

# Krishnagar Academy

## PROJECT WORK FOR CLASS IX, CLASS X & CLASS XII 2020-21

### Instructions for Project Work (Class IX, Class X and Class XII):

- Answers must be written in the Project Copy.
- The copies will be submitted by the guardian to the respective teachers on the specified date.

### PROJECT WORK FOR CLASS IX

NAME OF THE SUBJECT	NAME OF THE TOPIC
English-I	Writing an original short story
English-II	Explain the transformation of Jane Thompson from a selfish woman to selfless and affectionate motherly figure in the story An Angel in Disguise by T.S. Arthur.
2nd Lang	Bengali: 'গিল্লি' গল্পটির অন্য একটি নাম দাও। কেন ঐ রকম নাম দিলে তা গল্পটি বিশ্লেষণ করে বুঝিয়ে দাও। (কমপক্ষে ৪০০টি শব্দ)  Hindi: 'নেতা জী का चश्मा' नामक कहानी का उद्देश्य क्या है। 400 शब्दों में लिखिए।
Mathematics	Draw a circle of radius $r$ on a $1/2$ cm graph paper and then on a 2mm graph paper. Estimate the area enclosed in each case by actually counting the squares. Now try out with circles of different radii. Establish the pattern, if any, between the two observed values and the theoretical values ( $\text{area} = \pi r^2$ ). Any modification?
Physics	To find the value of acceleration due to gravity and to plot the graph of $L$ vs $T^2$ .
Chemistry	Action of dilute sulphuric acid on the following substances. (warm if necessary) (a) a metal (b) a carbonate (c) a sulphide (d) a sulphite Make observations, identify the gas evolved and make deductions.
Biology	Examination, Identification and Study of a cross-pollinated flower.
Commercial Studies	Assignment . Q. 3. Discuss the Objectives of Accounting. Q. 4 .Discuss the functions of Commercial Bank.
History & Civics	Highlight the civic issues of your locality and what are the suggestions you would offer to address them.
Geography	Assignment Meteorological instruments and their uses
Computer Application	Assignment 2: Write a program that simulates a simple dice game. The game is played as follows: Roll a six-sided die. If you roll a 1, 2 or a 3, the game is over. If you roll a 4, 5, or 6, you win that many rupees (₹4, ₹5, or ₹6), and then roll

	<p>again.</p> <p>With each additional roll, you have the chance to win more money, or you might roll a game-ending 1, 2, or 3, at which time the game is over and you keep whatever winnings you have accumulated.</p>
Economics Application	<p>Project no. 1</p> <p>Topic- Identify 100 consumers of major brands of edible oils in a locality/ area where you live. Draw up the pattern of their monthly expenditure on this product and compare it with the other household expenditure. Make a presentation of your findings in class.</p> <p>Project no-2</p> <p>Topic- Identify the major brands of bathing soaps that are available in the market in your area. Select a sample of 10 shops/ department stores that sell these brands and collect the sales of these brands over a period of one week at these shops. Identify the brands that sell the most and make a presentation for your class.</p>
Commercial Application	<p>Assignment</p> <p>Q.3. Discuss the need and relevance of Accounting.</p> <p>Q.4. Discuss the interpersonal skills required for effective communication.</p>

