# 12<sup>th</sup> Computer Science

# FAQ

(Frequently Asked Questions)

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### **Multiple Choice Questions**

1.	. The function which will give exact (Mar-2020)	esult when	same arguments a	re passed are called			
	(a) Pure functions	(b) In	npure functions				
	(c) Partial functions		ynamic functions				
2	. A sequence of immutable objects i		•				
	(a) Derived data			(d) Tuple			
2	. Which of the following members o	• •					
J.	(Mar-2020)	i a ciass cari	be nanaled only if	om within the class:			
	(a) Public members	(b) Private	members				
	(b) (c) Protected members (d) Secured members						
4.	Two main measures for the efficiency of an algorithm are (Mar-2020)						
	(a) Data and space (b) Processor and memory						
	(b) Complexity and capacity (d) Time and space						
5.	. Expand IDLE : (Mar-2020)						
	(a) Integrated Design Learning Environment (b) Insert Development Learning						
	Environment						
	(b) Integrated Develop Learning Environment (d) Integrated Development Learning						
	Environment						
6.	What is the output of the following snippet? (Mar-2020)						
	for i in range(2,10,2):	70					
	print(i,end="")						
	(a) 8 6 4 2 (b) 2 4	6810	(c) 2 4 6 8	(d) 2 4 6			
7.	. Evaluate the following function and	d write the d	output. 1. (Mar	-2020)			
	x=14.4						
	print(math.floor(x))						
	(a) 13 (b) 14	(c) 15	(d) 14.3				
8.	What will be the output of the following code? (Mar-2020)						
	str="NEW DELHI"						
	str[3]="-"						
		-DELHI	(c) NEW DELHI	(d) NEW-ELHI			
	Ans: Errror	_ ==	(3)	(5)			
9.	The keys in Python dictionary is specified by 1. (Mar-2020)						
	•	-					
	(a): (b)- (c):	(d) +					

10.What symbol is used for SELECT statement? (Mar-2020)
(a) $\Omega$ (b) $\sigma$ (c) $\Pi$ (d) $x$
11.A CSV file is also known as a : 1. (Mar-2020)
(a) Random File (b) String File (c) 3D File (d) Flat File
12.A framework for interfacing Python and C++ is : 1. (Mar-2020)
(a) Cytpes (b) Boost (c) SWIG (d) Cython
13. Which of the following is an organized collection of data? 1. (Mar-2020)
(a) Records (b) Information (c) DBMS (d) Database
14. Which is the basic building block of computer programs? (Sep-2020)
(a) Argument (b) Parameter (c) Subroutine (d) Interface
15. Which functions build the abstract data type? (Sep-2020)
(a) Constructors (b) Data (c) List (d) Tuple
16. The process of binding a variable name with an object is called: (Sep-2020)
(a) Scope (b) Mapping (c) Namespaces (d) Memory
17. Which one of the following is not a factor to measure the execution time of an algorithm?
(Sep-2020)
(a) Speed of the machine (b) Operating system
(b) Programming language used (d) Selection
18. Which key is pressed to execute Python Script? (Sep-2020)
(a) F5 (b) F2 (c) F1 (d) F3
19. Which statement is used to skip the remaining part of the loop and start with next
iteration? (Sep-2020)
(a) break (b) pass (c) continue (d) null
20. Which of the following keyword is used to begin the function block? (Sep-2020)
(a) define (b) def (c) finally (d) for
21.In Python, which operator is used to display a string in multiple number of times? (Sep-
2020)
(a) * (multiplication) (b) + (addition) (c) - (subtraction) (d) / (division)
22.Marks = [20, 40, 60, 80, 100] (Sep-2020)
print(Marks[-2])
What will be the output?
(a)60 (b) 100 (c) 40 <b>(d) 80</b>
23.In Python, which of the following class declaration is correct? (Sep-2020)
(a) classclass_name : (b) class class_name<>
(c) class class_name (d) class class_name[]
24.The Relational Database model was first proposed by : (Sep-2020)
(a) C.D. Darween (b) Chris Date (c) E.F. Codd (d) Hugh Darween
25. Which is a Data Control Language command in SQL? (Sep-2020)
(a) Alter (b) Grant (c) Truncate (d) Commit
26.CSV is expanded as : (Sep-2020)
(a) Comma Separated Values (b) Condition Separated Values
(b) Comma Special Values (d) Condition Special Values

