



**ACE**<sup>®</sup>  
**Engineering Academy**  
Leading Institute for ESE/GATE/PSUs

# GATE-2023

## *Online* Test Series

### Computer Science and Information Technology - Schedule

No. of Tests : 54 + 54 *free* practice tests of GATE-2022 Online Test Series

	GATE - 2023 Test Series	Practice Tests GATE - 2022 OTS
Topic wise Tests	23	23
Grand Tests (Subject Wise Tests + Multi-Subject Wise Tests)	19	19
Full Length Mock Tests	12	12
<b>Total Tests - 108</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-2023 Exam schedule.
- ★ Tests will be activated at 06:00 pm on the scheduled day.

## Topic wise Tests

*(No. of Questions: 15, Time duration: 45 Minutes and Marks: 25 M)*

Test No	Name of the Test	Date of Activation
Test-01	<b>Engineering Mathematics-1:</b> Linear Algebra: Matrices, determinants, system of linear equations, eigenvalues and eigenvectors, LU decomposition. Calculus: Limits, continuity and differentiability. Maxima and minima. Mean value theorem. Integration. Probability and Statistics: Random variables. Uniform, normal, exponential, poisson and binomial distributions. Mean, median, mode and standard deviation. Conditional probability and Bayes theorem.	15-04-2022
Test-02	<b>Engineering Mathematics-2:</b> Discrete Mathematics: Propositional and first order logic. Sets, relations, functions, partial orders and lattices. Monoids, Groups	
Test-03	<b>Engineering Mathematics-3:</b> Discrete Mathematics: Graphs: connectivity, matching, coloring. Combinatorics: counting, recurrence relations, generating functions.	
Test-04	<b>Digital Logic-1:</b> Number Systems, Boolean Expression, Boolean Laws & K-maps	19-04-2022
Test-05	<b>Digital Logic-2:</b> Combinational Circuits, Multiplex & De-Multiplex, Sequential Circuits & Counters	
Test-06	<b>Computer Organization and Architecture-1:</b> Computer Arithmetic, Memory Organization (Cache, Main & Secondary Storage).	
Test-07	<b>Computer Organization and Architecture-2:</b> Instruction Pipelining, Pipeline Hazards, Control Unit Design( H/W & Micro Programmed Control, ALU & Data Path), Machine Instructions & Addressing Modes, I/O Interface (Interrupt and DMA mode), Serial Communication Interface.	26-04-2022
Test-08	<b>Computer Networks-1:</b> Concept of layering: OSI and TCP/IP Protocol Stacks; Basics of packet, circuit and virtual circuit-switching; Data link layer: framing, error detection, Medium Access Control, Ethernet bridging	
Test-09	<b>Computer Networks-2:</b> Routing protocols: shortest path, flooding, distance vector and link state routing; Fragmentation and IP addressing, IPv4, CIDR notation, Basics of IP support protocols (ARP, DHCP, ICMP), Network Address Translation (NAT); Transport layer: flow control and congestion control, UDP, TCP, sockets; Application layer protocols: DNS, SMTP, HTTP, FTP, Email.	03-05-2022

