DA

Detailed Schedule

GATE 2025: Online Test Series
DATA SCIENCE AND ARTIFICIAL INTELLIGENCE

MADE EASY

Topicwise Tests

Test No.	Test Syllabus	No. of Ques.	Marks	Time	Activation Date
1	**Probability and Statistics-1:** Counting (permutation and combinations), probability axioms, Sample space, events, independent events, mutually exclusive events, marginal, conditional and joint probability, Bayes Theorem.	17	25	45 min	01-04-2024
2	**Probability and Statistics-2:** Conditional and joint probability, Bayes Theorem, conditional expectation and variance, mean, median, mode and standard deviation, correlation, and covariance, random variables, discrete random variables and probability mass functions, uniform.	17	25	45 min	
3	**Probability and Statistics-3:** Bernoulli, binomial distribution, Continuous random variables and probability distribution function, uniform, exponential, Poisson, normal, standard normal, t-distribution, chi-squared distributions, cumulative distribution function, Conditional PDF, Central limit theorem, confidence interval, z-test, t-test, chi-squared test.	17	25	45 min	
4	**Linear Algebra-1:** Vector space, subspaces, linear dependence and independence of vectors, matrices, projection matrix, orthogonal matrix.	17	25	45 min	15-04-2024
5	**Linear Algebra-2:** Systems of linear equations and solutions; Gaussian elimination, eigenvalues and eigenvectors, determinant, rank, nullity, projections, LU decomposition, singular value decomposition.	17	25	45 min	
6	**Calculus and Optimization-1:** Functions of a single variable, limit, continuity and differentiability.	17	25	45 min	
7	**General Aptitude-1:** Numerical Ability: Numerical computation, numerical estimation, numerical reasoning and data interpretation.	17	25	45 min	
8	**General Aptitude-2:** Verbal Ability: English grammar, sentence completion, verbal analogies, word groups, instructions, critical reasoning and verbal deduction.	17	25	45 min	
9	**Calculus and Optimization-2:** Taylor series, maxima and minima, optimization involving a single variable.	17	25	45 min	1-05-2024
10	**Programming, Data Structures and Algorithms-1:** Programming in Python, basic data structures: stacks, queues, linked lists, trees, hash tables; Search algorithms: linear search and binary search.	17	25	45 min	
11	**Programming, Data Structures and Algorithms-2:** Basic sorting algorithms: selection sort, bubble sort and insertion sort; divide and conquer: mergesort, quicksort; introduction to graph theory; basic graph algorithms: traversals and shortest path.	17	25	45 min	
12	**Machine Learning-1:** Supervised Learning: regression and classification problems, simple linear regression, multiple linear regression, ridge regression, logistic regression, k-nearest neighbour, Naive Bayes classifier.	17	25	45 min	
13	**Machine Learning-2:** Linear discriminant analysis, support vector machine, decision trees, bias-variance trade-off, cross-validation methods such as leave-one-out (LOO) cross-validation, k-folds cross-validation.	17	25	45 min	
14	**Machine Learning-3:** Multi-layer perceptron, feed-forward neural network; (ii) Unsupervised Learning: clustering algorithms, k-means/k-medoid, hierarchical clustering, top-down, bottom-up: single-linkage, multiple linkage, dimensionality reduction, principal component analysis.	17	25	45 min	15-05-2024
15	**Artificial Intelligence-1:** Informed, uninformed, adversarial; logic, propositional, predicate; reasoning under uncertainty topics - conditional independence representation.	17	25	45 min	
16	**Artificial Intelligence-2:** Exact inference through variable elimination, and approximate inference through sampling.	17	25	45 min	
17	**Database Management and Warehouse-1:** ER-model, relational model: relational algebra, tuple calculus, SQL, integrity constraints, normal form, file organization.	17	25	45 min	
18	**Database Management and Warehouse-2:** Discretization, sampling, compression; data warehouse modelling: schema for multi-dimensional data models, concept hierarchies, measures: categorization and computations	17	25	45 min	
Single Subject Tests					
19	Probability and Statistics	33	50	90 min	15-06-2024
20	Linear Algebra	33	50	90 min	
21	Calculus and Optimization	33	50	90 min	
22	Programming, Data Structures and Algorithms	33	50	90 min	
23	Database Management and Warehouse	33	50	90 min	
24	Machine Learning	33	50	90 min	15-07-2024
25	Artificial Intelligence	33	50	90 min	
26	General Aptitude	33	50	90 min	

Full Syllabus Test

Test No.	Test Syllabus	No. of Ques.	Marks	Time	Activation Date
27	Full Syllabus Test-1 (Basic Level)	65	100	180 min	15-08-2024
28	Full Syllabus Test-2 (Basic Level)	65	100	180 min	
29	Full Syllabus Test-3 (Basic Level)	65	100	180 min	
30	Full Syllabus Test-4 (Basic Level)	65	100	180 min	
31	Full Syllabus Test-5 (Advance Level)	65	100	180 min	15-09-2024
32	Full Syllabus Test-6 (Advance Level)	65	100	180 min	
33	Full Syllabus Test-7 (Advance Level)	65	100	180 min	
34	Full Syllabus Test-8 (Advance Level)	65	100	180 min	
35	GATE Mock Test 1	65	100	180 min	15-10-2024
36	GATE Mock Test 2	65	100	180 min	
37	GATE Mock Test 3	65	100	180 min	
38	GATE Mock Test 4	65	100	180 min	