

HALF-YEARLY EXAMINATION - 2023

2206

STD - XII

COMPUTER SCIENCE

MARKS : 70

TIME : 3.00 Hrs

YouTube/ Akwa Academy

I. Answer all the questions.

15 x 1 = 15

- A sequence of immutable objects is called
 - Derived data
 - Built in
 - List
 - Tuple
- Which operator is also called as comparative operator?
 - Relational operator
 - logical operator
 - Arithmetic operator
 - Assignment operator
- What will be the output of the following code?


```
S = "Chennai Schools"
S[7] = '-'
```

 - Type error
 - Chennai - Schools
 - Chennai
 - Chenna - School
- If List = [17, 23, 41, 10] then list.append(32) will result :
 - [10, 17, 23, 32, 41]
 - [17, 23, 41, 10, 32]
 - [32, 17, 23, 41, 10]
 - [41, 10, 32, 23, 17]
- A tuple is also known as :
 - Attribute
 - Table
 - Row
 - field
- Which of the following members of a class can be handled only from within the class?
 - Private members
 - Public members
 - Protected members
 - Secured members
- The key in python dictionary is specified by
 - ;
 - =
 - +
 - :
- What symbol is used for SELECT statement?
 - Ω
 - σ
 - π
 - X
- The command to delete a table is
 - ALTER
 - DELETE
 - DROP
 - DELETE ALL
- A framework for interfacing python and c++ is :
 - Boost
 - Ctypes
 - Cython
 - SWIG
- SQLite falls under which database system?
 - Hlerarchical Database system
 - Relational Database system
 - Flat File Database system
 - Object oriented Database System
- What is the output of the following snippet?


```
for i in range (2, 10, 2) :
  Print (i, end = '')
```

 - 8 6 4 2
 - 2 4 6 8 10
 - 2 4 6
 - 2 4 6 8
- Which is a python package used for 2D graphics?
 - matplotlib.pip
 - matplotlib.plt
 - matplotlib.pyplot
 - matplotlib.py
- The command used to skip a row in a CSV file is
 - next ()
 - skip ()
 - omit ()
 - bounce ()
- Which of the following Keyword is used to exit a function block?
 - define
 - def
 - finally
 - return

II. Answer any Six Questions. Q.No.24 is compulsory

6 x 2 = 12

- What is a subroutine? .

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17. Differentiate constructors and selectors.
18. What is mapping? YouTube/ Akwa Academy
19. What is searching? Write its types.
20. Write note on range() in loop.
21. Differentiate unique constraint and Primary key constraint.
22. What is the advantage of declaring a column as "INTEGER PRIMARY KEY"?
23. List the general types of data visualization.
24. What will be the output of the given Python program?

```
str = " COMPUTER SCIENCE"
```

- a) Print (Str * 3) b) Print (Str [0:7])

III. Answer any Six Questions. Q.No.33 is compulsory

6 x 3 = 18

25. Differentiate pure and impure function.
26. List the characteristics of an Algorithm.
27. Write a program to get the following output.
 A
 A B
 A B C
 A B C D
 A B C D E
28. What is sys.argv?
29. Write a Python program to read a CSV file with default delimiter comma (,).
30. Read the following details, based on that write a Python Script to display department wise records.
 database name : organization - db
 Table name : Employee
 Columns in the table : Eno, EmpName, Esal, Dept
31. What is the difference between select and project commands
32. Write any three uses of data visualization?
33. Write a SQL statement using DISTINCT Keyword.

IV. Answer all the Questions.

5 x 5 = 25

34. a) Explain LEGB rule with example (OR)
 b) Explain Bubble Sort Algorithm with example.
35. a) Explain input () and output () function with example. (OR)
 b) Explain the following built-in functions
 id () ii) Chr () iii) round () iv) type () v) pow ()
36. a) How to define constructor and destructor in Python? Explain with example. (OR)
 b) Explain the different set operations supported by Python with suitable example.
37. a) Differentiate Excel file and CSV file (OR)
 b) Differentiate DBMS and RDBMS
38. a) What is the use of HAVING Clause. Give an example Python Script. (OR)
 b) Explain the detail the types of Pyplots using Matplotlib.