



Standard 12

COMPUTER SCIENCE

Time: 3.00 Hrs.

Marks: 70

PART - I

I. Choose the correct answer:

15×1=15

- 1) Which of the following defines, what an object can do?
 - a) Operating system
 - b) Compiler
 - c) Interface
 - d) Implementation
- 2) The datatype whose representation is known?
 - a) Built-in
 - b) Derived
 - c) Concrete
 - d) Abstract
- 3) Containers for mapping names of variables to object is called _____.
 - a) Scope
 - b) Mapping
 - c) Namespace
 - d) Binding
- 4) The two main measures for the efficiency of an algorithm are _____ and _____.
 - a) Process, memory
 - b) Time, space
 - c) Data, memory
 - d) Data, capacity
- 5) Which of the following is not a keyword?
 - a) while
 - b) operators
 - c) continue
 - d) else
- 6) Fill the blank with correct expression for the following statement:
if _____ : print (X, "is a leap year")
 - a) X%2 = 0
 - b) X%4 = 0
 - c) X%4 ==0
 - d) X/4 ==0
- 7) What is stride? Stride is the _____ argument of slicing operations.
 - a) First
 - b) Second
 - c) Third
 - d) default
- 8) >>> squares = [X**2 for X in range (1, 5)]
>>> print (squares). What is the output?
 - a) [0, 1, 2, 3, 4]
 - b) [1, 2, 4, 8]
 - c) [1, 4, 9, 16]
 - d) [2, 4, 6, 8]
- 9) Which of the following method is used as constructor?
 - a) --init--
 - b) --del--
 - c) --class--
 - d) --rem--
- 10) ER model was developed by _____.
 - a) EF codd
 - b) chen
 - c) chand
 - d) chend
- 11) _____ is a condition applicable on field, fields and table.
 - a) limit
 - b) range
 - c) constraint
 - d) scope
- 12) csv.reader () and csv.writer () work with _____.
 - a) list
 - b) dictionary
 - c) tuple
 - d) list/tuple
- 13) importing C++ programs in a python program is called _____.
 - a) wrapping
 - b) downloading
 - c) passing
 - d) connecting
- 14) Which of the following is called master table?
 - a) sqlite_master
 - b) sql_master
 - c) main_master
 - d) master_file
- 15) _____ is a management software for installing python packages.
 - a) Pip
 - b) Matplotlib
 - c) plt
 - d) plt.show()

PART - II

II. Answer ANY SIX questions. Qn.no. 24 is compulsory:

6×2=12

- 16) What is the difference between parameters and arguments.
- 17) What is an algorithm?
- 18) What is a literal in python? List the types of literals.
- 19) What are the differences between break and continue statements?
- 20) What is instantiation?

Kindly send me your questions and answerkeys to us : Padasalai.net@gmail.com

V12CS

2

- 21) What is the difference between SQL and Mysql?
- 22) Expand : (i) SWIG (ii) MinGW
- 23) Define "Data Visualization".
- 24) What will be the output for the following code?

```
>>> place = "Tech-Park"
>>> print (place * 3)
```

PART - III**III. Answer ANY SIX questions. Qn.no. 32 is compulsory:****6×3=18**

- 25) Write notes on Asymptotic notations.
- 26) Write notes on the ways of accessing elements of a list.
- 27) What are the logical operators in python? Give example for the usage of them.
- 28) What is composition in function?
- 29) Differentiate remove (), pop () and clear () functions used in lists.
- 30) What is the role of DBA?
- 31) Write notes on TCL commands: Commit, Roll back and Save point
- 32) Identify the module, operator and the definition name from the following statement.

```
Welcome . display ()
```
- 33) Write any three uses of data vizualization.

PART - IV**IV. Answer the following questions:****5×5=25**

- 34) a) What are the characteristics of modules?

(OR)

- b) Explain the Bubble sort algorithm.

- 35) a) Write a python program to print the following pattern:

```
1
2 2
3 3 3
4 4 4 4
5 5 5 5 5
```

(OR)

- b) What are the types of function arguments? Explain them with suitable examples.

- 36) a) Explain the set operations with suitable example.

(OR)

- b) What is Relational Algebra in DBMS? Explain the various groups in it.

- 37) a) Explain the need of python's OS module with suitable example.

(OR)

- b) Write notes on the aggregate functions used in values of Table column.

- 38) a) List the rules to be followed to format the data in a CSV file.

(OR)

- b) Explain the purpose of the following functions in data visualization.

- a) plt.X label ()
- b) plt.Y label ()
- c) plt.title ()
- d) plt.legend ()
- e) plt.show ()