

## Model Quarterly Examination 2022

**Std : XII**

**Time : 3:00Hrs**

**Subject : Computer science**

**Total marks: 70**

**Choose the correct answer**

**1 \* 15 = 15**

1.The variables in a function definition are called as

- (A) Subroutines      (B) Function      (C) Definition      (D) Parameters

2.sequence of immutable objects is called

- (A) Built in      (B) List      (C) Tuple      (D) Derived data

3.Which of the following security technique that regulates who cause resources in a computing environment?

- (A) Password      (B)Authentication      (C) Access control      (D) Certification

4.Which of the following members of a class can be handled only from within the class?

- (A) Public members      (B)Protected members      (C) Secured members  
(D) Private members

5.Time complexity of bubble sort in best case is

- (A)  $\theta(n)$       (B)  $\theta(n \log n)$       (C)  $\theta(n^2)$       (D)  $\theta(n(\log n)^2)$

6.The word comes from the name of a Persian mathematician Abu Ja'far Mohammed ibn-iMusa al Khowarizmi is called?

- (A) Flowchart      (B) Flow      (C) Algorithm      (D) Syntax

7 Which of the following is not a Keyword in Python ?

- A) break      B) while      C) continue      D) operators

8..Which of the following characters used to give comments in Python Program ?

- A) #      B) &      C) @      D) \$

9.What plays vital role in Python programming?

- A) Statements      B) Control      C) Structure      D) Indentation

10.Which statement is generally used as a placeholder?

- A) continue      B) break      C) pass      D) goto

11.Which function is called anonymous un-named function

- (a) Lambda      (b) Recursion      (c) Function      (d) define

12.Which of the following keyword is used to define the function testpython(): ?

- (a) define      (b) pass      (c) def      (d) while

13. Which of the following is used as placeholders or replacement fields which get replaced along with format( ) function?

- (a) { }      (b) < >      (c) ++      (d) ^^

14. Which of the following is the slicing operator?

- (a) { }      (b) [ ]      (c) < >      (d) ( )

15. Which of the following Python function can be used to add more than one element within an existing list?

- (a) append()      (b) append\_more()      (c) extend()      (d) more()

### Part II

**Answer any Six questions .Question no 24 is compulsory**

**6 \* 2 = 12**

16. What is a subroutine?

17. What is abstract data type?

18. What is Mapping?

19. Define Pseudo code

20. Write short notes on Exponent data?

21. What are the main advantages of function?

22. Write note on break statement.

23. What is the purpose of Destructor?

24. Using if..else..elif statement write a suitable program to display largest of 3 numbers.

### Part III

**Answer any Six questions .Question no 33 is compulsory**

**6 \* 3 = 18**

25. Identify Which of the following are List, Tuple and class ?

- (a) arr [1, 2, 34] (b) arr (1, 2, 34) (c) student [rno, name, mark]  
(d) day= ('sun', 'mon', 'tue', 'wed') (e) x= [2, 5, 6.5, [5, 6], 8.2]  
(f) employee [eno, ename, esal, eaddress]

26. Write a note on Asymptotic notation

27. Why access control is required?

28. Write short notes on Escape sequences with examples.

29. Differentiate ceil() and floor() function?

30. What is the use of format( )? Give an example
31. What is the purpose of Destructor?
32. What are the factors that influence time and space complexity.
33. Write a Python program to display the given pattern

```
COMPUTER
COMPUTE
COMPUT
COMPU
COMP
COM
CO
C
```

#### Part IV

**Answer all the questions:**

**5 \* 5 = 25**

34. What are called Parameters and write a note on  
(i) Parameter without Type (ii) Parameter with Type  
OR  
Explain the types of scopes for variable or LEGB rule with example.
35. Explain the characteristics of an algorithm.  
OR  
Explain input() and print() functions with examples.
36. Write a detail note on for loop  
OR  
Explain the following built-in functions.  
(a) id() (b) chr() (c) round() (d) type() (e) pow()
37. What the different ways to insert an element in a list. Explain with suitable example  
OR  
Explain the different set operations supported by python with suitable example
38. Write a program using class to accept three sides of a triangle and print its area.  
OR  
Explain the concept of Dynamic programming with suitable example.

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