- 43. Which of the following is a distinct Syntactic block? (May-2022)
  - (a) **Definition** (b) Subroutines (c) Modules (d) Function
- 44. Which of the following will retrieve information from the data type? (May-2022)
  - (a) Recursive (b) Constructors (c) Nested (d) Selectors
- 45. Which of the following names of variables to object is called: (May-2022)
  - (a) Binding (b) Scope (c) Namespaces (d) Mapping
- 46. The word comes from the name of a Persian mathematician Abu Jafar Mohammed ibn-i Musa al Khowarizmj is called: (Sep-2021, May-2022)
  - (a) Algorithm (b) Flow chart (c) Syntax (d) Flow
- 47. Which Operator is also called as Comparative Operator » (May-2022)
  - (a) Logical Operator (b) Arithmetic Operator
  - (b) Assignment Operator (d) Relational Operator

```
48. 'elif' can be considered to be short form of _____ (May-2022,Jun-2023)
                        (b) nested if (c) if...elif (d) if..else
         (a) else if
49. What will be the output of the following code? (May-2022)
       str1 ="Chennai Schools"
       str1[7]="-"
     (a) Type Error (b) Chennai-Schools
                                               (c) Chennai
                                                                     (d) Chenna-School
50.If List=[17, 23, 41, 10] then, List.append(32) will result: (May-2022)
         (a) [10, 17, 23, 32, 41]
                                           (b) [32, 17, 23, 41, 10]
         (b) (c) [41, 32, 23, 17, 10]
                                           (d) [17, 23, 41, 10, 32]
51. Which of the following method is used as destructor? (May-2022)
         (a) __rem__() (b) __init__() (c) __del__()
                                                              (d) __dest
52.A tuple is also known as: (May-2022)
         (a) Attribute
                         (b) Table
                                     (c) Field
                                                 (d) Row
53. The expansion of CRLF is: (May-2022)
         (a) Control Router and Line Feed (b) Control Return and Line Feed
         (b) Carriage Return and Line Feed (d) Carriage Return and Form Feed
54.A Framework for interfacing Python and C++ is: (May-2022)
                               (b) Ctypes (c) Boost (d) SWIG
         (a) Cython
55. Which of the following is a unit of code that is often defined within a greater structure?
    (Jul-2022)
         (a) Subroutines (b) Function
                                            (c) Files
                                                        (d) Modules
56. Which scope refers to variables defined in current function? (Jul-2022)
         (a) Local Scope (b) Global Scope (c) Module Scope (d) Function Scope
57. Which of the following shortcut is used to create new Python Program? (Jul-2022, Jun-2023)
         (a) Ctrl + C
                               (b) Ctrl + F (c) Cul+B
                                                        (d) Ctrl + N
58. is used to print more than one item on a single line. (Jul-2022)
                                                 (c) Comma (,)
         (a) Semicolon (;) (b) Dollar ($)
                                                                           (d) Colon (:)
59. Which is the most Comfortable loop? (Jul-2022)
         (a) do..while (b) while
                                     (c) for
                                                  (d) if..elif
60. Which of the following keyword is used to Define the function block (Jul-2022)
         (a) define
                               (b) for
                                                 (c) finally
                                                              (d) def
61. What is Stride? (Jul-2022)
         (a) index value of slide operation (b) first argument of slice operation
         (b) second argument of slice operation
                                                        (d) third argument of slice operation:
62. What will be the result of the following Python code? (Jul-2022)
          S = [x ** 2 \text{ for x in range } (5)]
           print (S)
```

(a) [0, 1, 2, 4, 5] (b) [0, 1, 4, 9, 16] (c) [0, 1, 4, 9, 16, 25]

(d) [1, 4, 9, 16, 25]

(a) Memoization

(b) Saving value property

(b) Mapping

(d) Storing value property

78.Let set A={3, 6, 9}, set B={1, 3, 9}. (Mar-2023)

The result of the following snippet Print (set A set B)