Test No	Name of the Test	Date of Activation
Test-10	<b>Theory of Computation-1:</b> Finite automata(DFA,NFA), Regular languages, Regular expression,closure properties of regular sets, pumping lemma. FA WITH OUTPUT, PDA,DPDA. Cfg, Normalisation of Cfg,Dcfl, CFL, closure properties.	10-05-2022
Test-11	<b>Theory of Computation-2:</b> Turning machine, Recursive languages , REL, closure properties of REL, LBA,Csl,closure properties Of csl, Decidable and undecidable/computability, Complexity.	
Test-12	<b>Operating System-1:</b> Introduction,Process Management,System Calls, Synchronization and Concurrency Control, CPU Scheduling, Deadlocks	17-05-2022
Test-13	<b>Operating System-2:</b> Memory Management, I/O scheduling, File Systems,	
Test-14	<b>Algorithms-1:</b> Algorithm Analysis & Asymptotic Notations,Divide and Conquer, Greedy Method	24-05-2022
Test-15	<b>Algorithms-2:</b> Dynamic Programming,Graph Techniques.	
Test-16	<b>Database-1:</b> ER Diagrams, FD, Normalization	
Test-17	<b>Database-2:</b> SQL, RA & RC and Transaction concurrency, Indexing (e.g., B and B+ trees).	
Test-18	<b>Compiler Design:</b> Lexical Analysis & Parsing ,Semantic Analysis(SDT), Intermediate code generation, Basics of Optimization	31-05-2022
Test-19	<b>Programming and Data Structures-1:</b> Programming in C,Recursion;Arrays, Stacks , Queues, Linked Lists, Trees, Graphs & Hashing	
Test-20	<b>Programming and Data Structures-2:</b> Programming in C; Recursion,Arrays, Stacks , Queues, Linked Lists, Trees, Graphs & Hashing	
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.	07-06-2022
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: 90 Minutes and Marks: 50 M)</i>		
Test-24	Engineering Mathematics	28-06-2022
Test-25	Digital Logic	
Test-26	Computer Organization and Architecture	05-07-2022
Test-27	Computer Networks	
Test-28	Theory of Computation	12-07-2022
Test-29	Operating System	
Test-30	Algorithms	19-07-2022
Test-31	Databases	
Test-32	Compiler Design	26-07-2022
Test-33	Programming and Data Structures	
Test-34	General Aptitude	02-08-2022

<b>Full Length Mock Test - 1<sup>st</sup> Series</b> <i>(No. of Questions: 65, Time duration: 180 Minutes and Marks: 100 M)</i>		
Test-35	Full Length Mock Test-1	16-08-2022
Test-36	Full Length Mock Test-2	23-08-2022
Test-37	Full Length Mock Test-3	30-08-2022
Test-38	Full Length Mock Test-4	13-09-2022
Test-39	Full Length Mock Test-5	20-09-2022
Test-40	Full Length Mock Test-6	27-09-2022

<b>Multi-Subject Wise Grand Tests</b> <i>(No. of Questions: 30, Time duration: 90 Minutes and Marks: 50 M)</i>		
Test-41	Programming and Data Structures	11-10-2022
Test-42	Computer Organization and Architecture and Digital Logic	
Test-43	Theory of Computation and Compiler Design	18-10-2022
Test-44	Computer Networks and Databases	
Test-45	Operating System and Algorithms	25-10-2022
Test-46	Engineering Mathematics and General Aptitude	
Test-47	Programming Languages & Data Structures, Computer Organization, Digital Logic & Computer Networks and Network Security	01-11-2022
Test-48	Theory of Computation, Compiler Design, Operating Systems, Algorithms & Database	

Test No	Name of the Test	Date of Activation
<b>Full Length Mock Test - 2<sup>nd</sup> Series</b> <i>(No. of Questions: 65, Time duration: 180 Minutes and Marks: 100 M)</i>		
Test-49	Full Length Mock Test-7	15-11-2022
Test-50	Full Length Mock Test-8	22-11-2022
Test-51	Full Length Mock Test-9	29-11-2022
Test-52	Full Length Mock Test-10	27-12-2022
Test-53	Full Length Mock Test-11	03-01-2023
Test-54	Full Length Mock Test-12	10-01-2023

# Free Practice Tests of GATE-2022 Online Test Series

## Topic wise Tests

(No. of Questions: 15, Time duration: 45 Minutes and Marks: 25 M)

