

**ROSE BUD SCHOOL, LILUAH, HOWRAH**  
**PROJECT WORK- 2023-2024**  
**CLASS - X**

SUBJECT	CHAPTERS
ENGLISH LANGUAGE	1. Write an Original short story entitled, 'The Secret'. 2. Traffic jams in your city / town are getting worse day after day. Write a letter to the Deputy Commissioner of Police (Traffic) complaining about the problem and offering suggestions for improvement.
ENGLISH LITERATURE	1. Discuss the dramatic importance of the trial scene in the Merchant of Venice. 2. How is the theme of true sportsmanship and the spirit of cooperation portrayed through the poem Nine Gold Medals?
HINDI	<b>Topic-1-</b> Saras Hindi Vayakaran Pustak ke pageNo-113 S. N. --8--ke chitra ko file me utarkr book ko dekh kr lekhan karya kro. Picture ko project file me past karna hoga.
	<b>Topic--2-</b> Bhere aur Bheriye kahani ke kahani kar kaparichya dete hue kahani ka sarans apane sabdo me likhiye
BENGALI	i. Naam golpotir sarmormo lekho
	ii. Picture composition given in drive
HISTORY	Give a detailed study of any one Dr. A. P.J Abdul Kalam or Dr. Rajendra Prasad.
GEOGRAPHY	Transport system of India.
	Meaning, modes, advantages, disadvantages, development.
MATHEMATICS	1. Survey of different/ various types of bank accounts and rates of interests offered.
	2. Conduct a survey in your locality to study the mode of conveyance / price of various essential commodities/ favourite sports. Represent the data using a bar graph / histogram and estimate the mode.
PHYSICS	Machines (Pulley Systems, Mechanical Advantage)
BIOLOGY	<b>Plant Life:</b> Observation of permanent slides of stages of mitosis. [Draw and label different stages.]
	<b>Animal Life:</b> The identification of different types of blood cells under a microscope. [Draw and label]
COMMERCIAL STUDIES	1. From the daily newspaper which your family buys, select ten different advertisements, compare each of the m with the essentials of a good advertisement you have read in this chapter(Advertising and sales promotion). Note down how many requirements are fulfilled by each advertisement. Is the advertisement which fulfilld the maximum number of requirements the most popular / effective. 2. Meet the owner / manager of a business firm selling some service enquire from him the unique characteristics of the service sold. What special problems the firm is facing because it is selling a services rather than a product? On the basis of your discussion what conclusion do you form? Is selling a service more difficult than selling a product?

