



Rukmani Birla Modern High School

Session 2025-26

SUMMER ASSIGNMENT

*Summer days, so warm and bright,
Filled with laughter, pure delight.
Every day a chance to see,
The world in all its mystery.*

*Explore the world, both near and far,
Find out just how brave you are.
Let curiosity be your guide,
In every step, take pride.*

*When you return to books and class,
You'll be refreshed and strong at last.
For summer's magic, soft and slow,
Is the seed where knowledge grows.*

*Balance work with time for play,
Enjoy the sunshine every day.
Rest and dream, let your mind soar,
Summer's gifts hold so much more.*



HOLIDAYS... FUN TIME ...

Summer holidays are around the corner. Despite the hot sun, we can still have a lot of fun, so vacation is here for a sweet treat. To enhance the child's creativity and innovation for the progressive learning, we have designed a few engaging activities and holiday homework. Kindly encourage your ward to do the following activities to enhance their skills and make learning a joyful experience.

Morning Blessings- Parents can help children to inculcate good habits by doing, Surya Namaskar and encouraging them to greet all elders in the morning.

Being responsible- Spend a week with your elders. Observe their routine. Listen to their childhood memories, incidents from the past and watch their old family albums. This will strengthen the bond between you and your elders. Don't forget to capture them in the form of short videos.

Engage in Hobbies - Explore Interests, Spend time on activities you enjoy, such as sports, music or art.

Adopt a Tree - Encourage your child to adopt a tree in the park around you and make sure that you take care of it daily by watering it. Also, click a picture with it and share it with your class teacher.

Stay Active: Engage in regular exercise, whether through sports, walking, cycling, or home workouts.

Outdoor Activities: Spend time outdoors, enjoying nature through hiking, swimming, or camping.

Helping Others: Do a good deed at least once a week, fostering a sense of community.

Travel and Explore: Visit local museums, parks, or historical sites.

Trips: Plan trips, whether it's a family vacation or day trips to nearby attractions.

Stay Safe: Follow health guidelines, stay hydrated.

Parents can help their ward to memorize their home address and contact numbers

IMPORTANT: Please feel free to contact the class teacher regarding any query.



RUKMANI BIRLA MODERN HIGH SCHOOL
Session 2025-26
SUMMER ASSIGNMENT
CLASS XII

Subject	Assignment
English	<p>Investigatory Project: As per CBSE syllabus, the students have to prepare an investigatory project(ALS). The project file should be on any one of the sub-topics given below:</p> <p>Topic- Overcoming Contemporary Issues</p> <p>Project Question:</p> <p>How do the themes of introspection, nature's beauty, and escapism in Pablo Neruda's "Keeping Quiet," John Keats' "A Thing of Beauty," and Jack Finney's "The Third Level" provide insights into addressing contemporary issues such as mental health challenges, environmental concerns, and the quest for meaning in today's fast-paced society?</p> <p>Guidelines for the Research File:</p> <p>1. Cover Page Title: Student Name, Class, Roll Number Session Submitted to Submitted by</p> <p>Page 2-Acknowledgment Page 3-Certificate Page 4-Index Page 5- Project topic Page 6-Objectives of the project</p> <p>PROJECT STRUCTURE</p> <p>1. Introduction Mention the key themes of</p> <ul style="list-style-type: none"> ➤ Introspection in Keeping Quiet ➤ Nature's beauty in A Thing of Beauty ➤ Escapism in The Third Level <p>2.Thematic Analysis (Analytical Section) (Choose any one of the sub-topics)</p> <p>A. Mental Health Challenges- In today's overstimulated world, quietness and mindfulness practices like meditation are essential for mental well-being. Link to modern statistics on stress, anxiety, and the growing popularity of mindfulness apps.</p>

	<p>B. Environmental Concerns and Nature's Beauty: A Thing of Beauty talks about how nature provides constant joy and is a remedy for despair. Contrast this with environmental destruction, pollution, deforestation. Suggest how returning to a nature-centric lifestyle can heal both the planet and the human spirit.</p> <p>C. Escapism and the Search for Meaning: The Third Level portrays escapism as a way to cope with dissatisfaction. Analyze how people today escape through social media, fantasy, travel, or nostalgia. Discuss whether escapism is harmful or a natural response to a high-pressure world. Real-life Connections (Research Component) Interviews/surveys with peers or family members about: * Stress levels * Use of nature walks/meditation •Escapism in movies, books, social media</p> <p>Include statistics or short newspaper clippings or charts on: Suggest real, actionable ways for youth to apply the themes in their own lives. Include pictures, charts, or creative artwork.</p> <p>Reflections -Highlight what you as a student learned personally from these texts.</p> <p>Bibliography Note: Length:12 -15 pages</p>
Physics	<p><u>Investigatory Project :</u> As per CBSE syllabus, the students have to prepare an investigatory project .The project must be based on some concept of physics of standard class XII. The students will have to submit a report on the project comprising scientific investigations involving laboratory testing and collecting information from other sources.</p> <p><u>Guidelines to be followed :</u> (a) The Students will get the topic of investigation from the concerned subject teacher. (b) Brief report (Investigation file) Mention following details:</p> <ul style="list-style-type: none"> • Cover Page • Index • Certificate • Acknowledgement • Content: <ol style="list-style-type: none"> 1. Aim (name of investigatory project) 2. Apparatus and material used 3. Theory (concept, diagram etc.) 4. Procedure 5. Experiments and Observations 6. Result/Conclusion 7. Application of project in daily life 8. Bibliography <p>Few suggested projects:</p>

