LIONS PUBLIC SCHOOL

I BLOCK PHASE- 1, ASHOK VIHAR
DELHI: 110052
(SESSION: 2026-27)

HOLIDAY HOME WORK

CLASS – XII A (SCIENCE STREAM)

PHYSICS

1. Revise all the chapters done in class.

2. Write practicals in Physics practical file.

3. Prepare project file as discussed in class.

CHEMISTRY

- Do revise ch-1,4,5
- Complete the practical file.
- Prepare the project files on the topic assigned to you.

MATHS

1. Revise all the chapters completed in class.

2. Solve the assignments given in class.

3 .Prepare Math activity file as explained in class.

COMPUTER SCIENCE

1. Revise all the chapters done in class.

2. Prepare a **Project Report** on the selected topic (already chosen by students in class). It can be created individually or in a group of max. 2 students but each student has to submit his own copy of report. Take colored printout of complete project report on A4-size sheets (spiral-binded) and also, keep soft copy of your project ready (to be later submitted in school). All pages of project report should have page numbers at bottom (except cover-page). Complete this project in Summer Vacation i.e. till 30th June 2026. Last date to get your project signed is **5th July 2026**.

Check this link for reference of sample project :

https://www.studocu.com/in/document/dav-senior-secondary-public-school/class-12-computer/merged-document-project-file-computer-science/115839568.

Project report should include the following :

1. Cover page : School Name & logo, Project Title, Subject, Session, Student Details (Rollno, Name, Class), Subject Teacher
2. Certificate
3. Declaration
4. Acknowledgement
5. Index
6. Introduction
7. Objectives/Advantages of the Project
8. Software & Hardware Requirements
9. Front-End & Back-End to be used : Python & MySQL (specify the versions used)
10. Source Code in Python
11. Output
12. MySQL Tables
13. Bibliography

3. Complete and submit hard copy of **Practical file** : 5 sets of SQL commands and 4 programs of Python-SQL connectivity (insert, delete, update & display) as done in class. **Submission Date**: 5th July 2026

4. Revise **Ch – 1 (Python Revision Tour - I) & Ch – 2 (Python Revision Tour - II)** (based on topics already covered in class 11th) and complete the following Assignment Questions in fair CS Notebook.

1.	Given is a Python list declaration : Listofnames=["Aman","Ankit","Ashish","Rajan","Rajat"] Write the output of : print (Listofnames [–1:–4:–1])
2.	Given is a Python string declaration : NAME = "Learning Python is Fun" Write the output of : print(NAME[-5:-10:-1])
3.	Write the output of the code given below : dict1={1:["Rohit",20], 2:["Siya",90]} dict2={1:["Rahul",95], 5:["Rajan",80]} dict1.update(dict2) print(dict1.values( ))
4.	Write the output displayed on execution of the following Python code : LS=["HIMALAYA","NILGIRI","ALASKA","ALPS"] D={} for S in LS : if len(S)%4 == 0: D[S] = len(S) for K in D : print(K,D[K], sep = "#")

<table>
<tr><td></td><td></td></tr>
<tr><td>5.</td><td>Write the Python statement for each of the following tasks using built-in functions/methods only :
(i) To remove the item whose key is "NISHA" from a dictionary named Students. For example,
if the dictionary Students contains {"ANITA":90, "NISHA":76, "ASHA":92}, then after
removal the dictionary should contain{"ANITA":90,"ASHA":92}
(ii) To display the number of occurrences of the substring "is" in a string named message.
For example if the string message contains "This is his book", then the output will be 3.</td></tr>
<tr><td>6.</td><td>A tuple named subject stores the names of different subjects. Write the Python commands to
convert the given tuple to a list and thereafter delete the last element of the list.</td></tr>
<tr><td>7.</td><td>Write the Python statement for each of the following tasks using BUILT-IN functions/methods only :
(i) To delete an element 10 from the list lst.
(ii) To replace the string "This" with "That" in the string str1.</td></tr>
<tr><td>8.</td><td>A dictionary dict2 is copied into the dictionary dict1 such that the common key’s value gets updated. Write the Python commands to do the task and after that empty the dictionary dict1.</td></tr>
<tr><td>9.</td><td>i. Which operator in python has right to left associativity?
ii. Evaluate the following expression and write output: >>> 5//4**3%6+2</td></tr>
<tr><td>10.</td><td>Write a user defined function in Python named showGrades(S) which takes the dictionary S as
an argument. The dictionary, S contains Name:(Eng,Math,Science] as key:value pairs. The
function displays the corresponding grade obtained by the students according to the following grading rules :
<table><tr><th>Average of Eng,Math,Science</th><th>Grade</th></tr><tr><td>>=90</td><td>A</td></tr><tr><td><90 but >=60</td><td>B</td></tr><tr><td><60</td><td>C</td></tr></table>For example : Consider the following dictionary
S={"AMIT":[92,86,64],"NAGMA":[65,42,43],"DAVID":[92,90,88]}
The output should be :
AMIT – B
NAGMA – C
DAVID – A</td></tr>
<tr><td>11.</td><td>What is the difference between Keyword and Identifier? Explain with example.</td></tr>
<tr><td>12.</td><td>What is comment? What are the different ways to give comment? Explain with example.</td></tr>
<tr><td>13.</td><td>Explain and 3 data types of Python with example.</td></tr>
<tr><td>14.</td><td>What is membership operator? Explain with example.</td></tr>
<tr><td>15.</td><td>Explain Runtime Error and Logical Error with example.</td></tr>
<tr><td>16.</td><td>What is type conversion? What are the different method of type conversion? Illustrate with example.</td></tr>
<tr><td>17.</td><td>Explain Mutable and Immutable data type with example.</td></tr>
<tr><td>18.</td><td>WAP to enter any number and check it is Prime Number or not.</td></tr>
</table>

19.	WAP to enter any string and count how many Alphabets, Digits, Symbols, Uppercase letter, Lower case letter, vowels present in the string
20.	WAP to enter two numbers and find GCD and LCM.

ENGLISH

A Project File based on research, surveys, or literary analysis to be prepared selecting any one of the suggested topics :

1. "Fear and Freedom" — A Comparative Study of Deep Water and Aunt Jennifer's Tigers

2. "Dreams, Illusions and Reality" — Going Places and The Third Level

3. "Human Kindness Can Transform Lives" — The Rattrap and Indigo

4. "Voices Against Oppression" — Indigo and Memories of Childhood

5. "Women and Freedom" — Aunt Jennifer's Tigers and Memories of Childhood

6. "Power of Silence and Introspection" — Keeping Quiet and Deep Water

7. "Poverty and Lost Childhood" — Lost Spring and Going Places

8. "Nature as a Source of Healing and Hope" — A Thing of Beauty and Journey to the End of the Earth

9. Pride, Power and Human Weakness — The Tiger King and The Rattrap

10. "The Search for Peace in a Restless World" — Keeping Quiet and The Third Level

11. "Social Inequality in Literature" — Lost Spring and A Roadside Stand

12. "Education as a Tool for Change" — The Last Lesson and Memories of Childhood

13 "Human Relationships and Emotional Bonds" — My Mother at Sixty-Six and The Third Level

14. "Fantasy vs Reality in Human Life" — Going Places and The Tiger King

NOTE:For the structure and further details refer to the instructions provided in the class.

Practice the unseen passages and all the writing skills thoroughly.