# GATE-2024

## *Online* Test Series

## Computer Science and Information Technology - Schedule

| No.of Tests : 54 + 54 *free* practice tests of GATE-2023 Online Test Series | | |
|---|---|---|
| | GATE - 2024 Test Series | Practice Tests GATE - 2023 OTS |
| Topic wise Tests | 23 | 23 |
| Grand Tests (Subject Wise Tests + Multi-Subject Wise Tests) | 19 | 19 |
| Full Length Mock Tests | 12 | 12 |
| Total Tests - 108 | | |

**Note:**

★ The Syllabus considered as per Previoues 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-2024 Exam schedule.

★ Tests will be activated at 06:00 pm on the scheduled day.

★ All tests will be active till GATE-2024 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 | **Engineering Mathematics-1:**<br>Linear Algebra: Matrices, determinants, system of linear equations, eigenvalues and eigenvectors, LU decomposition.<br>Calculus: Limits, continuity and differentiability. Maxima and minima. Mean value theorem. Integration.<br>Probability and Statistics: Random variables. Uniform, normal, exponential, poisson and binomial<br>distributions. Mean, median, mode and standard deviation. Conditional probability and Bayes theorem. | 17-04-2023 |
| Test-02 | **Engineering Mathematics-2:**<br>Discrete Mathematics: Propositional and first order logic. Sets, relations, functions, partial orders and lattices. Monoids, Groups | |
| Test-03 | **Engineering Mathematics-3:**<br>Discrete Mathematics: Graphs: connectivity, matching, coloring. Combinatorics: counting, recurrence relations, generating functions. | |
| Test-04 | **Digital Logic-1:**<br>Number Systems,Boolean Expression,  Boolean Laws & K-maps | 25-04-2023 |
| Test-05 | **Digital Logic-2:**<br>Combinational Circuits, Multiplex  & De-Multiplex, Sequential Circuits & Counters | |
| Test-06 | **Computer Organization and Architecture-1:**<br>Computer Arithmetic, Memory Organization (Cache, Main  & Secondary Storage). | 02-05-2023 |
| Test-07 | **Computer Organization and Architecture-2:**<br>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. | |
| Test-08 | **Computer Networks-1:**<br>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 | 09-05-2023 |
| Test-09 | **Computer Networks-2:**<br>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. | |

| Test No | Name of the Test | Date of Activation |
|---------|------------------|--------------------|
| Test-10 | **Theory of Computation-1:**<br>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. | 16-05-2023 |
| Test-11 | **Theory of Computation-2:**<br>Turning machine, Recursive languages , REL, closure properties of REL, LBA,Csl,closure properties Of csl, Decidable and undecidable/computability, Complexity. | |
| Test-12 | **Operating System-1:**<br>Introduction,Process Management,System Calls, Synchronization and Concurrency Control, CPU Scheduling, Deadlocks | 23-05-2023 |
| Test-13 | **Operating System-2:**<br>Memory Management, I/O scheduling, File Systems, | |
| Test-14 | **Algorithms-1:**<br>Algorithm Analysis & Asymptotic Notations,Divide and Conquer, Greedy Method | 30-05-2023 |
| Test-15 | **Algorithms-2:**<br>Dynamic Programming,Graph Techniques. | |
| Test-16 | **Database-1:**<br>ER Diagrams, FD, Normalization, RA & RC | |
| Test-17 | **Database-2:**<br>SQL, Transaction concurrency, Indexing (e.g., B and B+ trees), Recovery System. | |
| Test-18 | **Compiler Design:**<br>Lexical Analysis & Parsing ,Semantic Analysis(SDT), Intermediate code generation, Basics of Optimization | 06-06-2023 |
| Test-19 | **Programming and Data Structures-1:**<br>Programming in C,Recursion;Arrays, Stacks , Queues, Linked Lists, Trees, Graphs & Hashing | |
| Test-20 | **Programming and Data Structures-2:**<br>Programming in C; Recursion,Arrays, Stacks , Queues, Linked Lists, Trees, Graphs & Hashing | |
| Test-21 | **Verbal Ability:**<br>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. | |
| Test-22 | **Quantitative Aptitude:**<br>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<br>Mensuration and geometry. Elementary statistics and probability. | 13-06-2023 |
| Test-23 | **Analytical Aptitude:**<br>Logic: deduction and induction, Analogy, Numerical relations and reasoning<br>**Spatial Aptitude:**<br>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 |
|---------|------------------|--------------------|
| **Subject Wise Grand Tests** <br> *(No.of Questions: 30, Time duration: 83 Minutes and Marks: 50 M)* | | |
| Test-24 | Engineering Mathematics | 27-06-2023 |
| Test-25 | Digital Logic | |
| Test-26 | Computer Organization and Architecture | 04-07-2023 |
| Test-27 | Computer Networks | |
| Test-28 | Theory of Computation | 11-07-2023 |
| Test-29 | Operating System | |
| Test-30 | Algorithms | 18-07-2023 |
| Test-31 | Databases | |
| Test-32 | Compiler Design | 25-07-2023 |
| Test-33 | Programming and Data Structures | |
| Test-34 | General Aptitude | 01-08-2023 |