	<ol style="list-style-type: none"> 1. To study various factors on which the internal resistance of a cell depends. 2. To design an appropriate logic gate combination for a given truth table. 3. To investigate the dependence, of angle of deviation ,on the angle of incidence, using hollow prism filled, one by one ,with different transparent fluids. 4. To find refractive indices of water and oil using a plane mirror strip, a equiconvex lens and an adjustable object needle. 5. To investigate the phenomenon of total internal reflection. 6. To investigate the relation between the ratio of <ol style="list-style-type: none"> (i) output and input voltage (ii) number of turns in secondary coil and primary coil of self designed transformer. 7. To Study the Phenomenon of Diffraction of Light 9. To Study the Law of Polarization of Light 10.To Study the Changing the Speed of Light 11. To Study the Long and Short Wavelength Colours 12. To Study the Single Slit Diffraction and Double Slit Interference . 13. To Measuring the Speed of Light: physics investigatory projects . 14. To Study the Refractive Index Measurement and Its Applications . 15. To Study, the Wavelength Controlled Holographic Polarization . 16. Study of the intensity of light through many polarizers at various angles . 17. Determining the Type of Particle in an Air Sample by Using Laser Light Scattering . 18. By Using Laser Light Scattering Determine the type of Particle in an Air Sample 19. Investigate whether different frequencies of light contain different amounts of energy 20. Finding refractive indices of water and oil using a plane mirror and lens of known indices. 21.To Study the Lenz law of Electromagnetic Induction 22.To study the resonance condition of an LCR Series circuit. 23.To Study the Phenomenon of Electromagnetic Induction 24.To Study the Eddy Current Effect in the Transformers Windings
Chemistry	<p>Investigatory Project- As per C.B.S.E. Guidelines: Scientific investigations involving laboratory testing and collecting information from other sources.</p> <p>Project must cover the following:</p> <ul style="list-style-type: none"> • Cover Page • Index • Certificate • Acknowledgement • Objective of Project • Content • Experiments • Bibliography <p>Some suggestive Investigatory projects</p> <ol style="list-style-type: none"> 1. Sterilization of Water Using Bleaching Powder

	<ol style="list-style-type: none"> 2. Analysis of Fertilizer 3. Presence of Oxalate Ions in Guava Fruit and Different Stages of Ripening 4. Effect of Potassium Bisulphate as a Food Preservative 5. Quantity of Presence of Casein in Different Samples of Milk 6. Extraction of various essential oils present in Ajwain (Carum), Illaichi (Cardamom), and Saunf (Fennel Seeds) 7. Chemistry in black and white photography 8. Effects of Dye on different types of fabric 9. Comparative study of the rate of fermentation in the following substances- potato juice, wheat flour, carrot juice, gram flour, etc. 10. Common food adulterants in fat, butter, oil, turmeric powder, pepper, chilli powder, sugar, etc. 11. Measuring solubility of saturated solutions 12. Measure the amount of acetic acid in vinegar 13. Determination of contents in cold drinks 14. Removal of alcohol from the body through Esterification 15. Study of diffusion of solids in liquids 16. Compare the rate of evaporation of different liquids 17. Check the ions present in a toothpaste 18. Study the effects of metal coupling on the rate of corrosion 19. Determining caffeine in tea samples 20. Presence of pesticides and insecticide in fruits and Vegetables
Mathematics	<p>Do the following Activities in the Mathematics Activity File:</p> <ol style="list-style-type: none"> 1. To verify that the relation R in the Set L of all lines in a plane, defined by $R = \{(l, m) : l \perp m\}$ is symmetric but neither reflexive nor transitive. 2. To draw the graph of $\sin^{-1}x$, using the graph of $\sin x$ and demonstrate the concept of mirror reflection (about the line $y = x$). 3. To sketch the graphs of ax and $\log ax$, $a > 0$, $a \neq 1$ and to examine that they are mirror images of each other. 4. To establish a relationship between common logarithm (to the base 10) and natural logarithm (to the base e) of the number x. 5. To verify that for a function f to be continuous at given point x_0, $\Delta y = f(x_0 + \Delta x) - f(x_0)$ is arbitrarily small provided, Δx is sufficiently small. 6. To understand the concepts of decreasing and increasing functions. 7. To understand the concepts of local maxima, local minima and point of inflection.
Biology	<p><u>INVESTIGATORY PROJECT</u></p> <ol style="list-style-type: none"> 1. As per CBSE guidelines, the students have to prepare an investigatory project on a topic. They have to submit the project file comprising the scientific investigations done by him/her and the information collected from appropriate sources. The work should be done only on A4 size sheets. 2. Presentation of the project <ul style="list-style-type: none"> • Index • Certificate • Acknowledgement • Objective of Project • Introduction • Content

