

A COMMON HALF YEARLY EXAMINATION – 2023**STANDARD – XII****COMPUTER SCIENCE**

Time : 03.00 hrs

Marks : 70

PART-A**I. Choose the correct answer:**

15x1=15

- The variables in a function definition are called as
a) subroutines b) function c) definition d) parameters
- Which of the following is a compound structure?
a) pair b) Triplet c) singled d) quadrat
- The word comes from the name of a Persian mathematician Abu Ja'far Mohammed ibn-i Musa al Khowarizmi is called?
a) Flowchart b) Flowc) Algorithm d) Syntax
- Which of the following shortcut is used to create new python program?
a) Ctrl+C b) Ctrl+F c) Ctrl+B d) Ctrl+N
- What is the output of the following snippet?
i=1
while True:
if i % 4 == 0:
break
print (i, end= ' ')
i+= 1
a) 1 2 b) 1 2 3 c) 1 2 3 4 d) 1 2 4
- Which of the following keyword is used to begin the function block?
a) define b) for c) finally d) def
- The subscript of a string may be:
a) Positive b) Negative c) Both (a) or (b) d) Either (a) or (b)
- Which of the following function is used to count the number of elements in a list?
a) count () b) find () c) len () d) index ()
- Which of the following method is automatically executed when an object is created?
a) ----object----() b) ^----del---() c) ----func----() d) ---init----()
- Who is called father of Relational Database from the following?
a) Chris Date b) Hugh Darween
c) Edgar frankcodd d) Edgarfrankcadd

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11. Queries can be generated using
 - a) SELECT
 - b) ORDER BY
 - c) MODIFY
 - d) ALTER
12. The expansion of CRLF is
 - a) Control Return and Line Feed
 - b) Carriage Return and Form Feed
 - c) Control Router and Line Feed
 - d) Carriage Return and Line Feed
13. Which of the following is not a scriptin language?
 - a) Javascript
 - b) PHP
 - c) Perl
 - d) HTML.
14. SQLite falls under which database system?
 - a) flat file database system
 - b) Relationall Database system
 - c) Hierarchical database system
 - d) object oriented database system
15. Which is a python paekage used for 2D charts?
 - a) matplotlib.pyplot
 - b) matplotlib.pip
 - c) matplotlib.numpy
 - d) matplotlib.plt

PART-B

II. Answer any 6 Questions: Question number 24 is compulsory. 6x2=12

16. What is a subroutine?
17. What do you mean by Namespace?
18. Write short notes on Tokens.
19. Write the syntax of range ().
20. What is slicing?
21. What is class?
22. What component of SQL lets insert values values in tables and which lets to create a table?
23. Write the expansion of (i) SWIG (ii) MinGW.
24. Mention the two ways to read a CSV file using python.

PART - C

III. Answer any 6 question: Question number 33 is compulsory 6x3=18

25. What are the different ways to access the elements of a list. Give example.
26. List the characteristics of an algorithm.
27. List the differences between break and continue statements
28. What is base condition in seursivefunction
29. Write a short note about sort ().
30. Write the use of savepoint command with an example.
31. What is SQLite? What is it advantage?
32. Write any three uses of data visualization.
33. What will be the output of the given python program?

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```

Str1 = "Welcome"
Str2 = "to school"
Str3 =str1 [:2] + str2[4:]
Print(str3)

```

PART – D

5x5=25

IV. Answer all the questions:

- 34.a) How will you facilitate data abstraction. Explain it with suitable example. (OR)
- b) What is Binary search? Discuss with example.
35. a) Explain input () and print () functions with example. (OR)
- b) Write a detail note on for loop.
36. a) Explain the scope of variables with an example (OR)
- b) Explain the different set operations supported by python with suitable example.
37. a) Explain about constructor and destructor with suitable example. (OR)
- b) Consider the following employee table. Write SQL commands for the questions.

(i) to (v)

EMP CODE	NAME	DESIG	PAY	ALLOWANCE
S1001	Hariharan	Supervisor	29000	12000
P1002	Shaji	Operator	10000	5500
P1003	Prasad	Operator	12000	6500
C1004	Manjima	Clerk	8000	4500
M1005	Ratheesh	Mechanic	20000	7000

- (I) To display the details of all employees in descending order of pay.
- (II) To display all employees whose allowance is between 5000 and 7000.
- (III) To remove the employees who are mechanic .
- (IV) To add a new row.
- (V) To display the details of all employees who are operators.

- 38.a) Write any 5 features of python (OR)
- b) Explain the purpose of the following functions:
- plt.xlabel
 - plt.ylabel
 - plt.title
 - plt.legend ()
 - plt.show ()
