

**LT. COL. MEHAR LITTLE ANGELS SR. SEC. SCHOOL**  
**HOLIDAYS HOMEWORK**  
**CLASS XI SCIENCE STREAM (2024-2025)**

**ENGLISH**

**Q1. PROJECT 1** - Choose any one of the two topics:

**TOPIC: A Photograph (poem)**

Cover the following aspects:

1. Cover page – title of the project
2. School details and details of the students
3. Statement of purpose/Objectives/Goals
4. Acknowledgement
5. Certificate of completion under the guidance of the teacher
6. About the poet (with photograph)
7. Poem (paste related pictures)
8. Summary
9. Theme
10. Poetic devices
11. Describe your relationship with your mother. (paste the related photographs)

OR

**TOPIC: The Portrait of a Lady**

1. Cover page – title of the project
2. School details and details of the students
3. Statement of purpose/Objectives/Goals
4. Acknowledgement
5. Certificate of completion under the guidance of the teacher
6. About the author (with photograph)
7. Summary
8. Theme
9. The most interesting aspect of relationship between the author and his grandmother.
10. Describe your relationship with your grandmother/grandfather. (paste the related photographs)

**Q2.PROJECT 2.INTERVIEW BASED RESEARCH PROJECT WORK**

**TOPIC:** The effects of Social media on the life of different aged people

Follow the given guidelines:

1. Conduct interviews of different people (children, teenagers, adults, parents and grandparents)
2. Prepare a questionnaire. You may include the following questions-
  - Name
  - Age
  - Gender
  - Educational qualification
  - What do you mean by social media?
  - What changes you feel are there in society or in your life due to Social media?
  - What is the most popular social media platform?
  - How much time do you spend on social media per day?
  - What's the best time to post on social media?
  - How often should you post on social media?
  - How social media can harm or benefit people?
  - (add more questions accordingly)
3. Separate pages to be made for each interview.
4. Compile all the interviews and write a Report presenting the whole view in 500 - 500 words

The Project-Portfolio must include the following:

- Cover page, with title of project, school details/details of students.
- Statement of purpose/objectives/goals
- Certificate of completion under the guidance of the teacher.
- Action plan for the completion of assigned tasks.
- Materials such as questionnaire for interview, survey-reports and other material evidence of learning progress and academic accomplishment.
- The 400-500 words Report.
- Photographs that capture the positive learning experiences.
- List of resources/bibliography.
- Viva will also be taken on the research based project.
- This project and viva comprises of 10 marks for the Internal assessment.

Instructions to be followed:

- All the work should be done on A4 sheets.
- Both the projects are COMPULSORY for everyone.

### HOME-SCIENCE

Complete Assignment 1 to 4.

### PHYSICAL EDUCATION

#### **PROJECT WORK**

Prepare project file as per the latest CBSE norms.

Practical-1: Fitness tests administration. (SAI Khelo India Test)

Practical-2: Procedure for Asanas, Benefits & Contraindication for any two Asanas for each lifestyle disease.

Practical-3: Anyone one IOA recognized Sport/Game of choice. Labelled diagram of Field & Equipment. Also mention its Rules, Terminologies & Skills.

### MATHEMATICS

I. Make a portfolio based on **LATEST MATHEMATICIANS AND THEIR CONTRIBUTION** in 6-8 colourful pages.

II. Make a beautiful A-4 size cover page based on mathematics shapes.

III. Do any 5 activities from mathematics lab manual.

IV. Do following assignment in rolled sheets.

**Note:** Submit above work in a *clear bag* after vacation mentioning your roll number, name, class and section.

#### **ASSIGNMENT**

1. Write down the all possible proper subsets of the set  $\{1, [2]\}$ .

2. In a group of students, 225 students know French, 100 know Spanish and 45 know both. Each student knows either French or Spanish. How many students there in the group?

3. If A and B are two sets and U is the universal of sets that:  $(U) = 1000, n(A) = 300, n(B) = 300, n(A \cap B) = 200$ , find  $n(A' \cap B')$ .

4. A and B are two sets such that  $n(A-B) = 14+x, n(B-A) = 3x, n(A \cap B) = x$ . Draw a venn diagram to illustrate this information. If  $n(A) = n(B)$ , Find

(i) the value of x.

