



# RAJA RAMMOHAN ROY ACADEMY

**"Learning, laughter, and lovely summer days!"**

**Dear Parents,  
Greetings!**

**Summer vacation is a wonderful time for children to relax, refresh, and explore new learning experiences. To keep our students engaged in productive and creative activities during the holidays, we have prepared the Summer Holiday Homework.**

**The homework has been designed to enhance your child's creativity, thinking skills, and subject knowledge in an enjoyable way. We kindly request you to encourage and guide your child to complete the work neatly and sincerely within the given time.**

**Motivate your child to develop reading habits by encouraging him/her to read books and practice writing daily. Kindly limit excessive screen time and involve your child in creative and outdoor activities. Ensure that your child follows a healthy routine with proper sleep, exercise, and nutritious food.**

**We hope your child enjoys the holidays while learning something new every day.**

**Wishing you and your family a happy, safe, and joyful summer vacation!**

**Warm regards,  
Raja Rammohan Roy Academy**

**RAJA RAMMOHAN ROY ACADEMY, DEHRADUN SUMMER  
ASSIGNMENT AND PROJECT WORK SESSION 2026**

**CLASS -11**

Subject	Project/ Assignment
Eng. Lang.	<p>Q1.Solve specimen paper 2,3 and 4 (Total English)</p> <p>Q2. The process of human communication has evolved over the years; describe how communication has changed in the last 20 years.</p> <p>Q3.Write a review of a book that you recently read.</p>
Eng. Lit.	<p>Q1.Explain the symbols used by the poet in the poem 'Abhisara :The tryst to communicate it's message.</p> <p>Q2. Describe in your own words how the pine torch was used by Yamaguchi Gohei which made him to lose his invested capital but gain the status of a Living God.</p>
Hindi	<p>1 निम्नलिखित राज्यों में से किसी एि राज्य िी भौगोलिि स्थित, वेशभूषा, िृत्य, लौहार,व्यंजि,मोटा अिाज आदि पर सचित्र वर्णि िीस्जए। शब्ि संख्या 1000 (ििाणटि,िेरि, राजथिाि, उत्तरािंड।)</p> <p>2 िबीरिस िा सादहस्सि पररिय।(शब्ि संख्या 300)</p> <p>3 बुजुगण िेवि पररवार िे सिथय िहकं होते,बस्कि वे घर िी जडें होते हैं।स्जस प्रार किसी वृक्ष िी जडें उसे मजबूती िेती हैं,उसी प्रार बुजुगण पररवार िे स्थिरता,प्रेम,और दिशा प्राि िरते हैं।इस वषय िे आधार मािते हुए - बुजुगण घर िी िींव होते हैं।पर एि निबंध लिखिए।</p>
Mathematics	<p>Prepare two Projects from the following topics. Mark allocation for each Project [10 marks]</p> <p><b>Suggested Project Layout:-</b> A standard 10 to 15-page project file should follow this structure: <b>Cover Page:</b> Topic name, student name, Class, and roll number. <b>Certificate &amp; Acknowledgement:</b> Formal declarations regarding the authenticity of your work. <b>Aim/Objective:</b> What specific mathematical outcome or real-life application you are investigating. <b>Content &amp; Methodology:</b> The theoretical background and the step-by-step mathematical calculations or modeling and Bibliography.</p> <p>(1)Sets and Functions ... Sets and their representations. Empty set. Finite and Infinite sets. Equal sets. Subsets. Subsets of a set of real numbers.</p> <p>(2)Explore different methods to prove the result “If a set has ‘n’ number of elements, then the total number of subsets is <math>2^n</math>”.</p> <p>(3)Verify that for two sets A and B, <math>n(A \times B) = pq</math>, where <math>n(A) = p</math> and <math>n(B) = q</math>, the total number of relations from A to B is <math>2^{pq}</math>.</p> <p>(4)Draw the graph of quadratic function <math>f(x) = ax^2 + bx + c</math>. From the graph find Maximum/minimum value of the function. Also determine the sign of the expression.</p> <p>(5)Construct a Pascal’s triangle to write a binomial expansion for a given positive integral exponent.</p> <p>1. Revise all exercises of Quadratic Equations and Complex Numbers.</p>

