**Guideline for the Practical Examination:: Computer Science (083) :: Class XII**

**Duration: 3 hours Total Marks: 30**

1. **Programming in C++ 10**

ONE C++ problem will be given to the students to solve within one hour. The student is supposed to solve the problem and then submit the printout of the source code with the sample outputs. The student should also staple those paper along with C++ Question Slip with the CBSE Answer Book. The source code must have the followings:

* Board Roll Number at the top of the source code as a single line C++ comment
* then the Problem Definition as multiple line C++ comment
* Sufficient comments for internal documentation [Internal Documentation]
* Appropriate naming of the variables [Internal Documentation]
* Proper Indentation of the source code [Indentation]
* Appropriate format of the output [Output presentation]
* Distribution of Marks: Logic - **6** ; Documentation/Indentation – **2** ; Output presentation – **2**;

1. **SQL Commands 05**

A set of queries based on SQL Table(s) will be given to the students to solve within one hour. The student is supposed to do the followings within one hour:

* Create the Table(s) using MySQL
* Insert/Add all data (Rows) as shown in the Question Paper
* Solve the Queries on the Computer
* Check the output
* If the SQL Query Command is correct, write the SQL Command on the Answer Book.
* Staple SQL Question paper with the CBSE Answer Book.

1. **Project Work 05**

All students are supposed to submit ONE printed Project Report based on C++ applications on File Handling. The Project Report must include the followings:

* Cover Page indicating the name of the Project along with the Student’s name and Board Roll Number
* Index with Page Numbers

CERTIFICATE

**TO WHOM SO EVER IT MAY CONCERN**

This is to certify that the Project on XXXXXXX has been designed and developed by YYYYYYY under my guidance and supervision.

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Gautam Sarkar

Head, Computer Department

Modern School, Barakhamba Road

* Acknowledgement by the student
* Certificate from the Teacher
* About the Project and its uses
* Technical Details of the Project
* Source Code of the C++ programme with the following:
* Sufficient comments for internal documentation
* Appropriate naming of the variables
* Proper Indentation of the source code
* Sample Outputs
* Scope of Improvement
* Bibliography

1. **Practical File 06**

All students are supposed to submit ONE printed Practical File based on C++ programming and SQL Commands. The Practical File must include the followings:

ACKNOWLEDGMENT

**TO WHOM SO EVER IT MAY CONCERN**

I convey my sincere gratitude to Mr. Gautam Sarkar for his continuous guidance and help. Without his kind support, the completion of the Project would not have been possible. I also convey my sincere thanks to Ms. Divya Sahdev for her support and guidance.

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Class S7 D, Roll No.

Board Roll No.

* Cover Page indicating the name of the Student and Board Roll Number
* Index with Page Numbers
* Acknowledgement by the student
* Certificate from the Teacher
* Source Code of the C++ Programs with the followings:

**[Minimum 40 No. of Class XII Programs]**

* Problem Definitions as comment at the top of program
* Sufficient comments for internal documentations
* Appropriate naming of the variables
* Proper Indentation of the source codes
* Sample Output of each of the C++ program
* SQL Tables with Queries and Commands which include the followings:

**[Minimum 3 SQL Databases (Multiple Tables) with minimum 5 Queries each]**

* Printouts of the Databases/Tables using MySQL
* Printouts of the SQL Commands with their Outputs using MySQL

1. **Viva Voce 04**

Viva will be asked from syllabus covered in class XI & XII and the project & Programmes developed by the student