	<ul style="list-style-type: none"> • Discussion and Conclusion • Bibliography <p>3. Few suggested topics:</p> <ul style="list-style-type: none"> • Biomimicry • Amniocentesis • Diabetes and Exercise • Pedigree- X Linked Traits • Human Embryo Development • Anthropogenic action and environment (evidences from present conditions) • Biopiracy • Pollination • Evolutionary time line • Chromosomal disorder • Sickle cell anaemia • Evolutionary evidences • Population interaction • Conservation strategies for animals in your city • DNA fingerprinting • Harmful effects of mobile radiations • Microbes to control pollution • Biofertilizers • Population explosion and control • Effect of smoking during pregnancy • IVF • Genetic engineering for Indian Farmers • Techniques in biotechnology • Possible effect of maternal behavior on fetal development • Role of recombinant DNA technology in modern medicine • Algal bloom and preventive measures • Twins: monozygotic and dizygotic <p>Erythroblastosis fetalis</p>
Geography	<p>Complete first three chapters in your practical file.</p> <p>Chapter 1- Data- Its source and composition</p> <p>Chapter 2 – Data Processing</p> <p>Chapter 3- Graphical Representation of Data.</p> <p>Make notes of the chapters taught till date.</p> <p>Prepare a folder of Map work as per CBSE syllabus 2025-26.</p>
History	<p>PROJECT WORK</p> <p>Guidelines for History Project Work: 20 Marks</p> <p>One Project to be done throughout the session, as per the existing scheme.</p> <p>1. Steps involved in the conduct of the project:</p> <p>Students may work upon the following lines :</p> <ul style="list-style-type: none"> • Choose a Title/Topic • Need of the Study, Objective of the Study • Hypothesis • Content -Timeline, Maps, Mind maps, Pictures, etc. • (Organization of Material/Data Present Material/Data) • Analysing the Material/Data for Conclusion

	<ul style="list-style-type: none"> • Draw the Relevant Conclusion • Bibliography <p>2. Expected Checklist for the Project Work:</p> <ul style="list-style-type: none"> • Introduction of topic/title • Identifying the causes, events, consequences and/or remedies • Various stakeholders and effect on each of them • Advantages and disadvantages of situations or issues identified • Short-term and long-term implications of strategies suggested during research • Validity, reliability, appropriateness, and relevance of data used for research work and for presentation in the project file • Presentation and writing that is succinct and coherent in project file • Citation of the materials referred to, in the file in footnotes, resources section, bibliography etc. <p>FEW SUGGESTIVE TOPICS FOR PROJECTS - CLASS XII</p> <ol style="list-style-type: none"> 1. The Indus Valley Civilization-Archaeological Excavations and New Perspectives 2. The History and Legacy of Mauryan Empire 3. “Mahabharat”- The Great Epic of India 4. The History and Culture of the Vedic period 5. Buddha Charita 6. A Comprehensive History of Jainism 7. Bhakti Movement- Multiple interpretations and commentaries. 8. “The Mystical Dimensions of Sufism 9. Global legacy of Gandhian ideas 10. The Architectural Culture of the Vijayanagar Empire 11. Life of women in the Mughal rural society 12. Comparative Analysis of the Land Revenue Systems introduced by the Britishers in India 13. The Revolt of 1857- Causes; Planning & Coordination; Leadership, Vision of Unity 14. The Philosophy of Guru Nanak Dev 15. The Vision of Kabir 16. An insight into the Indian Constitution 17. Comparative study of Stupas and Pillar edicts 18. Comparative study of Mughal and Vijayanagar architecture <p>Students to pick any one topic after a thorough discussion with the subject teacher.</p> <p>In the research project, students can go beyond the textbook and explore the world of knowledge. They can conceptualize under the embedded themes. Forms of rubrics are a significant aspect and to be discussed in the classroom itself for clear understanding of concept and for assessment.</p>
Business Studies	<p>Students are supposed to select one unit out of four and are required to make only ONE project from the selected unit.</p> <p>Project One: Elements of Business Environment</p>

1. Changes witnessed over the last few years on mode of packaging and its economic impact.
2. Changing role of the women in the past 25 years relating to joint families, nuclear families, women as a bread earner of the family, changes in the requirement trend of mixers, washing machines, micro wave and standard of living.
3. The changes in the pattern of import and export of different Products.
4. The trend in the changing interest rates and their effect on savings etc.