Test No	Name of the Test	Date of Activation
Test-01	<p><b>Engineering Mathematics-1:</b>            Linear Algebra: Matrices, determinants, system of linear equations, eigenvalues and eigenvectors, LU decomposition.            Calculus: Limits, continuity and differentiability. Maxima and minima. Mean value theorem. Integration.            Probability and Statistics: Random variables. Uniform, normal, exponential, poisson and binomial distributions. Mean, median, mode and standard deviation. Conditional probability and Bayes theorem.</p>	<b>14-03-2022</b>
Test-02	<p><b>Engineering Mathematics-2:</b>            Discrete Mathematics: Propositional and first order logic. Sets, relations, functions, partial orders and lattices. Monoids, Groups</p>	
Test-03	<p><b>Engineering Mathematics-3:</b>            Discrete Mathematics: Graphs: connectivity, matching, coloring. Combinatorics: counting, recurrence relations, generating functions.</p>	
Test-04	<p><b>Digital Logic-1:</b>            Number Systems, Boolean Expression, Boolean Laws &amp; K-maps</p>	
Test-05	<p><b>Digital Logic-2:</b>            Combinational Circuits, Multiplex &amp; De-Multiplex, Sequential Circuits &amp; Counters</p>	
Test-06	<p><b>Computer Organization and Architecture-1:</b>            Number System ALU &amp; Data Path, Memory Organization (Cache, Main &amp; Secondary Storage).</p>	
Test-07	<p><b>Computer Organization and Architecture-2:</b>            Instruction Pipelining, Pipeline Hazards, Control Unit Design( H/W &amp; Micro Programmed Control), Machine Instructions &amp; Addressing Modes, I/O Interface (Interrupt and DMA mode), Serial Communication Interface.</p>	
Test-08	<p><b>Computer Networks-1:</b>            Concept of layering: OSI and TCP/IP Protocol Stacks; Basics of packet, circuit and virtual circuit-switching; Data link layer: framing, error detection, Medium Access Control, Ethernet bridging</p>	
Test-09	<p><b>Computer Networks-2:</b>            Routing protocols: shortest path, flooding, distance vector and link state routing; Fragmentation and IP addressing, IPv4, CIDR notation, Basics of IP support protocols (ARP, DHCP, ICMP), Network Address Translation (NAT); Transport layer: flow control and congestion control, UDP, TCP, sockets; Application layer protocols: DNS, SMTP, HTTP, FTP, Email.</p>	

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Test-11	<b>Theory of Computation-2:</b> Turning machine, Recursive languages , REL, closure properties of REL, LBA,Csl,closure properties Of csl, Decidable and undecidable/computability, Complexity.		
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Test-25	Digital Logic	
Test-26	Computer Organization and Architecture	
Test-27	Computer Networks	
Test-28	Theory of Computation	
Test-29	Operating System	
Test-30	Algorithms	
Test-31	Databases	
Test-32	Compiler Design	
Test-33	Programming and Data Structures	
Test-34	General Aptitude	

<b>Multi-Subject Wise Grand Tests</b> <i>(No. of Questions: 30, Time duration: 90 Minutes and Marks: 50 M)</i>		
Test-35	Programming and Data Structures	<b>20-03-2022</b>
Test-36	Computer Organization and Architecture and Digital Logic	
Test-37	Theory of Computation and Compiler Design	
Test-38	Computer Networks and Databases	
Test-39	Operating System and Algorithms	
Test-40	Engineering Mathematics and General Aptitude	
Test-41	Programming Languages & Data Structures, Computer Organization, Digital Logic & Computer Networks and Network Security	
Test-42	Theory of Computation, Compiler Design, Operating Systems, Algorithms & Database	



Test No	Name of the Test	Date of Activation
<b>Full Length Mock Tests</b> <i>(No. of Questions: 65, Time duration: 180 Minutes and Marks: 100 M)</i>		
Test-43	Full Length Mock Test-1	<b>01-04-2022</b>
Test-44	Full Length Mock Test-2	
Test-45	Full Length Mock Test-3	
Test-46	Full Length Mock Test-4	
Test-47	Full Length Mock Test-5	
Test-48	Full Length Mock Test-6	
Test-49	Full Length Mock Test-7	
Test-50	Full Length Mock Test-8	
Test-51	Full Length Mock Test-9	
Test-52	Full Length Mock Test-10	
Test-53	Full Length Mock Test-11	
Test-54	Full Length Mock Test-12	