ST. JOSEPH STUDY CENTRE

12ᵗʰ STD: Mid Term Test-1 **COMPUTER SCIENCE** **Timing: 1 Hr 30 mins / Total Marks: 50**

I. Answer any 5 of the following questions: **[5 x 2 = 10]**

1. Differentiate interface and implementation

2. What is a Tuple? Give an example

3. What is mapping?

4. What is an Algorithm?

5.   Define Pseudo code.

6. What are the different operators that can be used in Python?

II. Answer any 5 of the following questions: **[5 x 3 = 15]**

7. Why strlen is called pure function?

8. Identify Which of the following are List, Tuple and class ?

    (a) arr [1, 2, 34]   (b) arr (1, 2, 34)   (c) student [rno, name, mark]

    (d) day= ('sun', 'mon', 'tue', 'wed')   (e) x= [2, 5, 6.5, [5, 6], 8.2]   (f) employee [eno, ename, esal, eaddress]

9. Define Enclosed scope with an example.

10. What are the factors that influence time and space complexity.

11. Write a note on Asymptotic notation

12. What are the assignment operators that can be used in Python?

III. Answer any 5 of the following questions: **[5 x 5 = 25]**

13. Explain with example Pure and impure functions.

14. How will you facilitate data abstraction? Explain it with suitable example.

15. Write any Five Characteristics of Modules.

16. What is Binary search? Discuss with example.

17. Explain the Bubble sort algorithm with example.

18. Explain input() and print() functions with examples

---ALL THE BEST---

Test should be written under the supervision of your parents and get the answer paper signed from them.

No corrections should be made after the test timings. We expect your honesty.

Test Papers have to be submitted after the completion of all the 4 tests.

Submission Date of Test Papers: 27ᵗʰ July, 28ᵗʰ July, 29ᵗʰ July   Timings: 9.30 AM – 1.00 PM / 5 PM- 8 PM