

Class: 12Register
Number**FIRST REVISION EXAMINATION-JANUARY-2025**

Time Allowed : 3.00 Hours]

COMPUTER SCIENCE

[Max. Marks : 70

PART - I

Note : i) All the questions.

15X1=15

ii) Choose the most appropriate answer from the given four alternatives and write the option code and the corresponding answer.

- Which of the following are mandatory to write the type annotations in the function definition?
a) {} b) () c) [] d) <>
- The functions which cause side effects to the arguments passed are called
a) impure function b) Partial Functions
c) Dynamic Functions d) Pure functions
- The data type whose representation is known are called
a) Built in datatype b) Derived datatype
c) Concrete datatype d) Abstract datatype
- Which scope refers to variables defined in current function?
a) Local Scope b) Global scope c) Module scope d) Function Scope
- Binary search is also called as
a) Linear search b) Sequential search c) Random search d) Half-interval search
- In dynamic programming, the technique of storing the previously calculated values is called?
a) Saving value property b) Storing value property
c) Memoization d) Mapping
- Expand IDE:
a) Integrated Design Learning Environment b) Insert Development Learning Environment
c) Integrated Develop Learning Environment d) Integrated Development Learning Environment
- Which of the following shortcut is used to create new Python Program?
a) Ctrl + C b) Ctrl + F c) Ctrl + B d) Ctrl + N
- Which statement is generally used as a placeholder?
a) continue b) break c) pass d) goto
- 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
- Which of the following keyword is used to exit a function block?
a) define b) return c) finally d) def
- 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
- The subscript of a string may be:
a) Positive only b) Negative only c) Positive or Negative d) None of these
- Let setA={3,6,9}, setB={1,3,9}. What will be the result of the following snippet?

```
print(setA|setB)
```


a) {3,6,9,1,3,9} b) {3,9} c) {1} d) {1,3,6,9}
- A private class variable is prefixed with
a) _ b) && c) ## d) **

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PART - II

6×2=12

II. Answer any SIX of the following:

16. Differentiate interface and implementation.
17. What is a Pair? Give an example.
18. How Python represents the private and protected Access specifiers?
19. Write the phases of performance evaluation of an algorithm
20. Write short notes on Tokens.
21. Write the output for the following.

```
for word in "Jump Statement":
    if word == "t":
        break
    print (word, end= ' ')
```
22. How to set the limit for recursive function? Give an example.
23. How will you delete a string in Python?
24. What will be the value of x in following python code?

```
List1=[2,4,6[1,3,5]]
x=len(List1)
```

PART - III

6×3=18

III. Answer any SIX of the following:

25. Mention the characteristics of Interface
26. Why access control is required?
27. What are the factors that influence time and space complexity.
28. Write short notes on Escape sequences with examples.
29. List the differences between break and continue statements.
30. What happens when we modify global variable inside the function?
31. What is the use of format()? Give an example.
32. What is the output of the following program?

```
class Greeting:
    def __init__(self, name):
        self.__name = name

    def display(self):
        print("Good Morning ", self.__name)

obj=Greeting('Bindu Madhavan')
obj.display()
```

33. What will be the output of the following code?

```
list = [x**2 for x in range(5)]
print(list)
```

PART - IV

IV. Answer all questions:

5×5=25

34. (a)What is a List? Why List can be called as Pairs. Explain with suitable example. (OR)
- (b)Explain with example Pure and impure functions.
35. (a)Explain the LEGB rule with suitable example. (OR)
- (b)Explain the concept of Dynamic programming with suitable example.
36. (a)Describe in detail the procedure Script mode programming. (OR)
- (b)Write a program to display all 3 digit odd numbers.
37. (a)Explain the different types of function with an example. (OR)
- (b)Explain about constructor and destructor with suitable example.

38. (a) Find the output for the following python snippet.

```
MyList=[21,76,98,21]
```

- | | | |
|------------------------|------------------------------|-------------------------------|
| (i) print(max(MyList)) | (ii) print(sum(MyList)) | (iii) print(MyList.count(12)) |
| (iv) MyList.reverse() | (v) print(MyList.index(98)) | (OR) |

- (b) Find the output for the following python snippet.

```
str1="THIRUKKURAL"
```

- | | | |
|-----------------------------|---------------------------------|---------------------------|
| (i) print(len(str1)) | (ii) print(str1.center(15,'*')) | (iii) print(str1.lower()) |
| (iv) print (str1.islower()) | (v) print (str1.isupper()) | |

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