Project Two: Principles of Management

The students are required to visit any one of the following:

1. A departmental store.
2. An Industrial unit.
3. A fast food outlet.

They are required to observe the application of the general Principles of management advocated by Fayol.

OR

They may enquire into the application of scientific management techniques by F.W.Taylor in the unit visited. The observations could be on the basis of-

- ❖ The different stages of division of work resulting to specialization.
- ❖ Following instructions and accountability of subordinates to higher authorities.
- ❖ Visibility of order and equity in the unit.
- ❖ Communication levels and pattern in the organization.
- ❖ Methods and techniques followed by the organization for unity of direction and Coordination amongst all etc.

Project Three: Stock Exchange

The students are expected to:

- a) Develop a brief report on History of Stock Exchanges in India.
- b) Prepare a list of at least 25 companies listed on a Stock Exchange.
- c) To make an imaginary portfolio totaling a sum of Rs. 50,000 equally in any of the 5 companies of their choice listed above over a period of twenty working days.

The students are required to report the prices of the stocks on daily basis and present it diagrammatically on the graph paper.

Project Four: Marketing

Identify any one product/service which the students may like to manufacture/provide.

The students are required to make a project on the identified product/service keeping in mind why they selected the product, 5 competitive brands, permission and licenses, USP, Logo, Tagline, Pricing of the product/ service, social message, promotion etc.

Presentation and Submission of Project Report

At the end of the stipulated term, each student will prepare and submit his/her project report.

Following essentials are required to be fulfilled for its preparation and submission.

1. The total length of the project will be of 25 to 30 pages.
2. The project should be handwritten.
3. The project should be presented in a neat folder.
4. The project report should be developed in the following sequence-
 - ☐ Cover page should include the title of the Project, student information, school and year.
 - ☐ List of contents.
 - ☐ Acknowledgements and preface
 - ☐ Introduction.
 - ☐ Topic with suitable heading.
 - ☐ Planning and activities done during the project, if any.

	<input type="checkbox"/> Observations and findings of the visit. <input type="checkbox"/> Conclusions (summarized suggestions or findings, future scope of study). <input type="checkbox"/> Photographs (if any). <input type="checkbox"/> Appendix
Sociology	<p>PROJECT WORK</p> <p>As per the CBSE guidelines each student has to prepare a research project. The project must involve actual first hand research done by the students in close consultation with the teacher. Students can take any topic of their choice emphasizing the importance/effects/role of society.</p> <p>PREPARATION AND SUBMISSION OF PROJECT REPORT</p> <p>Each report must fulfill the following requirements:</p> <ol style="list-style-type: none"> 1. The body of the Project Report will be of approximately 15-20 A4/A3 Pages excluding additional appendices, questionnaires etc. 2. The project report will be written in the student's own hand; though they may include other illustrative material that is not hand - written 3. The project report will contain the following matter: <ol style="list-style-type: none"> a) Cover page showing project title, student's information, school and session b) List of contents c) Acknowledgements and preface d) Introduction e) Rationale Purpose) -The reason for the choice of the subject and its social significance. f) Methodology Technique - Mention the methodology e.g. questionnaire, case study, ethnographic description <p>The students may use any method which is appropriate for the topic selected. Detailed steps and procedures adopted must be given.</p> <ol style="list-style-type: none"> g) Presentation of evidence - There must be a major section formally presenting the evidence gathered as a part of the project. This can be in the form of tables, extracts from interviews, reports on case studies or discussion of documentary data (newspapers, articles, magazines, diaries, photographs). However, there should be value addition by the student and it must not be a simple reproduction of the original material. h) Analysis of evidence & conclusions - Each project should summarize its conclusions in a separate section. This can be brief but should be clearly and carefully stated. If possible, some suggestions can be given for further enhancement in the areal subject studied. This section can also include a statement describing the limitations of the study. i) Bibliography/ Appendix or other supporting material - This should include the references to relevant books and other sources used for the study. The appendix will include questionnaires, list of interviews, documents or any other material used in the study.
Accountancy	<p><u>Project Work as per C.B.S.E. Guidelines: SPECIFIC PROJECT</u></p> <p>Objective: To develop the competence of reading accounting data from quarterly or half yearly or annual reports of corporate sector and interpreting the information on the basis of given guidelines to present the desirable information in required format in the Project File for specific project.</p> <ul style="list-style-type: none"> • Students have to collect the quarterly or half yearly or Annual Audited Consolidated Financial Statements of Public ltd . Companies which are listed on stock exchange (NSE/ BSE) from newspapers , magazines or from the websites of the companies . Financial Statements should be of (2023-24 ; 2024-25)

