

Standard 12

COMPUTER SCIENCE

Marks: 70

Time: 3.00 Hrs.

PART - A

15×1=15

I. Choose the correct answer:

- 1) Which one of the following is a pure function?
a) str len () b) Random c) Date d) All of these
- 2) To process of subdividing a computer program into separate subprogram is called _____ programming.
a) modular b) sequential c) structured d) oop
- 3) To execute python script press _____ key.
a) F2 b) F5 c) F7 d) F9
- 4) The typical amount of indentation for python is _____ spaces.
a) 7 b) 4 c) 8 d) 3
- 5) Which statement is generally used as placeholder?
a) continue b) break c) pass d) goto
- 6) _____ keyword is used to exit a function block.
a) def b) return c) break d) goto
- 7) Let listn = [3, 6, 9, 12, 15], then print (list [-2]) will give the result _____.
a) 6 b) 12 c) 9 d) 15
- 8) A tuple is also known as _____.
a) table b) row c) attribute d) field
- 9) Which command is used to change the structure of the table?
a) SELECT b) MODIFY c) ALTER d) ORDER BY
- 10) By default "skip initial space" has a value _____.
a) true b) false c) 4 d) 7
- 11) Making some changes in the data of the existing file or adding more data is called _____.
a) Editing b) Appending c) Modification d) Correction
- 12) Which modules allows python to interface with the windows operating system?
a) os b) sys c) csv d) getopt
- 13) Which clause avoid the duplicate?
a) DISTINCT b) REMOVE c) WHERE d) GROUP BY
- 14) _____ is a management software used for installing python package.
a) matplotlib lib b) pip c) pyplot d) plt.show()
- 15) Creating object to a class is known as _____.
a) construction b) instantiation c) initialisation d) creation

PART - B

II. Answer ANY SIX from the following questions.

6×2=12

Qn.no. 24 is compulsory.

- 16) What is subroutine?
- 17) What is a pair? Give example.
- 18) What is a token? List the tokens.
- 19) What is a loop? What are the types of loops?
- 20) What is base condition in recursive function?

- 21) How will you create constructor in python? Give example.
- 22) What is normalisation?
- 23) What is the use of write row () and write rows () methods.
- 24) Differentiate Compiler and Interpreter.

PART - C

III. Answer ANY SIX from the following questions.

6×3=18

Qn.no. 33 is compulsory.

- 25) List the characteristics of algorithm.
- 26) What is a literal? What are the types of literals in python?
- 27) a) Write a python code to print the following output:

```
A
A B
A B C
A B C D
A B C D E
```

(OR)

- b) Differentiate del and clear () in dictionary with example.
- 28) What are the rules for "global" keyword?
- 29) What is the use of format() function? Give example.
- 30) Explain Cartesian product with an example.
- 31) Write a python code to read a csv file with the default delimiter (,) comma.
- 32) List the types visualisation in matplotlib.
- 33) What is the use of 'SAVE POINT' command?

PART - D

IV. Answer the following questions:

5×5=25

- 34) a) Write notes on Binary search with suitable example.

(OR)

- b) What is data abstraction? How abstraction is implemented? Explain with an example.

- 35) a) Describe in detail about the script mode programming in python.

(OR)

- b) Explain the following built-in-functions (i) abs () (ii) bin () (iii) chr () (iv) type () (v) pow ().

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

(OR)

- b) Write a python program to illustrate the private and public variables and Explain.

- 37) a) Write notes on the different types of constraints and their functions with suitable examples. **(OR)**

- b) Tabulate the different mode to open a python file with its meaning.

- 38) a) Explain each phrase (word) the following command.

```
python <file name.py> -i<c++ file name without cpp extension>
```

(OR)

- b) Explain the various buttons and their uses in matplotlib lib window.