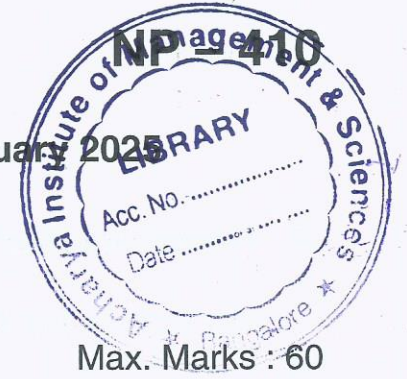




III Semester B.C.A. Examination, January/February 2025
(NEP) (F+R)
COMPUTER SCIENCE
CA – C13T : Python Programming



Time : 2½ Hours

Instruction : Answer **any four** questions from **each** Section.

SECTION – A

I. Answer **any four** questions. **Each** question carries **2** marks.

(4×2=8)

- 1) What is Python ? List the execution modes in Python.
- 2) Define function. Name the type of functions in Python.
- 3) What is indexing and negative indexing in a string ?
- 4) Give difference between list and string.
- 5) What is pickling and unpickling ?
- 6) Define abstraction and inheritance.

SECTION – B

II. Answer **any four** questions. **Each** question carries **5** marks.

(4×5=20)

- 7) Explain the features of Python.
- 8) What does it mean that strings are immutable ? Explain five string methods with example.
- 9) Explain len (), any (), all () and sorted () functions on dictionary.
- 10) Write differences between tuple and dictionary.
- 11) What is data visualization ? Explain role of Matplotlib library in visualization.
- 12) What is frozen set ? Explain difference, difference – update (), intersection and intersection – update method on set.

P.T.O.



SECTION - C

III. Answer **any four** questions. **Each** question carries **8** marks.

(4×8=32)

- 13) Explain the different types of control flow statements with an example.
 - 14) Describe with example basic operations on list.
 - 15) How to define and call user defined function ? Explain with example.
 - 16) Explain the process of reading and writing a data into file with example.
 - 17) What is a constructor ? What are the types of constructor ? How to define it in Python ?
 - 18) Write a note on :
 - a) Web API
 - b) Plotly.
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