



ST. JOSEPH STUDY CENTRE

12th STD: Half Yearly Exam

COMPUTER SCIENCE

Time: 2 Hrs 30 Mins / Total Marks: 70

I. Answer any 10 of the following questions:

[10 x 2 = 20]

1. Differentiate interface and implementations?
2. What is a Tuple? Give an example.
3. How Python represents the private and protected Access specifiers?
4. What is Sorting?
5. What is searching? Write its types.
6. What is a literal? Explain the types of literals?
7. Write is the syntax of if..else statement
8. How to set the limit for recursive function? Give an example.
9. How will you delete a string in Python?
10. What will be the value of x in following python code?

```
List1=[2,4,6[1,3,5]]
```

```
X=len(List1)
```

11. Differentiate del with remove() function of List.
12. What is instantiation?

II. Answer any 5 of the following questions:

[5 x 3 = 15]

13. Write a class with two private class variables and print the sum using a method.
14. Write a Python code to check whether a given year is leap year or not.
15. Write a note on Asymptotic notation.
16. 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]

17. Define Enclosed scope with an example
18. Write a short about the followings with suitable example:

(a) Capitalize()

(b) swapcase()

III. Answer any 7 of the following questions:

[7 x 5 = 35]

19. What are called Parameters and write a note on (i) Parameter without Type (ii) Parameter with Type
20. What is a List? Why List can be called as Pairs. Explain with suitable example
21. Explain the types of scopes for variable or LEGB rule with example.
22. Explain the Bubble sort algorithm with example.
23. Discuss in detail about Tokens in Python
24. Write a detail note on for loop
25. Explain recursive function with an example.
26. Explain about string operators in python with suitable example.
27. What is nested tuple? Explain with an example

-----ALL THE BEST-----

70 marks will be converted to 100 marks

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: 6th January, 7th January, 8th January

Timings: 9.30 AM – 12.30 PM / 5 PM- 8.30 PM