

Standard 12
COMPUTER SCIENCE
Part - I

Time: 3.00 Hours

Marks: 70

15×1=15**I. Answer all the questions.**

- 1) Which of the following is constructed by placing expressions within square brackets
a) Tuples b) Lists c) Classes d) quadrats
- 2) The process of binding a variable name with an object is called
a) Scope b) Mapping c) Late binding d) early binding
- 3) Which of the following is used to describe the worst case of an algorithm?
a) Big A b) Big S c) Big W d) Big O
- 4) The following character is used to give comments in Python program?
a) # b) & c) @ d) \$
- 5) elif can be considered to be an abbreviation of
a) nested if b) if...else c) else if d) if... elif
- 6) Which of the following keyword is used to exit a function block in Python
a) Define b) finally c) return d) def
- 7)is the string slicing operator
a) [] b) { } c) < > d) ()
- 8) Which of the following statement is not correct
a) A list is Mutable b) A tuple is Immutable
c) The append () function is used to add an element
d) The extend () function is used to tuple to add elements in a list
- 9) Class members are accessed through which operator?
a) & b) .(dot) c) # d) %
- 10) Who is called father of Relation Database from the following
a) Chris Date b) Hugh Darween
c) Edar Frank Codd ~~E. G. AR~~ d) Edgar Frank Cadd
- 11) The command to delete a table including the structure is
a) DROP b) DELETE c) DELETE ALL d) ALTER TABLE
- 12) The following mode is used when dealing with non-text like image or exe files
a) Text mode b) Binary mode c) xls mode d) CSV mode
- 13) A framework for interfacing Python and C++ is
a) Ctypes b) SWIG c) Cython d) Boost
- 14) Which SQLite clause is used to filter data based on the group functions?
a) HAVING b) WHERE c) ORDER d) FILTER
- 15) In Python matplotlib is a
a) control structure b) dictionary
c) list d) library

Part - II**II. Answer any six questions. Question No. 24 is compulsory.****6×2=12**

- 16) What is an impure function?
- 17) What is Abstract data type?
- 18) What is Mapping?
- 19) What is the use of Lambda function?
- 20) How will you create constructor in Python?
- 21) List any 2 advantages of RDBMS.
- 22) Write the SQL statements using 'BETWEEN' and 'NOT BETWEEN' keywords.
- 23) Write the syntax of Python's OS Module.
- 24) What is Data Visualization?

Part - III**III. Answer any six questions. Question No. 29 is compulsory.****6×3=18**

- 25) Write note on Asymptotic notation.
- 26) Explain Ternary operator with example.
- 27) Write the syntax of while loop.
- 28) How Recursive function works?
- 29) Write a Python program to calculate area and circumference of a circle using classes & objects.
- 30) Write short note on ER model.
- 31) Explain the syntax of UPDATE SET command.
- 32) Tabulate the differences between Excel file and CSV file (any three)
- 33) Write about the special variable _____ name _____ in Python

Part - IV**IV. Answer all the questions****5×5=25**

- 34) Explain with an example interface and implementation.

(OR)

Write any 5 characteristics of Modules.

- 35) Explain the concept of Dynamic programming with suitable example.

(OR)

Describe in detail about the procedure of script mode programming.

- 36) Write a detail note on if-else-elif statement with example.

(OR)

Explain any 5 Built-in string functions in Python.

- 37) Write a Python program that prints maximum and minimum value in a Tuple.

(OR)

Write the rules to be followed to format the data in a CSV file.

- 38) Explain the usage of aggregate function in SQLite through Python program.

(OR)

What is a Pie-Chart? How will you draw pie-chart using matplotlib.

Set operation?
