

**MAYILADUTHURAI DISTRICT**

12th Standard  
Computer Science

Date : 14-Feb-23

Exam Time : 03:00:00 Hrs

Reg.No. : 

Total Marks : 70

15 x 1 = 15

**PART-A****CHOOSE THE CORRECT ANSWER**

- 1) The functions which will give exact result when same arguments are passed are called  
(a) Impure functions (b) Partial Functions (c) Dynamic Functions (d) Pure functions
- 2) Which of the following is a compound structure?  
(a) Pair (b) Triplet (c) single (d) quadrat
- 3) Which scope refers to variables defined in current function?  
(a) Local Scope (b) Global scope (c) Module scope (d) Function Scope
- 4) The  $\Theta$  notation in asymptotic evaluation represents  
(a) Base case (b) Average case (c) Worst case (d) NULL case
- 5) The Python prompt indicates that Interpreter is ready to accept instruction.  
(a) >>> (b) <<< (c) # (d) <<
- 6) What is the output of the following snippet?  

```
i=1
while True:
if i%3 ==0:
break
print(i,end="")
i +=1
```

(a) 12 (b) 123 (c) 1234 (d) 124
- 7) Which of the following keyword is used to exit a function block?  
(a) define (b) return (c) finally (d) def
- 8) What is stride?  
(a) index value of slide operation (b) first argument of slice operation  
(c) second argument of slice operation (d) third argument of slice operation
- 9) Let list1=[2,4,6,8,10], then print(List1[-2]) will result in  
(a) 10 (b) 8 (c) 4 (d) 6
- 10) A private class variable is prefixed with  
(a) \_\_ (b) && (c) ## (d) \*\*
- 11) Relational database model was first proposed by  
(a) E F Codd (b) E E Codd (c) E F Cadd (d) E F Codder
- 12) Queries can be generated using  
(a) SELECT (b) ORDER BY (c) MODIFY (d) ALTER
- 13) Which of the following is a string used to terminate lines produced by writer()method of csv module?  
(a) Line Terminator (b) Enter key (c) Form feed (d) Data Terminator
- 14) The most commonly used statement in SQL is  
(a) cursor (b) select (c) execute (d) commit
- 15) To install matplotlib, the following function will be typed in your command prompt. What does “-U”represents?  
Python -m pip install -U pip  
(a) downloading pip to the latest version (b) upgrading pip to the latest version (c) removing pip  
(d) upgrading matplotlib to the latest version

**PART-B**  
**ANSWER ANY SIX OF THE FOLLOWING**  
**Q.NO :24 IS COMPULSORY**

- 16) Define Function with respect to Programming language.
- 17) What is a Tuple? Give an example.
- 18) Define Pseudo code.
- 19) Write short notes on Exponent data?
- 20) Define control structure.
- 21) How will you delete a string in Python?
- 22) Differentiate del with remove( ) function of List.
- 23) Write a query that selects all students whose age is less than 18 in order wise.
- 24) Mention the default modes of the File.

**PART-C**  
**ANSWER ANY SIX OF THE FOLLOWING**  
**Q.NO: 33 IS COMPULSORY**

6 x 3 = 18

- 25) What are the different ways to access the elements of a list. Give example.
- 26) Discuss about Algorithmic complexity and its types.
- 27) Write short notes on Arithmetic operator with examples.
- 28) Write the syntax of while loop.
- 29) Differentiate ceil() and floor() function?
- 30) Write a short about the followings with suitable example:
  - (a) capitalize( )
  - (b) swapcase( )
- 31) What is the difference between Select and Project command?
- 32) Write the use of Savepoint command with an example.
- 33) What is the difference between reader() and DictReader() function?

5 x 5 = 25

**PART-D**  
**ANSWER THE FOLLOWING QUESTIONS**

- 34) a) Explain with an example interface and implementation.  
(OR)
- b) Explain the types of scopes for variable or LEGB rule with example.
- 35) a) What is Binary search? Discuss with example  
(OR)
- b) Discuss in detail about Tokens in Python.
- 36) a) Write a detail note on for loop.  
(OR)
- b) Explain about string operators in python with suitable example.
- 37) a) Explain the different set operations supported by python with suitable example.  
(OR)
- b) Explain the different operators in Relational algebra with suitable examples.
- 38) a) Explain each word of the following command.  
 Python < filename.py > - < i > < C++ filename without cpp extension >  
(OR)
- b) Explain in detail the types of pyplots using Matplotlib.

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