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| **S. No.** | **Area** | **Particulars** | **Total Marks 30** |
| 1 | 20 Python Programs  (60% logic+20% documentation + 20% Code quality | 2 Questions in Exam. For 12 Marks | 12 Marks |
| 2 | Report File – 20 Programs Min | Practical Record | 7 Marks |
| 3 | Viva Voice | On practical Record | 3 Marks |
| 4 | Project Work | Based on Concepts Learns | 8 Marks |
|  |  | **TOTAL** | **30 Marks** |

**XI – CS PRACTICAL AND SOLTIONS 2020-21**

**As Per CBSE Revised Syllabus**

1. Input a welcome message and display it.
2. Input two numbers and display the larger / smaller number.
3. Input three numbers and display the largest / smallest number.
4. Given two integers x and n, compute 𝑥n.
5. Write a program to input the value of x and n and print the sum of the

following series:

1. 1.x0+x1+x2+x3 …………..xn
2. 1.x0-x1+x2-x3+x4………..xn
3. Determine whether a number is a :
4. **perfect number** ( [positive integer](https://en.wikipedia.org/wiki/Positive_integer) that is equal to the sum of its positive [divisors](https://en.wikipedia.org/wiki/Divisor), excluding the number itself. For instance, 6 has divisors 1, 2 and 3 (excluding itself), and 1 + 2 + 3 = 6, so 6 is a perfect number.) ,
5. an Armstrong number or (153= 13+53+33= 1+125+27=153)
6. apalindrome. (5335 = 5335 , 1001=1001, 189≠981)
7. Input a number and check if the number is a prime or composite number.
8. Display the first nterms of a Fibonacci series.
9. Compute the greatest common divisor and least common multiple of twointegers.
10. Count and display the number of vowels, consonants, uppercase, lowercasecharacters in string.
11. Input a string and determine whether it is a palindrome or not; convert thecase of characters in a string.
12. Find the largest/smallest number in a list/tuple
13. Input a list of numbers and swap elements at the even location with the elements at the odd location.
14. Input a list/tuple of elements, search for a given element in the list/tuple.
15. Input a list of numbers and test if a number is equal to the sum of the cubes ofits digits. (Same as arm strong ) – 6 b
16. Create a dictionary with the roll number, name and marks of n students in aclass and display the names of students who have marks above 75.
17. Write a Program to Print the following pattern

\* 1 1# 1

\*\* 12 1#2# 12

\*\*\* 123 1#2#3# 123

\*\*\*\* 1234 1#2#3#4# 1234

\*\*\*\*\* 12345 1 #2#3#4#5# 12345

1. Write a program to store makrs of students in two different lists find whether they are identical or not
2. Write a program to count frequency of a character in a string
3. Write a program for number guessing game and give 3 chance to guess the randomly generate number between 1,100