(b) {3, 6, 9, 1, 3, 9} (c) {1, 3, 6, 9} (a) {1}

(d) {3,9}

(a) cursor

(c) execute

(d) commit

79. The variables in a function definition are called as: (JUNE-2023) (a) Subroutines (b) Function (c) Definition (d) Parameters 80. Data Containers for mapping names of variables to object is called (JUNE-2023) (a) Scope (b) Mapping (c) Binding (d) Namespaces 81. The two main factors which decide the efficiency of an algorithm are (JUNE-2023) (a) Processor and Memory (b) Complexity and capacity (c) Time and Space (d) Data and space 82. The function which is called anonymous un-named function: (May-2022, JUNE-2023) (c) Function (d) Define (b) Recursion (a) Lambda 83. Is used as placeholders or replacement fields which get replaced along with format() function. (JUN-2023) (b) <> (d) ^^ (a){} (c) ++84. Pick odd one in connection with collection data type. (JUNE-2023) (b) Tuple (c) Dictionary (a) List (d) Loop 85.A table is known as (Jul-2022, JUNE-2023) (b) attribute (c) relation (d) entity (a) tuple 86. The Command used to skip a row in a CSV file: (JUNE-2023) (c) omit() (d) bounce() (a) next() (b) skip() 87. The most commonly used statement in SQL is: (JUNE-2023)

(b) select

# 2 mark Questions

- 1. What is a Pair? Give an example. (March–2020, Jun-2023)
- 2. What do you mean by Namespaces? (March–2020, Jul-2022)
- 3. What is an Algorithm? (March–2020)
- 4. Write categories of SQL commands. (March–2020)
- 5. Write the expansion of : (i) SWIG (ii) MinGW(March–2020)
- 6. What is the advantage of declaring a column as "INTEGER PRIMARY KEY"? (March-2020)
- 7. List the general types of data visualization. (March–2020,Mar-2023)
- 8. What will be the output of the given Python program? (March–2020)
- 9. List the characteristics of interface. (Sep-2020)
- 10. What are the characteristics of modules? (Sep-2020)
- 11. What are tokens in Python? List the types. (Sep-2020, Jun-2023)
- 12. What is the use of replace() in Python? Write the general format of replace(). (Sep-2020)
- 13. Write the syntax to create list with suitable example in Python. (Sep-2020)
- 14. What are the advantages of DBMS? (Sep-2020)
- 15. What are the two ways to read a CSV file in Python? (Sep-2020)
- 16.List the types of visualizations in Matplotlib. (Sep-2020)
- 17. What are the advantages of user-defined functions? (Sep-2020)
- 18. Define Function with respect to programming language. (Sep-2021)
- 19. What are the different modes that can be used to test Python Program? (Sep-2021)
- 20. Write note on break statement. (Sep-2021)
- 21. Write the different types of function. (Sep-2021)
- 22. What is String? (Sep-2021)
- 23. Write advantages of DBMS. (Sep-2021)
- 24. What is the theoretical difference between scripting language and other programming language? (Sep-2021)
- 25. What is list in Python? (Sep-2021)
- 26. What is Abstract Data Type? (May-2022)
- 27. What is Mapping? (May- 2022)
- 28. What is Searching? Write its types. (May- 2022)
- 29. What are the different modes that can be used to test Python Program? (May- 2022)
- 30. Write the syntax of creating a tuple with 'n' number of elements. (May- 2022)
- 31. Differentiate unique constraint and primary key constraint. (May-2022)
- 32. What is CSV file? (Sep-2021, May-2022)
- 33. Define Data Visualization. (May- 2022)
- 34. Write the syntax of getopt.getopt method. (May- 2022)
- 35. Differentiate constructor and selector. . (July-2022)

- 38. Write note on range () in loop. . (Mar-2020, July-2022, Mar-2023)
- 40. What is meant by scope of variables? Mention its types. . (July-2022)
- 41. What is set in Python? . (July-2022, Jun-2023)
- 42. Mention few examples of Database Management System. . (July-2022)
- 43. Differentiate compiler and interpreter. . (July-2022)
- 44. Which method is used to fetch all rows from the database table? . (July-2022)
- 45. What will be the output of the following code? . (July-2022)