**PROJECT WORK FOR CLASS X**

NAME OF THE SUBJECT	NAME OF THE TOPIC
English-I	-----
English-II	<b>Assignment 2:</b> Summary of the short story, “An angel in disguise”. (350 words) <b>Assignment 3:</b> To write the socio-historical background of the poem “After Blenheim” (350 words).
2nd Lang	<b>Bengali:</b> মানিকবন্দ্যোপাধ্যায়ের ‘অসহযোগী’ গল্পে বাবাও ছেলে, দুজনাই দুজনার অসহযোগী- গল্পটি বিশ্লেষণ করে সেকথা বুঝিয়ে দাও। (কম দ্বিধা ৪০০টি শব্দ) <b>Hindi:</b> यशपालजी द्वारा रचित 'महयज्ञ का पुरस्कार' कहानी का अपनी ओर से एक अलग शीर्ष कदीजिये तथा आपने यह शीर्षक क्यों दि याइस की व्याख्या की जिए। (400 शब्दों में)
Mathematics	Take a square sheet of paper of side 10 cm. Four small squares are to be cut from the corners of the square sheet and then the paper folded at the cuts to form an open box. What should be the size of the squares cut so that the volume of the open box is maximum?
Physics	To verify the laws of refraction by using a rectangular glass slab and hence to determine the refractive index of glass.
Chemistry	Supply a solution of a dilute acid and alkali. Determine which is acidic and which is basic, giving two tests for each.
Biology	Identification of the internal structure of the Ear and Eye
Commercial Studies	Q. 3. Explain the various modules in an E R P System. Q.4. Discuss the various functions of Central Bank of India.
History & Civics	
Geography	
Computer Application	<p>I. <b>Write Java statements for the following</b></p> <ol style="list-style-type: none"><li>To display the size of the last word in the given string</li><li>To check which of the 2 strings is longest.</li><li>To find a new string after joining the first 3 characters and last characters of the string.</li><li>To convert the full string to capital letters.</li><li>To replace all the appearances of “Kumar” to “Sharma”.</li></ol> <p>II. <b>Write output for the following</b></p> <ol style="list-style-type: none"><li>Strings= “APARNA”; System.out.println(s.replace(s.charAt(0), ‘O’)); System.out.println(s.substring(0,2)+s.substring(s.length()-2));</li><li>Strings= ”10ICSE”, s1= ”20-20Match”; System.out.println(s.substring(0,2)+s1.substring(3,5)); System.out.println(Integer.parseInt(s.substring(0,2))+Integer.parseInt(s1.substring(3,5))); System.out.println(s.charAt(4)+13);</li></ol> <p>III. <b>Write Java Programs</b></p> <ol style="list-style-type: none"><li>Write a program to find and display the potential of the string. The potential of a word is found by adding the encrypted value of the alphabets. Example: KITE Potential = 11 + 9 + 20 + 5 = 45</li><li>Write a program to input the string, first convert it to uppercase and then encrypt it as follows. AC, BD, …… XZ, YA, ZB 02, 13, … 79, 80, 91 Ex: Input: 15AUGUST1947 Output: 37CWIWUV3169</li></ol>
Economics	1. Develop a hypothetical table of information for coffee that shows quantity

Application	<p>demanded at various prices and supply of coffee at these prices.Draw a demand curve and supply curve and show an equilibrium price at which market is cleared of its supplies.</p> <p>2. Make a list of products for which you think demand is price inelastic and price elastic.Specify the reasons you may think relevant for your analysis.</p>
Commercial Application	<p>Q.3. Discuss the functions of Central Bank of India.</p> <p>Q.4.Discuss the functions of Human Resource Management.</p>

## PROJECT WORK FOR CLASS XII

NAME OF THE SUBJECT	NAME OF THE TOPIC
English-I	Assignment 2: A passage will be read out followed by five questions. Students will have to write the answers of the questions after hearing the passage attentively. Assignment 3: Writing Skill: Narrate your own experience when a child taught you a lesson (400- 450 words)
English-II	
2nd Lang	Bengali: কবি সুভাষ মুখোপাধ্যায়ের লেখা 'সালেমনের মা' কবিতাটিকে একটি ছোট গল্পের রূপ দাও।(কমপক্ষে ১০০০ টি শব্দ লিখবে।) Hindi: मुंशी प्रेमचंदजी द्वारा रचित कहानी 'पुत्रप्रेम' एक संवेदनशील तथा भावनात्मक कहानी है।इस कथन की पुष्टि की जिये।(1000शब्दों में)
Mathematics	<u>Attempt either from Section-B or Section-C</u> <b>Section-B</b> Find the area bounded by a parabola and an oblique line.(Any other pair of curves which are specified in the syllabus may also be taken.) <b>Section-C</b> Draw a rough sketch of Cost (C), Average Cost (AC) and Marginal Cost (MC) OR Revenue (R), Average Revenue (AR) and Marginal Revenue (MR).
Physics	
Chemistry	
Biology	
Computer Science	
History	
Geography	
Political Science	
Economics	
Sociology	Crime and Society-A sociological analysis of Indian scenario.
Psychology	To study the group differences among 2 sections of the same class with the same subjects.
Accounts	Cash flow Statement.
Commerce	Principles of Management.
Business Studies	Staff Selection.
Physical Education	Project file on two major games