- Financial Statements (2024-25) will include – **Statement of Profit and Loss, Statement of Balance Sheet , Cash flow Statement and Segment Report of Revenue , Profit and Capital employed.**
 - Students will prepare a Project File(**A3 Size and ruled white sheets**) to record their work related to the problems attempted by them in the following format :
- ☐ **Cover Page-** First page of the file should describe title of work, identity of student, Name of school and Name of the teacher concerned. The cover page should be designed properly.
- ☐ **Acknowledgement**
- ☐ **Certificate**
- ☐ **List of contents-** Index to indicate columns for title of work, page no., source, teacher's remarks and signature.
- ☐ **Introduction of the Company** - Pictures of product, brief description of company , organizational structure etc.
- ☐ **Print outs /Cuttings of all the financial statements(2024-25) of the company to be pasted.**
- ☐ **Few suggestive Companies for specific project:**
- | | | |
|----------------------------|-----------------------------|---------------------------|
| 1. Bata India Ltd. | 8. Reliance Industries Ltd. | 15. Pidilite Ltd. |
| 2. Bajaj Auto Ltd. | 9. Asian Paints Ltd. | 16. Tata Motors Ltd. |
| 3. Bombay Dyeing Ltd. | 10. Maruti Suzuki Ltd. | 17. Tata Steel Ltd. |
| 4. Godrej Industries Ltd. | 11. BHEL LTD. | 18. Larsen TourboLtd. |
| 5. Hindustan Unilever Ltd. | 12. TCS Ltd. | 19. Wipro Ltd. |
| 6. Infosys Ltd. | 13. Sun Pharma Ltd. | 20. NTPC Ltd. |
| 7. ITC Ltd. | 14. Bharti Airtel Ltd. | 21. Ultratech Cement Ltd. |
- Each child needs to take separate company for the project work.
 - Project File should be neatly handwritten and presentable with page numbers.

Political Science

- To enable the students to know about the inventions of new concepts in world politics and constitution of India. - To develop 21st century managerial skills of co ordination, self-direction and time management. - To understand contemporary political issues in context to our past.
- To develop a global perspective and an international outlook.
- Research Activity: - Research and collect the information on recent revolution of political ideas on the Topics.
- Assignment: - Project Work
- Project Ideas (LIST OF PROJECTS TOPICS), STUDENTS CAN CHOOSE ANY ONE TOPIC AS THEIR PROJECT WORK
- Various media platforms used during political campaigns.
 - Strategic planning of Indian Policy Makers.
 - Human Rights acts and its ratification in India.
 - Political Impact on Indian Legislations.

- Political Impact on India's international standing.
- Indian political stand on United Nations General Assembly 2022.
- Relevance of SAARC as a forum of regional cooperation.
- Division of Germany with special focus on the construction and dismantling of the Berlin wall.
- CIS- Central Asian Republics.
- Arab Spring
- Crisis in Middle East with special focus on Operation Desert Storm, Operation Iraqi Freedom,
- Iraq today.
- European Union and BREXIT.
- BRICS
- India's Nuclear Policy.
- U.S. dominance in World politics in the Post-Cold War era.
- India's role in Non-Aligned Movement.
- Civil Society Movements - Role and participation in India.
- Relevance of the United Nations in a Unipolar World.
- Understanding Resource Geopolitics and Environment degradation
- India's external relations -Critical analysis of the foreign policy of India especially with its immediate neighbours (Pakistan, China, Srilanka, Nepal, Myanmar)
- Popular movements in the post-Independence era and their outcomes.
- Project on the role played by the regional aspirations in backing the secessionist and insurgency movement in India
- India's response to ASEAN as a dialogue partner.

GUIDELINES FOR THE PROJECTS:

- It must be emphasized that the process of doing the project is as important as the final project.
- Once the project/projects are chosen, there should be a process of brainstorming to make out a draft/structure for the project before embarking on research.
- Internet sites could be referred, but care must be taken in selecting, using and citing these sites.
- Avoid plagiarism
- Marks to be awarded for content and originality and not for decorative elements and embellishments.
- Projects must be the original work of the student.
- Project may be supported by- Data, fact sheets, maps, articles, newspaper clips.
- The project work has to be done on A- 4 sheet only.
- Originality of work and hand made maps and bar graph will be liked and appreciated.