  Strl = "School"

  print (str1\*3)
- 46. What is a Tuple? Give an example.
- 47. What is a scope?
- 48. How will you delete a string in Python?
- 49. Write note on range () in loop.
- 50. What is class?
- 51. What is Data Manipulation Language?
- 52. Mention the default modes of the File.
- 53. List the general types of data visualization.
- 54. What will be output of the following Python code? Squares=[x\*\*2 for x in range(1,11)] print (squares)
- 55. What is a Tuple? Give an example. (MAR-2023)
- 56. What is a scope? (MAR-2023)
- 57. How will you delete a string in Python? (MAR-2023)
- 58. What is class? (MAR-2023)
- 59. What is Data Manipulation Language? (MAR–2023)
- 60. Mention the default modes of the File. (MAR–2023)
- 61. What will be output of the following Python code? (MAR-2023)
- 62. Differentiate Interface and Implementation. (JUNE-2023)
- 63. List the control structures in Python. (JUNE-2023)
- 64. What are the main advantages of function? (JUNE-2023)
- 65. What is data consistency? (JUNE-2023)
- 66. Write the difference between table constraint and column constraint. (JUNE-2023)
- 67. Write notes on: (i) MAX () function (ii) MIN () function (JUNE-2023)

### 3 Mark Questions

- 1. Differentiate pure and impure function. (Mar-2020)
- 2. Explain Ternary operator with example. (Mar-2020)
- 3. How recursive function works? (Mar-2020)
- 4. What will be the output of the following code? (Mar-2020)

```
list=[3**x for x in range(5)]
print(list)
```

- 5. Write short notes on TCL commands in SQL. (Mar-2020)
- 6. What is the difference between reader() and DictReader() function? (Mar-2020)
- 7. Write the output of the following program. (Mar-2020)

```
class Hosting:
def__init__(self, name):
self. _name=name
def display(self):
print(" Welcome to", self. name)
obj=Hosting("Python Programming")
obj.display()
```

- 8. What is a selector? (Sep-2020)
- 9. What are the parts of a program? (Sep-2020)
- 10. Write note on Dynamic Programming. (Sep-2020)
- 11. Write the syntax of Nested if..elif...else statement with example. (Sep-2020)
- 12. Write short note on public and private data members in Python. (Sep-2020)
- 13. Write note on types of DBMS users. (Sep-2020)
- 14. Write short note on DELETE, TRUNCATE, DROP command in SQL. (Sep-2020)
- 15. What are the applications of scripting languages? (Sep-2020)
- 16. Write short note on: (Sep-2020)
  - (a) GROUP BY (b) ORDER BY clause in SQL
- 17. What will be the output of the given Python program? (Sep-2020)

```
a=""Computer"
b="Science"
x=a[:4]+b[len(b)-3:]
print(x)
```

```
18. Define Abstraction. What is abstract data type? (Sep-2021)
19. Define Local scope with an example. (Sep-2021)
20. What is an Algorithm? List any three characteristics of an algorithm.
                                                           (Sep-2021, May-2022)
21. What are the advantages of Tuples over a list (Sep-2021)
22. What are class members? How do you define it? (Sep-2021)
23. Write any three DDL commands. (Sep-2021)
24. What is the difference between the write mode and append mode (Sep-2021)
25. Differentiate Python and C++. (Sep-2021, Jun-2023)
26. List the difference between break and continue statements. (May-2022)
27. Write the rules of local variable. (May-2022)
28. What is sys.argv? (May-2022)
29. What is the use of 'where clause'? Give a Python statement using the where clause.
   (May-2022)
30. Write any three uses of data visualization. (May-2022)
31. Write short notes on Arithmetic Operator with example. (Sep-2021, May-2022)
32. Write a SQL statement using DISTINCT keyword. (May-2022)
33. Write a program to get the following output: (May-2022)
       Α
       ΑВ
       A B C
       ABCD
       ABCDE
34. Write the syntax of 'while' loop. (July-2022, Mar-2023)
35. Write the basic rules for global keyword in python. (July-2022)
36. Identify the module, operator, definition name for the following: (July-2022)
         welcome.display()
37. Mention the difference between fetchone () and fetchmany ().
                                               (Mar-2020, July-2022, Mar-2023)
38. Write a python program to modify an existing file. (July-2022)
39. Write a SQL statement to modify the student table structure by adding a new field.
   (July-2022)
40. Write a note on open () function of Python. What are the differences between its two
   methods? (July-2022)
41. List the general types of data visualization. (July-2022)
42. What is the output of the following program? (July-2022)
     class Greeting:
     def _ init _ (sell, name) :
     self. name = name
```

```
www.Padasalai.Net
                                            www.Trb Tnpsc.com13
      def display (self):
      print ("Good Morning", self. name)
      obj = Greeting("Bindu Madhavan")
      obj.display()
 43. Mention the characteristics of Interface. (Mar-2023)
 44. What do you understand by Dynamic Programming? (Mar-2023)
 45. Explain Ternary operator with an example. (Mar-2023)
 46. Differentiate - ceil() and floor () function. (Mar-2023)
 47. What is the difference between csvreader() method and DictReader () class? (Mar-2023)
 48. Write a Python program to display the given pattern. (Mar-2023)
         COMPUTER
         COMPUTE
         COMPUT
         COMPU
         COMP
         COM
         CO
         C
 49. Write about the steps of Python program executing C++ program using control
    statement. (Mar-2023)
 50. Write any three characteristics of modules. (JUNE-2023)
 51. Write a note on Asymptotic notation. (Mar-2020, JUNE-2023)
 52. What are string literals? (JUNE-2023)
 53. Write a note on if..else Structure. (JUNE-2023)
 54. Write about composition in functions with an example. (JUNE-2023)
 55. What are the differences between List and Dictionary? (JUNE-2023)
 56. What is the role of DBA? (JUNE-2023)
```