	2. Solve all exercises of Sequence and Series (Arithmetic and Geometric Progressions) in your fair notebook.
<b>Physics</b>	<p>Prepare a project report on any one of the following topics relevant to Class XI syllabus: -</p> <ol style="list-style-type: none"> <li>1. Vectors and Projectile Motion.</li> <li>2. Newton's Laws of Motion.</li> <li>3. Rotational Motion of a Rigid Body: Moment of Inertia.</li> <li>4. Gravitation: Planets and Satellites.</li> <li>5. Properties of Matter: Elasticity and Viscosity.</li> <li>6. Heat and Thermodynamics.</li> <li>7. Oscillations and waves.</li> </ol> <p>Guidelines for making the project are as follows: -</p> <ol style="list-style-type: none"> <li>1. Project report should be approximately 25 to 30 pages covering the topic chosen by you.</li> <li>2. Project report should contain relevant diagrams and figures wherever required.</li> <li>3. The useful information can be collected from your prescribed book, reference books or from the internet.</li> <li>4. Project report should have: - (a). Acknowledgement, (b). Introduction, (c). Content, and (d). Bibliography.</li> </ol>
<b>Chemistry</b>	<ol style="list-style-type: none"> <li>1. Make a project on the topic already allocated in the class.</li> <li>2. Complete Review Exercise questions of chapter Structure of Atom.</li> <li>3. Prepare the Chapters taught for Unit Test</li> </ol>
<b>Biology</b>	<p>Make notes on the following topics:</p> <ol style="list-style-type: none"> <li>1. Prokaryotic cell</li> <li>2. Eukaryotic cell</li> <li>3. Parts of cell</li> <li>4. Cell division.</li> </ol> <p>Prepare the following topics for unit test.</p> <ol style="list-style-type: none"> <li>1. Cell</li> <li>2. Kingdom Monera</li> </ol>
<b>History/Civics</b>	<p>Prepare an assignment on any one of the following topics:</p> <ol style="list-style-type: none"> <li>1) Books that changed the course of History.</li> <li>2) Growth of Feminist Movements in the west.</li> <li>3) Birth of Totalitarian Ideologies.</li> <li>4) Industrialization—Impact on the lives of the people.</li> <li>5) Impact of British colonial policies before/ after 1857</li> </ol>
<b>Political Science</b>	<ol style="list-style-type: none"> <li>1. Right to Freedom and Role of Media OR</li> <li>2. Crisis in Middle East and its impact on World Order.</li> </ol> <p>Prepare the project on any one topic.</p>

<b>Psychology</b>	<p>Summer Holiday Experiment*</p> <p>*Aim* To study the span of memory among males and females of age group 15–25 years.</p> <p>*Hypothesis* Males will have a better memory span than females.</p> <p>Variables</p> <p>* IV: Gender and Age</p> <p>* DV: Memory Span</p> <p>*Sample of the study:*</p> <p>* Minimum sample size: 20 participants (10 Males, 10 Females)</p> <p>*Materials Used*</p> <p>* Questionnaire sheet, Pen/Pencil, Stopwatch/Timer</p> <p>*Procedure*</p> <p>A questionnaire will be shared containing different taglines/slogans of famous apps or products. Participants have to identify the correct app or product from the given tagline.</p> <p>*Instructions to Participants*</p> <p>Orally given by the student to the participants</p> <p>*Scoring*</p> <p>* Give 1 mark for every correct answer.</p> <p>* Calculate the total score for each participant.</p> <p>* Prepare separate score tables for males and females.</p> <p>*Results*</p> <p>* Calculate and compare the performance of males and females.</p> <p>* Represent the findings using a graph/bar diagram.</p> <p>* Write brief observations based on the findings'</p>
<b>Computer Science</b>	<p>Write a Java programs to perform the following:</p> <ol style="list-style-type: none"> <li>1. Convert Decimal Integer to Binary.</li> <li>2. Convert Decimal Integer to Octal.</li> <li>3. Convert Decimal Integer to Hexadecimal.</li> <li>4. Convert Binary Integer to Decimal.</li> <li>5. Convert Octal Integer to Decimal.</li> <li>6. Convert Hexadecimal Integer to Decimal.</li> <li>7. Convert Octal Integer to Binary.</li> <li>8. Convert Hexadecimal Integer to Binary.</li> </ol> <p>Take the printouts and Submit after Summer vacation.</p>
<b>Physical Education</b>	<p>Make a project file on the topic (Volleyball and Football)</p> <p>The project must contain at least 20 pages per game.</p>
<b>Business Studies</b>	<p>Prepare a project on any one of the following topics .A list of suggested Projects is given below:</p> <ol style="list-style-type: none"> <li>1. Select a daily-use consumer product. Trace its origin right from the primary industry through the secondary and tertiary industries. Draw a flow chart to include all the business activities in its path from the producer tothe consumer.</li> <li>2. Assume you are starting a partnership firm with your friend/friends. Develop a business plan covering the following aspects: <ul style="list-style-type: none"> <li>– Formation of this partnership firm – rules and steps that would be followed including the partnership deed– Choice of types of partners involved and your justification for the same.</li> </ul> </li> <li>3. A System for Tracking Food Origins: Develop a blockchain-based system to trace the journey of food products from farm to consumer, recording details like origin, processing, and transportation. This can help ensure food safety and authenticity. For example, tracking the origin and processing of organic vegetables.</li> </ol>

