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LIST OF PRACTICLES
CLASS XII CS [2020-21]

Practical Marks distribution

S. No.	Area	Marks (Total=30)
1	**Lab Test:** 1. Python program (60% logic + 20% documentation + 20% code quality) 2. Small Python program that sends a SQL query to a database and displays the result. A stub program can be provided.	7 5
2	**Report file:** Minimum 20 Python programs. Out of this at least 4 programs should send SQL commands to a database and retrieve the result	7
3	**Project** (that uses the concepts that have been learnt in Class 11 and 12)	8
4	**Viva voce**	3

- Write program to read list and change its value with is cube
- Write program to read list and change its value with is cube
- Write program to read list and change its value with is square if it is odd and with cube if it is even.
- Read a text file and display each word
- Read a text file and count specific word in file.
- Read a text file and count number of "." in file.
- Read a text file and count word which starts with vowel.
- Read a text file and print the word which starts with vowel.

- Read a text file line by line and display each word separated by a #.

- Read a text file and display the number of vowels/ consonants/ uppercase/ lowercase characters in the file.

- Create a binary file with name and roll number. Search for a given roll number and display the name, if not found display appropriate message.

- Create a binary file with roll number, name and marks. Input a roll number and update the marks.

- Write program to save records and read records of a student using list in a binary file.

- Write program to save records and read records of a student using list in a CSV file.

- Write program to read a pickle file and display a specific record of a student whose roll no is provided.

- Write program to read a CSV file and display a specific record of a student whose roll no is provided.

- Remove all the lines that contain the character `a' in a file and write it to another file.

- Write a random number generator that generates random numbers between 1 and 6 (simulates a dice).

- Write a Python program to implement a stack and queue using a list data-structure.

- Take a sample of ten phishing e-mails (or any text file) and find most commonly occurring word(s)

- Write program to insert data in a mySQL table from Python interface

- Write program to display all records of mySQL table from Python interface

- Write program to display specific record based on criteria given from mySQL table using Python interface

- Write program to update specific record based on criteria given from mySQL table using Python interface

SQL

Create a student table and insert data. Implement the following SQL commands on the student table:

ALTER table to add new attributes / modify data type / drop attribute

UPDATE table to modify data

ORDER By to display data in ascending / descending order

DELETE to remove tuple(s)

GROUP BY and find the min, max, sum, count and average

Using join condition in SQL (emp and dept tables)

NOTE : So many queries will be performed