57. Write a Python code to check whether a given year is leap year or not. (JUNE-2023)

(v) pow(

## 5 mark Questions

- 1. Discuss about Linear Search algorithm with example. (Mar-2020)
- 2. Explain input() and print() functions with example. (Mar-2020)
- 3. Write a program to display all 3 digit even numbers. (Mar-2020)
- 4. Write the output for the following program. (Mar-2020)

```
i=1
while(i<=6):
for j in range(1, i):
print(j,end="\t)
print(end="\n)
i+=1</pre>
```

5. Explain the following built-in functions: (Mar-2020)

```
(i)id() (ii) chr() (iii) round() (iv) type()
```

6. Write the output for the following Python commands: (Mar-2020)

```
str1="Welcome to Python"
(i)print(str1)
(ii) print(str1[11:17])
(iii) print(str1[11:17:2])
(iv) print(str1[::4])
(v) print(str1[::—4])
```

7. How to define constructor and destructor in Python? Explain with example.

(Mar-2020, Sep-2020)

- 8. Explain the different set operations supported by Python with suitable example. (Mar-2020)
- 9. Differentiate DBMS and RDBMS. (Mar-2020)
- 10. Write a SQL statement to create a table for employee having any five fields and Create a table constraint for the employee table. (Mar-2020)
- 11. Write the features of Python over C++.( Mar-2020)
- 12. Explain the types of variable scope. (Sep-2020)
- 13. Explain data types in Python with suitable example. (Sep-2020)

x=0

14. Write the output for the following Python programs. (Sep-2020)

```
(i) j=15
              while(j>=10):
              print(j, end="\t")
             j=i-1
              else:
              print("\n End of the loop")
              (ii) k=5
              while(k < = 9):
              fori in range(1, k):
              print(i, end='\t')
              print(end="\n")
              k=k+1
15. Write about the following Python string functions. (Sep-2020)
      (i)capitalize()
                          (ii) swapcase()
                                              (iii) center()
                                                                  (iv) islower()
                                                                                     (v) title()
16. Debug the following Python program to get the given output: (Sep-2020)
Output:
    Inside add() function x value is: 10
    In main x value is: 10.
    Program:
    define add:
        globally x:
        x = x + 10
        print("Inside add() function X value 15 :
        add
        print("In main x value is 2)
17. What is set in Python? Explain the following set operations with suitable example. (Sep-
   2020)
                   (ii) Intersection
      (i)Union
                                              (iii) Difference
18. Explain the types of data model. (Sep-2020)
19. Explain the types of constraints in SQL with suitable example. (Sep-2020)
20.List the differences between CSV and excel sheets (XLS) file. (Sep-2020)
21. What is Binary Search? Discuss with example. (Sep-2021)
22. Discuss in detail about Tokens in Python. (Sep-2021)
23. Write a detail note on for loop. (Sep-2021)
24. Explain the scope of variables with an example. (Sep-2020, Sep-2021, Jun-2023)
25. What is slicing? (Sep-2021)
```

