul style="list-style-type: none"> • Data/Statistical Analysis/ Map work. • Analysis/Explanation and interpretation. • Bibliography <p>Students can use primary sources as well as secondary sources. Choose any one of the following topics:</p> <ul style="list-style-type: none"> ❖ Town planning and artefacts of the Harappan Civilization. ❖ Mahabharata through a reader's eye. ❖ India - through the travellers' eyes. ❖ Understanding the Bhakti-Sufi Movement in India. ❖ Depiction of life during Mughal period through paintings. ❖ The Partition in 1947 – not just a division of territory but also of hearts. |

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| GEOGRAPHY | <p>1. On the outline map of world mark the following:-</p> <ol style="list-style-type: none"> All airports Major sea ports Highest HDI in each continent Most populated countries & least countries in different continents Suez canal, Panama Canal, Shine river, port colon, Port colon Port panama, Port Suez, Port said (Page No. 74,75 & 76) Major trans – continental railway,Trains-siberian railway, Trains Canadian railway(Page no. 70,71 & 72) <p>2 Do three chapters in practical notebook from practical Book.</p> |
| POL. SC. | <p>XII – D</p> <p>Prepare a project according to CBSE guidelines.</p> <p>Some suggested topics are: Partition- Theory behind it and its legacy Evolution of State boundaries after 1956 China or India – The next Super Power India’s relation with its Neighbours (specially focus on SAARC) Emergency- Reasons and Consequences NITI AYOOG v/s Planning Commission: Role in India’s development</p> <p>XII – C</p> <p>Prepare a project according to CBSE guidelines.</p> <p>Some suggested topics are:</p> <ol style="list-style-type: none"> European Union and Brexit UN and its agencies North East: India’s Untapped Frontier One Party Dominance Then and Now India’s Foreign Policy India’s relation with its Neighbours (specially focus on China and Pakistan) <p>India in 1975, chronological political events Operation Blue Star Globalisationand its impact Jammu and Kashmir With or Without Article 370 Politics of Reservation in India Security in the Contemporary World (Specially focus on Terrorism and Migration)</p> <ol style="list-style-type: none"> Election Commission- its changing role and importance Regional Aspiration – Separatist Movement- Punjab Do opposition parties still exist in Indian politics? National integration and party politics Election 2014, 2019 and 2024, BJP V/s Congress Indias relation with its Neighbours (specially focus on Nepal and Bangladesh) <p>FINAL PRESENTATION/LAYOUT OF THE PROJECT</p> <p>Section 1: Political Science Project (Title of the Project) Name: School: Year: Roll no.: Section 2: Certificate of authenticity (To be pasted) Teacher’s Signature</p> |

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| | <p>Section 3: Index</p> <p>Section 4: Acknowledgement (Acknowledging the institution, the place visited and the person who has helped.)</p> <p>Section 5: Preface: Problem Statement/Objective of the project</p> <p>Section 6: Introduction: (Objective/learning outcomes of the project. Introduce the selected topic by giving some historical background)</p> <p>Section 7: Summary of the topic Activities done during the project</p> <p>Section 8: Observations and Analysis</p> <p>Section 9: Conclusion Summarized suggestions of findings/Future scope of study</p> <p>Section 10: Appendix Person consulted, Bibliography, Books, Websites, Films/ Television referred.</p> <p>Section 11: Values and Life skills learned through the project</p> <p>Section 12: Draft Thank you.</p> <p>General Instructions:</p> <p>Project should be individual only</p> <p>It should be a handwritten project on a A4 size sheet.</p> <p>Project should be summed up in 40 – 45 pages.</p> <p>It should be well researched based on facts and figures and pictorial.</p> <p>The project must have a Table of contents, Title/ Cover page, Acknowledgement, Bibliography, Analysis with headings and sub-headings.</p> <p>It must include relevant news clippings, facts and figures, pictures.</p> <p>You can plan a survey or an interview to supported your research.</p> <p>2. Make a question bank which is based on chapters we have already completed in the class. 20 questions from each chapter. Questions will include 1, 2, 4 and marker questions.</p> <p>3. Read the Newspaper daily and prepare a collage on the highlighted issues in Indian polity.</p> <p>3. Take Political maps and locate the following:</p> <ol style="list-style-type: none"> Axis Powers and Allied Powers NATO countries Warsaw countries (Any Five) Countries which were affected after disintegration of USSR. State formation after independence along with the year |
| PAINTING | Complete 40 Painting sheets for your portfolio. |
| HINDI | <p>1. समसामयिक परीक्षा- । पाठ्यक्रम याद कीजिए ।</p> <p>2. कवि जयशंकर प्रसाद रघुवीर सहाय और प्रेमघन का जीवन परिचय याद कीजिए ।</p> <p>3. भारत जैसे विशाल गणतंत्र देश में हो रहे चुनाव में होने वाली खामियों और विशेषताओं का वर्णन लगभग 150 शब्दों में कीजिए ।</p> <p>4. कविता देवसेना के गीत , कविता कारनेलिया का गीत , प्रेम धन की छाया स्मृति , सुमिरिणी के मनके , पाठ संवादिया इन पाठों के करवाए गए सभी प्रश्न उत्तर याद कीजिए ।</p> <p>5. पुस्तक अंतराल -सूरदास की झोपड़ी. इस पाठ का सारांश तथा करवाए गए सभी प्रश्न उत्तर याद कीजिए ।</p> <p>6. सब कुछ खो देने के बाद भी सूरदास ने ऐसा क्यों कहा कि चुराए गए रुपए मेरे नहीं थे ? ऐसा कहकर वह जनता में क्या संदेश देना चाहता था ? लगभग 100 शब्दों में अपने विचार प्रकट कीजिए ।</p> |

7 अभिव्यक्ति का माध्यम:-

कैसे बनती है कविता

इसे विस्तार से लिखिए तथा याद कीजिए।

8 बच्चों में बढ़ता खेल के प्रति रुझान, विषय पर लगभग 150 शब्दों में अपने विचार प्रकट कीजिए और बताइए कि क्या सरकार की भी इसमें कुछ सहभागिता है ? प्रोत्साहन मिलता है या खेलने का माहौल दिया जाता है ?

9 प्रतिदिन के मुख्य सकारात्मक समाचारों से हाथ से लिखकर तथा फोटो चिपका कर एक समाचार पत्र बनाए जिसमें कम से कम चार पेज हो । पूरे चार्ट साइज में । उसका नाम दीजिए "विकसित भारत".