



26-09-2023

Standard 12
COMPUTER SCIENCE
Part - I

Time: 3.00 Hours

Marks: 70

15x1=15**i) Answer all the questions:****ii) Choose the most appropriate answer from the given four alternatives and write the option code and the corresponding answer.**

- 1) Which of the following is a distinct syntactic block?
 - a) Subroutines
 - b) Functions
 - c) Definition
 - d) Modules
- 2) Which of the following allow to name the various parts of a multi - item object?
 - a) Tuples
 - b) Lists
 - c) Classes
 - d) quadrats
- 3) The members that are accessible from within the class and are also available to its sub-classes is called
 - a) Public members
 - b) Secured members
 - c) Private members
 - d) Protected members
- 4) Which of the following is used to describe the worst case of an algorithm?
 - a) Big O
 - b) Big A
 - c) Big θ
 - d) Big Ω
- 5) Which of the following shortcut is used to create new Python program?
 - a) Ctrl + C
 - b) Ctrl + F
 - c) Ctrl + B
 - d) Ctrl + M
- 6) Which statement is generally used as a placeholder?
 - a) Continue
 - b) break
 - c) pass
 - d) goto
- 7) What is output of the following python code?


```
i = 15
While (i<=20):
    print(i, end='\t')
    i + = 2
```

 - a) 15 16 17 18 19 20
 - b) 15 17 19
 - c) 16 18 20
 - d) 15 17 19 20
- 8) Which of the following keyword is used to exit a function block?
 - a) Def
 - b) close
 - c) exit
 - d) return
- 9) What is the output of following python function?


```
import math
print (math.ceil(3.5 + 4.6))
```

 - a) 9
 - b) 8.1
 - c) 8
 - d) 8.0
- 10) Which of the following is used as placeholders or replacement fields which get replaced along with format () function?
 - a) {}
 - b) <>
 - c) + +
 - d) ()
- 11) What is the output of the following python code?


```
a = "Govt Schools"
print(len(a))
```

 - a) Govt Schools
 - b) 11
 - c) 12
 - d) Syntax error
- 12) The keys in python, dictionary is specified by
 - a) +
 - b) =
 - c) :
 - d) ;
- 13) Let List 1 = [2, 4, 6, 8, 10], then print(List1[-4]) will result in
 - a) 4
 - b) 8
 - c) 10
 - d) 6
- 14) Which of the following method is automatically executed when an object is created?
 - a) _obj_
 - b) _init_
 - c) _del_
 - d) _def_
- 15) The process of creating an object is called as:
 - a) Constructor
 - b) Destructor
 - c) Initialize
 - d) Instantiation

Part - II

6x2=12

Answer any six questions. Question no. 24 is compulsory:

- 16) Differentiate Constructors and Selectors.
- 17) What is modular programming?
- 18) What is searching? Write its types.
- 19) What are the different modes that can be used to test Python Program?
- 20) Write a note on Continue Statement?
- 21) Define Global Scope.
- 22) What is slicing?
- 23) How will you create constructor in Python?
- 24) Let setA=(3, 6, 9), setB=(1, 3, 9) then write the output of given snippet
Print(setA | set B)

Part - III

6x3=18

Answer any six questions. Question no. 33 is compulsory:

- 25) Why strelen is called pure function?
- 26) Why access control is required?
- 27) Write about Algorithmic complexity and its types.
- 28) What are string literals? Explain.
- 29) Write the syntax of if ..elif...else statement.
- 30) What are the points to be noted while defining a function?
- 31) What is the use of format() function? Give an example.
- 32) Compare List and Tuples.
- 33) What is the output of the following program?

```
class sample:
    def _init_(self,name)
        self.name=name
    def display(self)
        print("Welcome", self.name)
a=sample('Tamilnadu')
a.display()
```

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Part - IV

5x5=25

Answer all the questions:

- 34) a) Explain with example Pure and impure function
(OR)
b) What is List? Why list can be called as Pairs. Explain with example.
- 35) a) Write the characteristics of Modules.
(OR)
b) Explain the Bubble sort algorithm with example.
- 36) a) Explain input() and print() functions with examples.
(OR)
b) Write a python program to display all 3 digit odd numbers.
- 37) a) Explain the different types of function with an example
(OR)
b) Explain about string operators in python with suitable example
- 38) a) Explain the different set operations supported by python with example.
(OR)
b) Explain constructor and destructors with suitable example.