26. What is output for the following Python Commands? (Sep-2021)

str = "Thinking with Python"
(i)print(str[::3]) (ii) print(str[9:13])

- 27. What is the purpose of range()? Explain with an example. (Sep-2021)
- 28. Explain the characteristics of DBMS. (Sep-2021)
- 29. Write the different types of constraints and their functions. (Sep-2020, Sep-2021, Jul-2022)
- 30. Write the Python script to display all the records of the following table using fetchmany().(Sep-2021)

Icode	ItemName	Rate
1003	Scanner	10500
1004	Speaker	3000
1005	Printer	8000
1008	Monitor	15000
1010	Mouse	700

- 31. Write any five key differences between Histogram and Bar Graph. (Sep-2021)
- 32. What are called Parameters? (May-2022)
- 33. Write a note on: Parameter without type and Parameter with type. (May-2022)
- 34. Explain LEGB rule with example. (May-2022)
- 35. Explain Bubble Sort Algorithm with example. (May-2022)
- 36. Construct the following SQL statements in the student table, (May-2022)
  - (i)SELECT statement using GROUP BY Clause
  - (ii) SELECT statement using ORDER BY Clause
- 37. Explain input() and output() functions with example. (Mar-2021, May-2022, Jun-2022)
- 38. Explain the purpose of the following functions: (May-2022)
  - (i)plt.xlabel (ii) plt.ylabel (iii) plt.title (iv) plt.legend() (v) plt.show()
- 39. Write a detail note on for loop. (Sep-2021, May-2022, Jul-2022)
- 40. Differentiate Excel file and CSV file. (Sep-2020, May-2022)
- 41. Explain the different set operations supported by Python with suitable example. (May-2022)
- 42. Explain each word of the following command. (May-2022)

Python <filename.py> — <i><C++ filename without cpp extension

- 43. Discuss about linear search algorithm. (Mar-2020, July-2022, Mar-2023)
- 44. Explain the different types of function with an example. (July-2022)
- 45. What is nested tuple? Explain with an example. (July-2022)
- 46. Explain about SQLite and the steps to be used. (July-2022)
- 47. Explain the different types of operators used in Python. (July-2022)
- 48. Explain the characteristics of DBMS. (Sep-2021, July-2022, Jun-2023)
- 49. Write the different methods to read a file in Python. (July-2022)
- 50. What is the purpose of range ()? Explain with an example. (Sep-2021, July-2022)

- 51. What is a List? Why List, can be called as pairs? Explain with suitable example. (Mar-2023)
- 52. Discuss in details about Token in Python. (Sep-2021, Mar-2023)
- 53. Explain the following built-in function. (Mar-2023)
  - (i)id() (ii) chr() (iii) round() (iv) type (v) pow()
- 54. What is Nested Tuple? Explain with an example. (Jul-2022, Mar-2023)
- 55. Explain the different types of relationship mapping. (Mar-2023)
- 56. Write the syntax for getopt() and explain its arguments and return values. (Mar-2023)
- 57. Differentiate DBMS and RDBMS. (Mar-2020, Mar-2023)
- 58. Explain about differences between Histogram and Bar Graph. (Sep-2021, Mar-2023)
- 59. Explain 'continue' statement with an example. (Mar-2023)
- 60. What is Binary Search? Explain with an example. (Sep-2021, JUNE-2023)
- 61. How will you facilitate data abstraction? Explain it with suitable example. (JUNE-2023)
- 62. Explain about string operators in Python with suitable example. (JUNE-2023)
- 63. What are the different ways to insert an element in a list? Explain with suitable example.

(JUNE-2023)

- 64. Explain about SQLite and the steps to be used. (Jul-2022, JUNE-2023)
- 65. Write the different methods to read a file in Python. (Jul-2022, JUNE-2023)
- 66. Write any five features of Python. (JUNE-2023)

Best of Luck