



NADAR HR.SEC.SCHOOL, RAJAPALAYAM.

COMPUTER SCIENCE – JUNE - 2020



CLASS : 12

Time Allowed : 3.00 Hours

Maximum Marks : 70

PART - I

I . Choose the most appropriate answer from the given four alternatives and Write the option code and the corresponding answer.

15 X 1 = 15

1. Which is the basic building block of computer programs?

(A) Argument	(B) Parameter
(C) Subroutine	(D) Interface
2. Which functions build the abstract data type ?

(A) Constructors	(B) Data
(C) List	(D) Tuple
3. The process of binding a variable name with an object is called:

(A) Scope	(B) Marping
(C) Namespaces	(D) Memory
4. Which one of the following is not a factor to measure the execution time of an algorithm ?

(A) Speed of the machine	(B) Operating system
(C) Programming language used	(D) Selection
5. Which key is pressed to execute Python Script?

(A) F5	(B) F2
(C) F1	(D) F3
6. Which statement is used to skip the remaining part of the loop and start with next iteration ?

(A) break	(B) pass
(C) continue	(D) null
7. Which of the following keyword is used to begin the function block?

(A) define	(B) def
(C) finally	(D) for
8. In Python, which operator is used to display a string in multiple number of times?

(A) * (multiplication)	(B) + (addition)
(C) -(subtraction)	(D) continue
9. Marks = [20, 40, 60, 80, 100]
print(Marks[-2])
What will be the output ?

(A) 60	(B) 100
(C) 40	(D) 80
10. In Python, which of the following class declaration is correct?

(A) class class_name:	(B) class class_name<>
(C) class class_name	(D) class class_name[]
11. The Relational Database model was first proposed by:

(A) C.D. Darween	(B) Chris Date
(C) E.F. Codd	(D) Hugh Darween
12. Which is a Data Control Language command in SQL ?

(A) Alter	(B) Grant
(C) Truncate	(D) Commit
13. CSV is expanded as:

(A) Comma Separated Values	(B) Condition Separated Values
(C) Comma Special Values	(D) Condition Special Values
14. Which of the following is not a scripting language?

(A) Ruby	(B) DBMS
(C) Perl	(D) JavaScript
15. Which SQL function returns the number of rows in a table ?

(A) SUM()	(B) MAX()
(C) CHECK()	(D) COUNT()



PART - II**II . Answer any six questions. Question No. 24 is Compulsory.****6 X 2 = 12**

16. List the characteristics of interface.
17. What are the characteristics of modules ?
18. What are tokens in Python ? List the types.
19. What is the use of replace() in Python? Write the general format of replace().
20. Write the syntax to create list with suitable example in Python.
21. What are the advantages of DBMS ?
22. What are the two ways to read a CSV file in Python?
23. List the types of visualizations in Matplotlib.
24. What are the advantages of user-defined functions ?

PART - III**III . Answer any six questions. Question No. 33 is compulsory.****6 X 3 = 18**

25. (a) What is a selector? (b) What are the parts of a program?
26. Write note on Dynamic Programming.
27. Write the syntax of Nested if..e}if...else statement with example.
28. Write short note on public and private data members in Python.
29. Write note on types of DBMS users.
30. Write short note on DELETE, TRUNCATE, DROP command in SQL.
31. What are the applications of scripting languages ?
32. Write short note on : (a) GROUP BY (b) ORDER BY clause - in SQL
33. What will be the output of the given Python program?

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

PART - IV**IV Answer all the questions.****5 X 5 = 25**

34. (A) Explain the types of variable scope.
- (B) Explain data types in Python with suitable example.
35. (A) Write the output for the following Python programs.

- (i)

```
j=15
while(j>=10):
    print(j,end='\t')
    j=j-1
else:
    print("\n End of the loop")
```
- (ii)

```
k=15
while(k<=9):
    for I in range(1,k):
        print(i,end='\t')
    print(end='\n')
    k=k+1
```



- (B) Write about the following Python string functions.
 - (i) capitalize() (ii) swapcase() (iii) center() (iv) islower() (v) title()

36. (A) Debug the following Python program the get the given output :

(OR)

Output : Inside add() function x value is : 10
In main x value is : 10

```
Program :
x=0
def add:
    globally x:
    x=x+10
    print("Inside add() function x value is :")
    add
print("In main x value is :")
```

- (B) What is set in Python? Explain the set operations with suitable example.
37. (A) Explain about constructors and destructors in Python with suitable example.
- (B) Explain the types of data model.
38. (A) Explain the types of constraints in SQL with suitable example.
- (B) List the differences between CSV and excel sheets (XLS) file.

(OR)