	<p>4. Ethical and Sustainable Sourcing: Build a blockchain system to track the sourcing of raw materials, ensuring they come from ethical and sustainable sources. This could be applied to industries like fashion or electronics to provide consumers with verifiable sustainability information.</p> <p>5. Identify two Public Private Partnership projects. Find out:- The equity participation of both the partners.</p> <ul style="list-style-type: none"> <li>- Objectives of the partnership</li> <li>- Strengths both partners bring into the venture.</li> </ul> <p>6. Select one consumer cooperative and one housing cooperative. For each of the cooperatives:</p> <ul style="list-style-type: none"> <li>- State the objectives.</li> <li>- The organisational structure.</li> <li>- Details of surplus distribution and the form of government support.</li> </ul> <p>7. Document and analyse the Corporate Social Responsibility activities of a pharmaceutical company and a five-star hotel. Comment on the changing role assumed by Corporates towards business ethics and social responsibility in the last two decades.</p> <p>8. Contact an insurance agent and collect information about 5 different types of life insurance policies provided by different companies. Include information as per details given below for every insurance plan and make a comparative analysis.</p> <ul style="list-style-type: none"> <li>- Premium of insurance</li> <li>- Terms of inclusions and exclusions of each policy</li> <li>- comparative analysis</li> <li>- Term of the policy</li> <li>- Withdrawal of money from the insurance scheme (surrender / foreclosure)</li> <li>- Advantages/disadvantages of the plan</li> </ul> <p>9. Visit a company that is involved in e-business (which offers online services) or a consultancy, which helps in developing websites for such companies. Study different aspects they keep in mind while preparing business plans for e-business. Include information regarding the payment mechanisms, security and safety of business transactions. The risks involved in e-business should also be covered. Also include the steps they follow while implementing the plan and starting the business.</p> <p>10. Select a global enterprise, study its expansion strategy, focusing on its entry into emerging markets, adaptation to local regulations, and the role of technology in driving international growth and customer engagement.</p>
<b>Economics</b>	<p>Prepare project on any two of the topics</p> <ol style="list-style-type: none"> <li>1 Impact of Lockdown on Indian Industries.</li> <li>2 Case study of a model village (economic perspective) Hiwre Bazar(MH),Pansari (Gujrat)</li> <li>3Solar Energy: A Cost-Effective Comparison with Conventional Energy Sources</li> <li>4 Waste management in India -Need of the hour</li> <li>5 Make in India -The way ahead</li> </ol>
<b>Accountancy</b>	<p>Candidates will be required to do a minimum of one assignment. Suggested list of assignments:</p> <ol style="list-style-type: none"> <li>1. Take any five accounting concepts and give any two practical examples of each to bring out clearly the understanding of the concept.</li> <li>2. Take up an internship programme for a week under any commercial/non-commercial organization and prepare a report that includes the following details. <ol style="list-style-type: none"> <li>(a) Organization profile (name, sector, type of organization, etc.)</li> <li>(b) Internship activities (day-wise break up)</li> <li>(c) Tasks done (vouchers prepared, BRS, etc.)</li> <li>(6) Learning outcomes from internship</li> <li>(e) Documentation of the internship activity (photographs, certificate, etc.).</li> </ol> </li> </ol> <p>GENERAL INSTRUCTIONS:</p> <ol style="list-style-type: none"> <li>1) The project work has to be supported with recent data and pictures</li> </ol>

	<p>2) The project should be done independently.</p> <p>3) The project should be neatly done on Interleaf project papers and in good handwriting.</p> <p>4) Follow the given sequence for the project- i) Acknowledgement, ii) Certificate, iii) Index, iv) Content and v) Bibliography</p>
<b>Home Science</b>	<p>1. Use 24 hour dietary recall method to analyse individual diet patterns with reference to requirement of basic food groups and RDA.</p> <p>2. Design care labels for a garment.</p> <p>3. Conduct a survey on the user of Social Media among teenagers on various aspects such as, social network sites used, time spend in a day ,frequency of usage reason for using social network sites, perceived advantages and disadvantages,etc.</p>
<b>SUPW</b>	<p>*Topic:* _“Framing Nature: A Study of Photography as a Tool for Interior Decoration using Natural Wood”_</p> <p>*Aim:*</p> <p>To capture and frame a nature photograph in 12 x 12 inches using natural wood for framing.</p>
<b>Art</b>	<p>Create a large and colourful Folk Art painting on a portrait sheet/chart paper using any traditional folk art style such as Madhubani, Warli, Gond, Mandala, or Pattachitra.</p> <p>Fill your artwork with beautiful patterns, detailed designs, and attractive colour combinations to make it creative and decorative</p> <p>Your painting should be neatly completed, properly mounted or framed, and submitted after the holidays.</p>