Economics	<p>The students are required to prepare a project as per the guidelines issued by the CBSE (available on www.cbse.nic.in). There is a list of suggested topics for the same on this website.</p> <p>After conducting research work on the selected topic, each student will prepare and submit his/her project report in a file. Following essentials are required to be fulfilled for its preparation and submission.</p> <ol style="list-style-type: none"> 1. The total length of the project will be of 25 to 30 pages. 2. The project should be handwritten. 3. The project should be presented in a neat folder/file. <p>The project file must contain the following details:</p> <ul style="list-style-type: none"> • Cover page • Certificate and Acknowledgement • Introduction of topic/title • Identifying the causes, consequences and/or remedies • Various stakeholders and effects on each of them • Advantages and disadvantages of situations or issues identified • Short-term and long-term implications of economic strategies suggested. • Using appropriate research methodology • Conclusion and Project Report • Bibliography
Applied Mathematics	<p>NOTE: Do the following activities in the mathematics activity file.</p> <ol style="list-style-type: none"> 1. To sketch the graphs of ax and $\log ax$, $a > 0$, $a \neq 1$ and to examine that they are mirror images of each other. 2. To verify that for a function f to be continuous at given point x_0, $\Delta y = f(x_0 + \Delta x) - f(x_0)$ is arbitrarily small provided, Δx is sufficiently small. 3. To understand the concepts of local maxima, local minima and point of inflection. 4. Using the following keywords – Shares , face value , Market Value , Brokerage , Types of shares , Debentures ... take an appropriate example to understand the given words and represent it by using graph . 5. In a spread sheet or excel, matrices are referred to as arrays of numbers or functions. To perform matrix operations using spread sheet- Show addition, subtraction and multiplication of matrices. <p>Prepare a project from anyone of the following topics:</p> <ol style="list-style-type: none"> i) Analysis of population migration data – positive and negative influence on urbanization. ii) 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. iii) Vehicle registration data – correlating with pollution and the number of accidents. iv) Visit a village near Jaipur and collect data of various crops over the past few years from the farmers. Also, collect data about temperature variation and rain over the

	<p>period for a particular crop. Try to find the effect of temperature and rain variations on various crops.</p> <p>v) Weather prediction (prediction of monsoon from past data).</p> <p>vi) 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.</p> <p>vii) Stock price movement.</p> <p>viii) Risk assessments by insurance firms.</p> <p>ix) Predicting stock market crash.</p> <p>x) Predicting the outcome of an election – exit polls.</p> <p>xi) Predicting mortality of infants.</p>															
Psychology	<p>Psychological Analysis of a Film</p> <p>Objective: To apply psychological theories, concepts, and principles to analyze the characters and themes in a selected movie.</p> <p>Instructions:</p> <p>1.Choose a movie from the suggested list or select another film that offers rich material for psychological analysis.</p> <p>(Suggested movies:</p> <p>-Silver linings</p> <p>-Dear Zindagi</p> <p>-A beautiful mind</p> <p>-Goodwill hunting</p> <p>-28 days)</p> <p>2.Watch the movie attentively, taking note of key scenes, character interactions, and recurring themes.</p> <p>3.Conduct research on relevant psychological theories and concepts that you plan to apply to your analysis. Consider aspects such as personality, motivation, behavior, cognition, emotion, and social influence.</p> <p>4.Write a comprehensive analysis paper that includes the following components:</p> <ul style="list-style-type: none">•Introduction: Provide a brief overview of the movie and its relevance to psychological analysis.•Character Analysis: Select two or more main characters and analyze their personalities, motivations, and behavior using psychological theories.•Theme Analysis: Identify and discuss major themes or psychological motifs present in the movie, such as identity, love, power, morality, or mental illness. Explore how these themes contribute to the overall narrative and character development.•Psychological Dynamics: Examine interpersonal relationships, conflicts, and dynamics within the movie, applying concepts of psychology.•Ethical Considerations: Reflect on any ethical issues portrayed in the movie, such as psychological manipulation, stigma, or boundary violations, and discuss their implications from an ethical standpoint.•Conclusion: Summarize your findings and insights, highlighting the psychological significance of the movie and its potential real-world applications or implications.															
Computer Science	<p>Write queries for the following table:</p> <p>Table 1: Employees</p> <table><tr><th>EmpID</th><th>Name</th><th>Department</th><th>Salary</th><th>Join_Date</th></tr><tr><td>101</td><td>Rohan Sharma</td><td>HR</td><td>45000</td><td>2020-05-12</td></tr><tr><td>102</td><td>Priya Patel</td><td>IT</td><td>60000</td><td>2019-11-03</td></tr></table>	EmpID	Name	Department	Salary	Join_Date	101	Rohan Sharma	HR	45000	2020-05-12	102	Priya Patel	IT	60000	2019-11-03
EmpID	Name	Department	Salary	Join_Date												
101	Rohan Sharma	HR	45000	2020-05-12												
102	Priya Patel	IT	60000	2019-11-03												

103	Amit Singh	Finance	55000	2021-02-15
104	Neha Gupta	HR	48000	2022-07-20
105	Vikas Joshi	IT	65000	2018-09-10

Queries to Write:

1. Display employees with salary **between 50000 and 60000**.
2. List employees in **HR or IT** departments.
3. Find employees whose names start with '**P**'.
4. Select **Name** and **Salary** of employees who joined **after 2020-01-01**.
5. Display employees with **salary > 50000 AND department = 'IT'**.

