STUDENT'S - 100

FULL PORTION MODEL QUESTION PAPER - 1

12 - COMPUTER SCIENCE

Time : 3 Hrs. Marks : 70

PART : I

Note: *(I)* *All the questions are compulsory.* *15 x 1 = 15*

(II) *Choose the most appropriate answer from the given four alternatives and write the option code and the corresponding answer.*

1. _____ are the basic building blocks of computer programs.

   (A) Subroutines (B) Variables (C) Classes (D) Arrays

2. The process of providing only the essentials and hiding the details is known as _____

   (A) Hiding (B) Abstraction (C) Providing (D) Calling

3. Which of the following is the command prompt symbol of Python?

   (A) >> (B) << (C) >>> (D) <<<

4. Which of the following python built-in function is used to display result on the screen?

   (A) display( ) (B) show( ) (C) output( ) (D) print( )

5. Which statement is generally a place holder?

   (A) continue (B) break (C) pass (D) goto

6. _____ statement allows to execute a statement or group of statements multiple times

   (A) Branching (B) Conditional (C) Jumping (D) Loop

7. What is the positive index value of 66 in the list given below?

MyList=[50, 58, 76, 66]

(A) 4 (B) - 4 (C) 3 (D) - 1

8. The function used to create a tuple from a list

(A) tuple.list( ) (B) list.tuple( ) (C) tuple( ) (D) list( )

9. The elements in a tuple:

(A) Can be change (B) Cannot be change

(C) Can be deleted (D) Cannot be deleted

10. The human readable text file where each line has a number of fields, separated by commas:

(A) txt files (B) py files (C) csv files (D) doc file

11. File extension of Excel:

(A) exl (B) xls (C) cel (D) Ecl

12. Python is a:

(A) Programming language (B) Scripting language

(C) Glue language (D) B or C

13. What does __name__ contains ?

(A) C++ filename (B) main( ) name

(C) Python filename (D) OS module name

14. Which is a python package used for 2D graphics?

(A) matplotlib.pyplot (B) matplotlib.pip

(C) matplotlib.numpy (D) matplotlib.plt

15. Identify the package manager for Python packages or modules.

(A) Matplotlib (B) PIP

(C) plt.show( ) (D) python package

PART : II

Answer any SIX questions. (Question No. 16 is Compulsory) 6 x 2 = 12

16. Write the inference you get from X:=(78)

17. What is the use of constructor and selector?

18. Write a short note about token and list the token types of python.

19. What are the types of looping constructs used in Python?

20. Define function and list out the types of functions.

21. What is List in Python? Write with an example.

22. List out any four characteristics of DBMS.

23. Mention the two ways to read a CSV file using Python.

24. Write the expansion of (i) SWIG (ii) MinGW

PART : III

Answer any SIX questions. (Question No. 25 is Compulsory) 6 x 3 = 18

25. Answer to the following questions with the help of the function given below:

```
let rec pow (a: int) (b: int) : int :=
if b=0 then 1
else a * pow a (b-1)
```

(a) What is the name assigned to this function?

(b) What are the parameters defined to this function?

(c) What type of function is this?

26. List the characteristics of algorithm.

27. Explain ternary operator with an example.

28. List the difference between break and continue statement.

29. What will be the output of the following python code?

```
x=20
while(x >= 5):
    print (x, end='\t')
x-=5
```

30. Write a short note about Slicing operator.

31. What are the advantages of Tuples over a list?

32. What is instantiation?

33. What will be the output of the following python code?

```
import matplotlib.pyplot as plt
plt.plot([1,2,3,4], [1,4,9,16])
plt.show( )
```

PART : IV

Answer all the questions. *5 x 5 = 25*

34. Explain the types of parameters with suitable example annotations.

(OR)

Explain about the input( ) and print( ) functions in python with suitable example.

35. Explain about the Nested if...elif...else statement of python with suitable example.

(OR)

Explain about for() loop with suitable example.

36. Explain the different set operations supported by python with suitable example.

(OR)

Compare remove( ), pop( ) and clear( ) function in Python.

37. Tabulate the different mode with its meaning.

(OR)

Write the syntax for getopt( ) and explain its arguments and return values.

38. Write in brief about SQLite and the steps used to use it.

(OR)

What will be the output of the following python code?

```
import matplotlib.pyplot as plt

x = [1,2,3]

y = [5,7,4]

x2 = [1,2,3]

y2 = [10,14,12]

plt.plot(x, y, label='Line 1')

plt.plot(x2, y2, label='Line 2')

plt.xlabel('X-Axis')

plt.ylabel('Y-Axis')

plt.title('LINE GRAPH')

plt.legend( )

plt.show( )
```


ALL THE BEST