(ii)  $n(A \cup B)$ .

5. Write short note on the following functions and draw their graph:

a- Odd function

b- Even function

c- Exponential function

d- Logarithmic function

e- Greatest integer function

f- Signum function

## **BIOLOGY**

- 1- Prepare Investigatory Project file as per latest CBSE norms.
- 2- Complete class Register and practice the diagrams of taught chapters.
- 3- Complete Practical file.
- 4- Revise Ch.1- The Living World and Ch. 2 – Biological classification)

## **CHEMISTRY**

1. Do all intext and exercise questions of Chapter 1.
2. Make short notes of this chapter (Max 2- 3 Pages).
3. Also solve DPP 1, 2 and 3.
4. Complete the practical work (Experiment no. 1-13) in chemistry practical notebook from the pdf file.

## **PHYSICS**

1. Complete practical file work and Auxiliary copy for following four practicals.  
Experiment No.1: To measure the diameter of a small spherical/cylindrical body and to measure internal diameter and depth of a given beaker/calorimeter using Vernier Calipers and hence find its volume.  
Experiment No .2: To measure the diameter of a given wire and thickness of a given sheet using screw gauge.  
Experiment No .3: To find the weight of a given body using parallelogram law of vectors.  
Experiment No .4: To study the relationship between force of limiting friction and normal reaction and to find the co- efficient of friction between a block and a horizontal surface.
2. Complete Activity file with following 3 activities.  
(a) To measure the force of limiting friction for rolling of a roller on a horizontal plane.  
(b) To study the variation in range of a projectile with angle of projection.  
(c) To study dissipation of energy of a simple pendulum by plotting a graph between square of amplitude and time.
3. Complete classwork copy.
4. Do all the numericals done in class in Homework copy separately.

## **COMPUTER SCIENCE**

COMPLETE THE FOLLOWING QUESTIONS IN COMPUTER SCIENCE REGISTER.

- Q1. What is the function of CPU in a computer system? What are its subunits?
- Q2. What functions are performed by the control unit? Can we call it the control centre of computer system? Why?
- Q3. What functions are performed by the ALU? Is it an independent unit? If not, which unit does ALU work in coordination with?
- Q4. Distinguish between CPU and ALU.
- Q5. What is the function of output unit in a computer system? Give examples of some output devices.
- Q6. What role does memory play in the functioning of computer system?
- Q7. Define each of the following: (a) byte (b) kilobyte (c) megabyte (d) gigabyte (e) terabyte.
- Q8. What is the meaning of the term volatile primary memory? What can be done to overcome the problems of volatility?
- Q9. Distinguish between internal and external memory.
- Q10. What is the role of memory in a computer functioning? What types of memory does the computer work with?
- Q11. What are RAM and ROM? How are they alike? How are they different? What are EEROM, PROM and EPROM?

Q12. What is system software? What role does it play in the functioning of the computer?

**(Practical Programs)**

1. Write Python Program to find the Area and Circumference of a Circle
2. Write Python Program to find the Area of Triangle
3. Write Python Program to obtain P, R and Time and Calculate the Simple Interest.
4. Write Python Program to obtain a number N from the user and check it is multiple of 7 or not.
5. Write Python Program to Find Greater No. among the given three Numbers
6. Write a Python Program to obtain marks of 5 Subjects, calculate the Percentage and print it.
7. Write Python Program for Converting Temperature Celsius into Fahrenheit
8. Write Python Program to Check If the Number Is Positive, Negative, or Zero.
9. Write a Python Program to Calculate the Factorial of a Given Number
10. Write Python Program to Check Number N obtained from the user Is Even or Odd.
11. Write Python Program to Check Number is Prime or Not Using If/Else Statements
12. Write a Python Program to Find the Quotient and Remainder of Two Numbers using if...else
13. Write Python Program to Find the Maximum Number among Given Three Numbers using if...else.
14. Write Python Program to Check if the Year Is Leap Year or Not Using If/Else Statements
15. Write Python Program to obtain weight, height, and Gender, calculate BMI, and print it.