

CHRIST THE KING MATRICULATION HR. SEC. SCHOOL, KUMBAKONAM – 612 001.

STD: XII

MARKS: 50

SUB: COMPUTER SCIENCE

TIME: 1.30 MINS

## I – MID TERM TEST

## PART – I

## I. CHOOSE THE CORRECT ANSWER:

10\*1=10

- The variables in a function definition are called as \_\_\_\_\_.  
a) Subroutines                      b) Function                              c) Definition                              d) Parameters
- A function can be a \_\_\_\_\_ function provided it should not have any external variable which will alter the behavior of that variable.  
a) Pure                                      b) Impure                                      c) Recursive                                      d) Lambda
- Which of the following functions that retrieve information from the data type?  
a) Constructors                      b) Selectors                              c) recursive                                      d) Nested
- \_\_\_\_\_ is a powerful concept in computer science that allows programmers to treat code as objects  
a) Encapsulation                      b) Data Abstraction                      c) Classes                                      d) Abstract Data Types
- Which members are accessible from outside the class?  
a) Public members                      b) Protected members                      c) Secured members                      d) Private members
- \_\_\_\_\_ is a security technique that regulates who or what can view or use resources in a computing environment.  
a) Access                                      b) Object – Oriented                      c) Access Control                      d) Encapsulation
- If a problem can be broken into subproblems which are reused several times, the problem possesses which property?  
a) Overlapping subproblems                      b) Optimal substructure                      c) Memoization                      d) Greedy
- A \_\_\_\_\_ is defined as the total space required for storing certain data and variables for an algorithm.  
a) Fixed Part                                      b) Variable Part                                      c) Algorithm                                      d) Array
- The \_\_\_\_\_ prompt indicates that Interpreter is ready to accept instruction.  
a) >>>                                      b) <<<                                      c) #                                      d) <<
- \_\_\_\_\_ are special words used by Python interpreter to recognize the structure of program.  
a) Tokens                                      b) Identifiers                                      c) Keywords                                      d) Delimiters

## PART – II

## II. ANSWER ANY 5 QUESTIONS: (Q.No.13 Compulsory)

5\*2=10

- Define Function with respect to Programming Language
- Differentiate Concrete Data type and Abstract Data type?
- Define Scope and Life Time
- What is meant by Algorithm Strategy and Algorithmic Solution?
- What are the two different phases of an Algorithm?
- What are the two types of Programming in Python?
- What are Escape Sequences with Example?

## PART – III

## III. ANSWER ANY 5 QUESTIONS: (Q.No.23 Compulsory)

5\*3=15

- Why strlen is a pure function?
- What are the different ways to access the elements of a list? Give example?
- Define Mapping and Namespaces
- State Algorithm vs Program
- Explain the three Asymptotic Notations used to represent the time complexity of Algorithms?
- Define Conditional Operator with Example
- What are Comments and Indentation in Python?

## PART – IV

## IV. ANSWER THE FOLLOWING QUESTIONS:

3\*5=15

- a) Explain with an example interface and implementation.  
[OR]  
b) What is a List? Why List can be called as Pairs. Explain with suitable example
- a) Explain the types of Scope for Variable or LEGB rule with Example?  
[OR]  
b) Explain the Characteristics of an Algorithm?
- a) Explain the Bubble sort algorithm with example.  
[OR]  
b) Explain input() and print() functions with examples.

// ALL THE BEST