



Blue Stars Higher Secondary School

HOME TEST -XII(A2)[REVISION]

12th Standard Computer Science

Date : 28-11-24

Reg.No. :

Exam Time : 00:01 Hrs

Total Marks : 100

II ANSWER ALL THE QUESTIONS:

10 x 2 = 20

- 1) What is a Pair? Give an example.
- 2) What do you mean by Namespaces?
- 3) What are the different operators that can be used in Python?
- 4) Write is the syntax of if..else statement.
- 5) Define global scope.
- 6) What is slicing?
- 7) What is use of next() function?
- 8) Write the expansion of (i) SWIG (ii) MinGW
- 9) Write the command to populate record in a table. Give an example.
- 10) Write the difference between the following functions: `plt.plot([1,2,3,4])`, `plt.plot([1,2,3,4], [1,4,9,16])`.

III ANSWER ALL THE QUESTIONS:

10 x 3 = 30

- 11) Differentiate pure and impure function.
- 12) Write short notes on Escape sequences with examples.
- 13) Write a program to display
 - A
 - A B
 - A B C
 - A B C D
 - A B C D E
- 14) What is composition in functions?
- 15) Write a note about `count()` function in python.
- 16) Write a shot note about `sort()`.
- 17) What is the difference between the write mode and append mode.
- 18) What is MinGW? What is its use?
- 19) 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

- 20) Draw the output for the following data visualization plot.
- ```
import matplotlib.pyplot as plt
plt.bar([1,3,5,7,9],[5,2,7,8,2], label="Example one")
plt.bar([2,4,6,8,10],[8,6,2,5,6], label="Example two", color='g')
plt.legend()
plt.xlabel('bar number')
plt.ylabel('bar height')
plt.title('Epic Graph in Another Line! Whoa')
plt.show()
```

### III ANSWER IN DETAIL:

10 x 5 = 50

- 21) Explain with example Pure and impure functions.
- 22) Explain the types of scopes for variable or LEGB rule with example.
- 23) Explain the Bubble sort algorithm with example.
- 24) Explain input() and print() functions with examples.
- 25) Explain the different set operations supported by python with suitable example.
- 26) Write a Python program to write a CSV File with custom quotes.
- 27) Explain about constructor and destructor with suitable example.
- 28) Write the syntax for getopt( ) and explain its arguments and return values.
- 29) Write in brief about SQLite and the steps used to use it.
- 30) Explain in detail the types of pyplots using Matplotlib.

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