Table 2: Students

S_ID	S_Name	Stream	Marks	Grade	City
1	Arjun Reddy	Science	85	A	Hyderabad
2	Meera Nair	Commerce	78	B	Chennai
3	Rahul Verma	Science	92	A+	Delhi
4	Sneha Desai	Arts	65	C	Mumbai
5	Karan Malhotra	Science	88	A	Bangalore

Queries to Write:

1. List students with marks **between 70 and 90**.
2. Display **Science** students with grade '**A**' or '**A+**'.
3. Find students from '**Delhi**' or '**Mumbai**'.
4. Select **S_Name** and **Stream** of students with names ending with '**a**'.
5. Display students with **Marks > 80 AND Stream = 'Science'**.
6. **Table 3: Products**

P_ID	P_Name	Category	Price	Stock
P001	Wireless Mouse	Electronics	1200	50
P002	Yoga Mat	Fitness	800	30
P003	Smart Watch	Electronics	5000	15
P004	Water Bottle	Fitness	300	100
P005	Bluetooth Speaker	Electronics	2500	20

Queries to Write:

1. List products with price **between 500 and 2000**.
2. Display **Electronics** products with **stock < 30**.
3. Find products with names containing '**Smart**'.
4. Select **P_Name** and **Price** of **Fitness** products.
5. Display products with **Price > 1000 OR Category = 'Fitness'**.

Table 4: Books

B_ID	Title	Author	Genre	Price
B101	The Silent Patient	Alex Michaelides	Thriller	350
B102	Atomic Habits	James Clear	Self-Help	400
B103	The Alchemist	Paulo Coelho	Fiction	299
B104	Educated	Tara Westover	Biography	450
B105	Sapiens	Yuval Harari	Non-Fiction	500

Queries to Write:

1. List books with price **between 300 and 450**.
2. Display **Fiction or Biography** books.
3. Find books with titles starting with '**The**'.
4. Select **Title** and **Author** of books priced **below 400**.
5. Display books with **Genre = 'Thriller' OR Price > 400**.

Table 5: Orders

O_ID	Customer_Name	Product	Amount	Order_Date
501	Rajesh Kumar	Laptop	45000	2023-01-10
O_ID	Customer_Name	Product	Amount	Order_Date
502	Ananya Singh	Smartphone	25000	2023-02-15
503	Deepak Verma	Headphones	1500	2023-03-20
504	Priya Reddy	Tablet	30000	2023-04-05
505	Ravi Shastri	Printer	8000	2023-05-12

Queries to Write:

1. List orders with amount **between 10000 and 30000**.
2. Display orders for '**Laptop**' or '**Tablet**'.
3. Find customers with names containing '**ee**'.
4. Select **Customer_Name** and **Product** for orders placed **after 2023-03-01**.
5. Display orders with **Amount > 20000 AND Product = 'Smartphone'**.

Instructions for Practical File Preparation

Materials Needed:

- Interleaf project copy
- Black and blue pens

Formatting Rules:

2. Index Page (First Page):

- Title: "**SQL Commands – Class XI**" (Center-aligned, underlined).
- Table with columns:
 - **SQL Problem-1** (Black pen)
 - **Page Number** (Black pen) ▪ **Date**
 - of Completion** (Black pen)

3. For Each Program:

- **Start on a fresh page.**
- **Right Side (Lined):**
 - **SQL Problem including table and commands** (Top, underlined with black pen).
- **Left Side (Blank):**
 - **Output** (Written in *black pen* with proper spacing).
- **Page Number:** Top-right corner (e.g., "*Pg. 3*").

Entrepreneurship

PROJECT 2 - 'BUSINESS PLAN'
 (Product will be same as taken in Project-1)
 The Separate project file will be developed for project -2 in the following sequence-

	<ul style="list-style-type: none"> • Cover page • Certificate • Acknowledgement • Index • Executive Summary about your own product with photo designed by you • Objectives or Features of your own product • Why you have chosen this product? • Type/ Forms of your product (if any) • Chemical Composition of your product • Research Methodology • Marketing Plan (Meaning) • Marketing Mix (4P's) <ul style="list-style-type: none"> ✓ Product (Brand name, Logo, Colour, Tagline, USP designed by you, Packaging, Labelling, Licensing, warehousing, Transportation, Target Market, SWOT Analysis of your own product with photos. ✓ Price (Meaning, Price of your product, Methods of pricing selected for your product) with photo ✓ Place (Meaning and Channel of distribution selected for your product) with photo ✓ Promotion (Meaning and technique of sales promotion selected for your product) with photo • Production Plan • Financial Plan (with start- up cost, Fixed cost, Variable cost, Statement of Profit and loss) • Break-even point • Conclusion • Bibliography • Performa page print out from NCERT Book
Informatics Practices	<p>Write following programs in Python Practical File. Make an interleaved Practical notebook, write programs on the right page and outputs on the left page.</p> <ol style="list-style-type: none"> 1. Write python code to create a Series object using a list. Assume that pandas is imported as alias name pd. 2. Write a program to create a Series object using individual vowel characters. Assume that Pandas is imported as alias name pd. 3. Write a program to create a series object using an ndarray that has 5 elements in the range 24 to 64. 4. Write a program to create a series object using a dictionary that stores the number of students in each section of class 12 in your school. 5. Write a program to create a Series object that stores the initial budget allocated (50000 each) for the four quarters of the year: Qtr1, Qtr2, Qtr3, Qtr4. 6. A python list namely section stores the section names of class 12 in your school. Another list contri stores the contribution made by these students to a charity fund endorsed by the school. Write code to create a series object that stores the contribution amount as the values and the sections name as the indexes. 7. Create a series S1 that stores the contribution of each section. <ol style="list-style-type: none"> i) Write code to modify the amount of section 'A' as 7600.

