

**S.No. 7247**

**P 20 MCA 10**

(For candidates admitted from 2020–2021 onwards)

**M.C.A. DEGREE EXAMINATION, NOVEMBER 2023.**

**Computer Applications**

**PROGRAMMING IN PYTHON**

**Time : Three hours**

**Maximum : 75 marks**

**PART A — (10 × 2 = 20)**

**Answer ALL questions.**

1. Define Tuple.
2. How to run python?
3. How will you delete a file?
4. What is the use of dir() function?
5. What is the use of compile() method?
6. Define: Data Hiding.
7. Define: NumPy.
8. Write a note on Aggregations.
9. Define: Scatter().
10. Define: Histogram.

**PART B — (5 × 5 = 25)**

Answer ALL questions, choosing either (a) or (b).

11. (a) Discuss about Data Types in python.

Or

- (b) Write a short note on Dictionary.

12. (a) Explain about Recursive Functions.

Or

- (b) Discuss about reload( ) function in python.

13. (a) Explain about Destructors in python.

Or

- (b) Briefly explain about User Defined Exception.

14. (a) Discuss about Data Indexing and Selection.

Or

- (b) Explain about Vectorized String Operations.

15. (a) Discuss about Density and Contour plots.

Or

- (b) Briefly explain about Scatter Plot.

**PART C — (3 × 10 = 30)**

Answer any THREE questions.

16. Discuss about types of loops in python.

17. Explain about Date and Time Modules in detail.

18. What is Inheritance? Explain the types of Inheritances.

19. Discuss about Numpy structured Array.

20. Explain about three Dimension Plotting in Matplotlib.