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Engineering Academy  
Leading Institute for ESE/GATE/PSUs



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# GATE-2025

## Online Test Series

### Data Science and Artificial Intelligence - Schedule

No.of Tests : 37 + 5 *free* practice tests of GATE-2024 Online Test Series

	GATE - 2025 Test Series	Practice Tests GATE - 2024 OTS
Topic wise Tests	23	-
Grand Tests (Subject Wise Tests)	8	-
Full Length Mock Tests	6	5
<b>Total Tests - 42</b>		

**Note:**

- ★ The Syllabus considered as per Previous year Notification of GATE. ACE Engineering Academy does not take any responsibility for deviations in syllabus in the final exam.
- ★ The Dates of Tests may Change according to the GATE-2025 Exam schedule.
- ★ Tests will be activated at 06:00 pm on the scheduled day.
- ★ All tests will be active till GATE-2025 Exam.

## Topic wise Tests

(No. of Questions: 15, Time duration: 42 Minutes and Marks: 25 M)

Test No	Name of the Test	Date of Activation
Test-01	<b>Probability and Statistics-1:</b> Probability and Statistics: Counting (permutation and combinations), probability axioms, Sample space, events, independent events, mutually exclusive events, marginal, conditional and joint probability, Bayes Theorem.	15-04-2024
Test-02	<b>Probability and Statistics-2:</b> conditional expectation and variance, mean, median, mode and standard deviation, correlation, and covariance, random variables, discrete random variables and probability mass functions, uniform, Bernoulli, binomial distribution, Continuous random variables	24-04-2024
Test-03	<b>Probability and Statistics-3:</b> 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.	
Test-04	<b>Linear Algebra-1:</b> Vector space, subspaces, linear dependence and independence of vectors, matrices, projection matrix, orthogonal matrix, idempotent matrix, partition matrix and their properties, quadratic forms.	01-05-2024
Test-05	<b>Linear Algebra-2:</b> Systems of linear equations and solutions; Gaussian elimination, eigenvalues and eigenvectors, determinant, rank, nullity, projections, LU decomposition, singular value decomposition.	
Test-06	<b>Calculus and Optimization-1:</b> Functions of a single variable, limit, continuity and differentiability.	08-05-2024
Test-07	<b>Calculus and Optimization-2:</b> Taylor series, maxima and minima, optimization involving a single variable.	
Test-08	<b>Programming, Data Structures and Algorithms-1:</b> Programming in Python	15-05-2024
Test-09	<b>Programming, Data Structures and Algorithms-2:</b> Basic data structures: stacks, queues, introduction to graph theory; basic graph algorithms: traversals and shortest path.	
Test-10	<b>Programming, Data Structures and Algorithms-3:</b> Linked lists, trees, hash tables;	22-05-2024
Test-11	<b>Programming, Data Structures and Algorithms-4:</b> Search algorithms: linear search and binary search, basic sorting algorithms: selection sort, bubble sort and insertion sort; divide and conquer: mergesort, quicksort;	

Test No	Name of the Test	Date of Activation
Test-12	<b>Database Management and Warehousing-1:</b> ER-model, relational model: relational algebra, tuple calculus, integrity constraints, normal form.	29-05-2024
Test-13	<b>Database Management and Warehousing-2:</b> SQL, file organization, indexing, data types, data transformation such as normalization, discretization, sampling, compression;	
Test-14	<b>Database Management and Warehousing-3:</b> ER-model, relational model: relational algebra, tuple calculus, integrity constraints, normal form. Data warehouse modeling: schema for multidimensional data models, concept hierarchies, measures: categorization and computations. SQL, file organization, indexing, data types, data transformation such as normalization, discretization, sampling, compression;	05-06-2024
Test-15	<b>Machine Learning-1:</b> Supervised Learning: regression and classification problems, simple linear regression, multiple linear regression, ridge regression, logistic regression,	
Test-16	<b>Machine Learning-2:</b> k-nearest neighbor, naive Bayes classifier, 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, multi-layer perceptron, feed-forward neural network;	
Test-17	<b>Machine Learning-3:</b> Unsupervised Learning: clustering algorithms, k-means/k-medoid, hierarchical clustering, top-down, bottom-up: single-linkage, multiple linkage, dimensionality reduction, principal component analysis.	12-06-2024
Test-18	<b>Artificial Intelligence-1:</b> Search: informed, uninformed, adversarial;	19-06-2024
Test-19	<b>Artificial Intelligence-2:</b> logic, propositional, predicate;	
Test-20	<b>Artificial Intelligence-3:</b> Reasoning under uncertainty topics - conditional independence representation, exact inference through variable elimination, and approximate inference through sampling	26-06-2024
Test-21	<b>Verbal Ability:</b> Basic English grammar: tenses, articles, adjectives, prepositions, conjunctions, verb-noun agreement, and other parts of speech. Basic vocabulary: words, idioms, and phrases in context. Reading and comprehension. Narrative sequencing.	03-07-2024
Test-22	<b>Quantitative Aptitude:</b> Data interpretation: data graphs (bar graphs, pie charts, and other graphs representing data), 2- and 3-dimensional plots, maps, and tables. Numerical computation and estimation: ratios, percentages, powers, exponents and logarithms, permutations and combinations, and series Mensuration and geometry. Elementary statistics and probability.	
Test-23	<b>Analytical Aptitude:</b> Logic: deduction and induction, Analogy, Numerical relations and reasoning <b>Spatial Aptitude:</b> Transformation of shapes: translation, rotation, scaling, mirroring, assembling, and grouping Paper folding, cutting, and patterns in 2 and 3 dimensions	

Test No	Name of the Test	Date of Activation
<b>Subject Wise Grand Tests</b> <i>(No. of Questions: 30, Time duration: 83 Minutes and Marks: 50 M)</i>		
Test-24	Probability and Statistics	10-07-2024
Test-25	Linear Algebra	17-07-2024
Test-26	Calculus and Optimization	24-07-2024
Test-27	Programming, Data Structures and Algorithms	31-07-2024
Test-28	Database Management and Warehousing	07-08-2024
Test-29	Machine Learning	14-08-2024
Test-30	Artificial Intelligence	21-08-2024
Test-31	General Aptitude	28-08-2024

<b>Full Length Mock Tests</b> <i>(No. of Questions: 65, Time duration: 180 Minutes and Marks: 100 M)</i>		
Test-32	Full Length Mock Test-1	04-09-2024
Test-33	Full Length Mock Test-2	18-09-2024
Test-34	Full Length Mock Test-3	02-10-2024
Test-35	Full Length Mock Test-4	16-10-2024
Test-36	Full Length Mock Test-5	25-12-2024
Test-37	Full Length Mock Test-6	08-01-2025

# Free Practice Tests

## Full Length Mock Tests

*(No. of Questions: 65, Time duration: 180 Minutes and Marks: 100 M)*

Test-01	Full Length Mock Test-1	<b>08-04-2024</b>
Test-02	Full Length Mock Test-2	
Test-03	Full Length Mock Test-3	
Test-04	Full Length Mock Test-4	
Test-05	Full Length Mock Test-5	