

STD: XII**JUNE MONTHLY TEST****Lessons: 1 - 4****Marks: 50 / Time: 1.30 Hrs.****COMPUTER SCIENCE****PART- I****I. Choose the correct answers.****10 × 1 = 10**

1. Which of the following is a distinct syntactic block?

- a) Subroutines b) Function c) Definition d) Modules

2. _____ is a set of action that object can do.

- a) Algorithm b) Interface c) Implementation d) Variable

3. Which of the following functions that retrieve information from the data type?

- a) Constructors b) Selectors c) recursive d) Nested

4. _____ are the functions that builds abstract data type.

- a) Constructors b) Destructors c) Selectors d) Structure

5. Containers for mapping names of variables to objects is called

- a) Scope b) Mapping c) Binding d) Namespaces

6. ___ scope has all the names that are pre-loaded into program code.

- a) Local b) Global c) Class d) Built in

7. The members that are accessible from within the class and are also available to its Sub-classes is called

- a) Public members b) Protected members
c) Secured members d) Private members

8. Big Ω is the reverse of

- a) Big O b) Big θ c) Big A d) Big S

9. Match:

- | | | |
|-----------------------|---|-----------------|
| 1. Big O | - | 1. Best Case |
| 2. Big Ω | - | 2. Worst Case |
| 3. Big Θ | - | 3. 1 |
| 4. Minimum Comparison | - | 4. N |
| 5. Maximum Comparison | - | 5. Average Case |

10. Binary search is also called as

- a) Linear search b) Sequential search
c) Random search d) Half-interval search

PART- II

II. Answer any five questions. Question No. 17 is compulsory:

5 X 2 = 10

11. Differentiate interface and implementation.
12. Write the syntax for function definition.
13. What is abstract data type?
14. What is Wishful thinking?
15. What do you mean by Namespaces?
16. How Python represents the private and protected Access specifiers?
17. What is Algorithm Analysis?

PART- III

III. Answer any five questions. Question No. 24 is compulsory:

5 X 3 = 15

18. Why strlen is called pure function?
19. How to use the recursive function?
20. Which strategy is used for program designing? Define that Strategy.
21. lst [(0, 10), (1, 20)]- Identify the Index position and Value
22. Why access control is required?
23. What is Data Encapsulation?
24. What is Algorithmic Strategy?

PART- IV

IV. Answer all the questions.

3 X 5 = 15

25. a) What are called Parameters and write a note on

- (i) Parameter without Type (ii) Parameter with Type

(OR)

b) What is a List? Why List can be called as Pairs. Explain with suitable example

26. a) Explain the types of scopes for variable or LEGB rule with example.

(OR)

b) Explain in detail about Access Control.

27. a) What is Binary search? Discuss with example.

(OR)

b) Explain in detail about Fibonacci Iterative Algorithm with Dynamic programming approach.