Turn Over



QP CODE: 24803824

Reg No : .....

## INTEGRATED MSC DEGREE EXAMINATION, JULY 2024

## **Fourth Semester**

INTEGRATED MSC BASIC SCIENCE-STATISTICS

# COMPLEMENTARY - IST4CM05 - COMPUTER SCIENCE IV PYTHON PROGRAMMING

2020 Admission Onwards

4FBB56DE

Time: 3 Hours

Weightage: 30

Part A (Short Answer Questions)

Answer any eight questions.

Weight **1** each.

- 1. What is Python scientific notations ?
- 2. What are loops in Python ?
- 3. What does Python interpreter do ?
- 4. Describe features of user-defined function in Python.
- 5. How we can reverse order of list items?
- 6. Define Python sequences.
- 7. Define abstraction in Python.
- 8. Write any three meta characters in Python.
- 9. What is NumPy ?
- 10. How does fancy indexing work?

(8×1=8 weightage)

### Part B (Short Essay/Problems)

Answer any **six** questions.

Weight 2 each.

- 11. Explain simple statergies for developing algorthms.
- 12. Describe the concept of module in Python.
- 13. Explain in detail about jumping statements in Python.







- 14. Differentiate between multiple inheritance and hierarchical inheritance.
- 15. Demonstrate catching exceptions in Python.
- 16. How to join NumPy arrays? Explain with an example.
- 17. Explain the methods to carry out boolean masking in Python.
- 18. Distinguish between indexing and slicing in Pandas.

(6×2=12 weightage)

### Part C (Essay Type Questions)

#### Answer any **two** questions.

#### Weight 5 each.

- 19. Explain in detail about flowcharst and its symbols.
- 20. Define a list.Discuss list operations in detail with suitable examples.
- 21. Define Python frozen set .Describe its functions with an example.
- 22. Explain heirarichal indexing and its uses in detail.

(2×5=10 weightage)