	<p>ii) Write code to modify for sections 'C' and 'D' as 7000.</p> <p>iii) Display the contribution made by section A and C.</p> <p>iv) Display the contribution wherever more than 5500.</p> <p>8. Create and display a DataFrame from a 2D dictionary , Sales, which stores the quarter wise sales as inner dictionary for two years.</p> <p>9. Write a program to create a dataframe from a list containing dictionaries of the sales performance of four zonal offices. Zone names should be the row labels.</p> <p>10. Write a program to create a dataframe from a 2D list. Specify own index labels.</p> <p>11. Write a program to create a dataframe object from a 2D ndarray as shown below.</p> <p>12. Consider two series objects staff and salaries that store the number of people in various office branches and salaries distributed in these branches, respectively. Write a program to create another series object that stores average salary per branch and then create a Dataframe object from these series objects.</p>														
Physical Education	<p>Practical 1</p> <p>Make a project file on sports /game from the list as given Running track, Cricket, Football, Hockey Grounds, Kho-Kho, Kabaddi, Handball, Volleyball, Basketball, Badminton.</p> <ol style="list-style-type: none"> 1 History of the game 2 Skills 3 Terminology 4 Important Tournaments 5. Famous Sports Personalities 6 Injuries And Treatment <p>Practical 2</p> <p>Yoga</p> <p>History of yoga</p> <p>Yoga as an Indian heritage</p>														
Commercial Arts	<p>1. Make illustrations based on subjects given in your syllabus.</p> <p>No. of Sheets: 07</p> <p>Medium: Poster colours/ pencil colours/ charcoal/ Pencil shading/ inks</p> <p>Size of the Sheet- 11" x 14"</p> <p>Type of Sheet- Ivory / Cartridge /Any other as per requirement</p> <p>Subjects-</p> <table> <tr> <td>1. Family and Friends in Daily life</td><td>2. Professionals/ Profession</td></tr> <tr> <td>3. Games and Sports</td><td>4. Nature</td></tr> <tr> <td>5. National events and celebrations</td><td>6. Religious events and celebrations</td></tr> <tr> <td colspan="2">7. Culture- Dance, Drama Music and Art</td></tr> </table> <p>2. Make Posters based on the subjects given in your syllabus.</p> <p>No. of Sheets: 07</p> <p>Medium: As per discussion (poster colors/ water colours/ pencil colours/ inks)</p> <p>Size of the Sheet- ½ imperial (22x14 inches)</p> <p>Type of Sheet- Italian Mount Board (20x15 inches) / ivory or cartridge (22x14 inches) as per the requirement</p> <p>Subjects-</p> <table> <tr> <td>1. Excursion/Tourism</td><td>2. Cultural Activities</td></tr> <tr> <td>3. Community and nature Development</td><td>4. Ideas –Social, National , International</td></tr> <tr> <td colspan="2">5. Commercial Products</td></tr> </table>	1. Family and Friends in Daily life	2. Professionals/ Profession	3. Games and Sports	4. Nature	5. National events and celebrations	6. Religious events and celebrations	7. Culture- Dance, Drama Music and Art		1. Excursion/Tourism	2. Cultural Activities	3. Community and nature Development	4. Ideas –Social, National , International	5. Commercial Products	
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3. **Choose any one folk art and draw and paint it using Acrylic colours on any one of the objects- Cloth Bag, Wooden utensils, Mobile Covers, Face Mask, Lamp Shade, Terracotta Object, Tea Coasters etc.(Any other object of your choice)-**

Folk Arts of India for reference-

Warli/ Kalamkari/ Madhubani/ Mandana/ Alpona/ Gond/ Cheriya/ Pattachitra/ Any other

Note:

- Students will first make layouts and after taking the approval will make the final artwork.
- Students are required to follow the guidelines as briefed during the class.

Classes
Nursery to VIII
IX to XII

Summer Vacation
May 10, 2025 to June 24, 2025
May 25, 2025 to June 24, 2025

*Do Your Assignments
But Do Not Forget To Read Books
Spend Time With Family & Friends
Help Birds & Stray Animals
Learn A New Skill, Sharpen Your Talent
Come Back Rejuvenated, Relaxed, Refreshed,
Revived, Recharged*

*Happy
Holidays*

