GATE DA 2025 Weekly Schedule

Week	Topics (Basics + Advanced)	Practice/Focus
Week 1	Mathematics: Basics of Probability (Permutations, Combinations, Axioms), Linear Algebra (Vector Spaces). Programming: Python Basics, Data Structures (Stacks, Queues). Machine Learning: Supervised Learning (Linear, Logistic Regression).	Solve basic probability problems and practice Python basics (loops, functions).
Week 2	Mathematics: Bayes Theorem, Conditional Expectation, Linear Algebra (Orthogonal, Projection, LU Decomposition). Algorithms: Search (Linear, Binary), Sorting (Selection, Bubble, Insertion). Machine Learning: k-Nearest Neighbor, Naive Bayes, Decision Trees.	Solve Probability distributions and Sorting/Searching problems.
Week 3	Mathematics: Probability Distributions (Binomial, Normal, t-Distribution), Confidence Intervals, Calculus (Taylor Series).	

Database: SQL Basics, Relational Algebra, Normalization, ER Models. Machine Learning: Bias-Variance Tradeoff, Cross-Validation, Ridge Regression, SVM.
Solve machine learning practice problems using Python (e.g., Decision Trees).

Week 4
AI: Informed & Uninformed Search (BFS, DFS, A*), Logic (Propositional, Predicate). Data Science: Data Preprocessing (Normalization, Sampling), Dimensionality Reduction (PCA). Machine Learning: Neural Networks (Multi-layer Perceptron), Clustering (K-Means, Hierarchical).
Implement clustering and PCA in Python for hands-on practice.

Week 5
Mock Tests: Full-length tests (3 tests during the week).
Focus on time management, review mistakes, and revise weak areas.

Final 2 Days
Revision: Quick formulas, cheat sheets, targeted practice questions.