ECONOMIC APPLICATIONS	<div>1. Take a fast moving consumer good (FMCG) like washing machine detergent. Analyse the factors that determine the demand of this product. Present your findings in form of a class presentation.</div> <div>2. Take a case of a nationalized bank – visit any one of its branches in your city. Analyse the main functions of this bank’s branch. Make a presentation / project to this effect.</div>														
COMPUTER APPLICATIONS	<div><div>Question 1.</div><div>Define a class to accept and store 10 strings into the array and print the strings with even number of characters.</div><div>Example:</div><div>Input: ROSE BUD SCHOOL LILUAH</div><table><tr><td>ROSE</td><td>BUD</td><td>SCHOOL</td><td>LILUAH</td></tr></table><div>Output:</div><div>ROSE</div><div>LILUAH</div></div> <div><div>Question 2.</div><div>Define a class to declare an array of size 20 of double datatype, accept the elements into the array and perform the following:</div><div><div>• Calculate and print the sum of all the elements.</div><div>• Calculate and print the highest value of the array.</div></div></div> <div><div>Question 3.</div><div>Design a class name ShowRoom with the following description:</div><div>Instance variables/ Data members:</div><div>String name – To store the name of the customer</div><div>long mobno – To store the mobile number of the customer</div><div>double cost – To store the cost of the items purchased</div><div>double dis – To store the discount amount</div><div>double amount – To store the amount to be paid after discount</div><div>Member methods: –</div><div>ShowRoom() – default constructor to initialize data members</div><div>void input() – To input customer name, mobile number, cost</div><div>void calculate() – To calculate discount on the cost of purchased items, based on following criteria</div><table><tr><td>Cost</td><td>Discount (in percentage)</td></tr><tr><td>Less than or equal to ₹ 10000</td><td>5%</td></tr><tr><td>More than ₹ 10000 and less than or equal to ₹ 20000</td><td>10%</td></tr><tr><td>More than ₹ 20000 and less than or equal to ₹ 35000</td><td>15%</td></tr><tr><td>More than ₹ 35000</td><td>20%</td></tr></table><div>void display() – To display customer name, mobile number, amount to be paid after discount</div><div>Write a main method to create an object of the class and call the above member methods.</div></div> <div><div>Question 4.</div><div>Write a program to input 15 integer elements in an array and sort them in ascending order using the bubble sort technique.</div></div> <div><div>Question 5.</div><div>Design a class to overload a function series () as follows: [15]</div><div>(a) void series (int x, int n) – To display the sum of the series given below:</div><div><math>S = x^1 + x^2 + x^3 + ..... x^n</math> terms</div><div>(b) void series (int p) – To display the following series:</div><div>0, 7, 26, 63 p terms.</div><div>(c) void series () – To display the sum of the series given below:</div><div><math>S= 12+13+14+ . . . + 110</math></div></div> <div><div>Question 6.</div><div>Write a program to input a sentence and convert it into uppercase and count and display the total number of words starting with a letter ‘A’.</div></div>	ROSE	BUD	SCHOOL	LILUAH	Cost	Discount (in percentage)	Less than or equal to ₹ 10000	5%	More than ₹ 10000 and less than or equal to ₹ 20000	10%	More than ₹ 20000 and less than or equal to ₹ 35000	15%	More than ₹ 35000	20%
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	<p>Example:  Sample Input: ADVANCEMENT AND APPLICATION OF INFORMATION TECHNOLOGY ARE EVER CHANGING.  Sample Output : Total number of words starting with letter A' = 4.</p> <p><b>Question 7.</b>  A tech number has even number of digits. If the number is split in two equal halves, then the square of sum of these halves is equal to the number itself. Write a program to generate and print all four digit tech numbers.  Example :  Consider the number 3025  Square of sum of the halves of 3025 = <math>(30+25)^2</math>  = <math>(55)^2</math>  = 3025 is a tech number.</p> <p><b>Question 8</b>  Write a program to input a string and convert it into uppercase and print the pair of vowels and number of pair of vowels occurring in the string.  Example:  Input:  "BEAUTIFUL BEAUTIES "  Output :  Pair of vowels: EA, AU, EA, AU, IE  No. of pair of vowels: 5</p> <p><b>Question 9.</b>  Using the switch statement, write a menu driven program to perform following operations:  (i) To Print the value of Z where <math>Z = (x^3+0.5x)/Y</math> where x ranges from – 10 to 10 with an increment of 2 and Y remains constant at 5.5.  (ii) To print the Floyds triangle with N rows  Example: If N = 5,  Output:  1  2 3  4 5 6  7 8 9 10  11 12 13 14 15</p> <p><b>Question 10</b>  Design a class to overload a function Sum( ) as follows:  (i) int Sum(int A, int B) – with two integer arguments (A and B) calculate and return sum of all the even numbers in the range of A and B.  Sample input: A=4 and B=16  Sample output: sum = 4 + 6 + 8 + 10 + 12 + 14 + 16  (ii) double Sum( double N ) – with one double arguments(N) calculate and return the product of the following series:  sum = 1.0 x 1.2 x 1.4 x ..... x N  (iii) int Sum(int N) - with one integer argument (N) calculate and return sum of only odd digits of the number N.  Sample input : N=43961  Sample output : sum = 3 + 9 + 1 = 13  Write the main method to create an object and invoke the above methods.</p>
ART APPLICATION	Copy from old master painting.
HOME SCIENCE	Collecting ten play materials and evaluating them in the terms of their merit and demerits