| Test No | Name of the Test | Date of Activation |
|---------|------------------|--------------------|
| **Full Length Mock Test - 1<sup>st</sup> Series** <br> *(No.of Questions: 65, Time duration: 180 Minutes and Marks: 100 M)* | | |
| Test-35 | Full Length Mock Test-1 | 15-08-2023 |
| Test-36 | Full Length Mock Test-2 | 22-08-2023 |
| Test-37 | Full Length Mock Test-3 | 29-08-2023 |
| Test-38 | Full Length Mock Test-4 | 12-09-2023 |
| Test-39 | Full Length Mock Test-5 | 19-09-2023 |
| Test-40 | Full Length Mock Test-6 | 26-09-2023 |

| Test No | Name of the Test | Date of Activation |
|---------|------------------|--------------------|
| **Multi-Subject Wise Grand Tests** <br> *(No.of Questions: 30, Time duration: 83 Minutes and Marks: 50 M)* | | |
| Test-41 | Programming and Data Structures | 03-10-2023 |
| Test-42 | Computer Organization and Architecture and Digital Logic | |
| Test-43 | Theory of Computation and Compiler Design | 10-10-2023 |
| Test-44 | Computer Networks and Databases | |
| Test-45 | Operating System and Algorithms | 17-10-2023 |
| Test-46 | Engineering Mathematics and General Aptitude | |
| Test-47 | Programming Languages & Data Structures, Computer Organization, Digital Logic & Computer Networks and Network Security | 20-10-2023 |
| Test-48 | Theory of Computation, Compiler Design, Operating Systems, Algorithms & Database | |

| Test No | Name of the Test | Date of Activation |
|---------|------------------|--------------------|
| | **Full Length Mock Test - 2ⁿᵈ Series**<br>*(No.of Questions: 65, Time duration: 180 Minutes and Marks: 100 M)* | |
| Test-49 | Full Length Mock Test-7 | 31-10-2023 |
| Test-50 | Full Length Mock Test-8 | 07-11-2023 |
| Test-51 | Full Length Mock Test-9 | 28-11-2023 |
| Test-52 | Full Length Mock Test-10 | 05-12-2023 |
| Test-53 | Full Length Mock Test-11 | 02-01-2024 |
| Test-54 | Full Length Mock Test-12 | 09-01-2024 |

# Free Practice Tests of GATE-2023 Online Test Series

## 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 | **Engineering Mathematics-1:**<br>Linear Algebra: Matrices, determinants, system of linear equations, eigenvalues and eigenvectors, LU decomposition.<br>Calculus: Limits, continuity and differentiability. Maxima and minima. Mean value theorem. Integration.<br>Probability and Statistics: Random variables. Uniform, normal, exponential, poisson and binomial<br>distributions. Mean, median, mode and standard deviation. Conditional probability and Bayes theorem. | |
| Test-02 | **Engineering Mathematics-2:**<br>Discrete Mathematics: Propositional and first order logic. Sets, relations, functions, partial orders and lattices. Monoids, Groups | |
| Test-03 | **Engineering Mathematics-3:**<br>Discrete Mathematics: Graphs: connectivity, matching, coloring. Combinatorics: counting, recurrence relations, generating functions. | |
| Test-04 | **Digital Logic-1:**<br>Number Systems,Boolean Expression,  Boolean Laws & K-maps | 20-03-2023 |
| Test-05 | **Digital Logic-2:**<br>Combinational Circuits, Multiplex  & De-Multiplex, Sequential Circuits & Counters | |
| Test-06 | **Computer Organization and Architecture-1:**<br>Computer Arithmetic, Memory Organization (Cache, Main  & Secondary Storage). | |
| Test-07 | **Computer Organization and Architecture-2:**<br>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. | |
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| Test-09 | **Computer Networks-2:**<br>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. | |

| Test No | Name of the Test | Date of Activation |
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| Test-10 | **Theory of Computation-1:** 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. | |
| Test-11 | **Theory of Computation-2:** Turning machine, Recursive languages , REL, closure properties of REL, LBA,Csl,closure properties Of csl, Decidable and undecidable/computability, Complexity. | |
| Test-12 | **Operating System-1:** Introduction,Process Management,System Calls, Synchronization and Concurrency Control, CPU Scheduling, Deadlocks | |
| Test-13 | **Operating System-2:** Memory Management, I/O scheduling, File Systems, | |
| Test-14 | **Algorithms-1:** Algorithm Analysis & Asymptotic Notations,Divide and Conquer, Greedy Method | |
| Test-15 | **Algorithms-2:** Dynamic Programming,Graph Techniques. | |
| Test-16 | **Database-1:** ER Diagrams, FD, Normalization, RA & RC | |
| Test-17 | **Database-2:** SQL, Transaction concurrency, Indexing (e.g., B and B+ trees), Recovery System. | |
| Test-18 | **Compiler Design:** Lexical Analysis & Parsing ,Semantic Analysis(SDT), Intermediate code generation, Basics of Optimization | 20-03-2023 |
| Test-19 | **Programming and Data Structures-1:** Programming in C,Recursion;Arrays, Stacks , Queues, Linked Lists, Trees, Graphs & Hashing | |
| Test-20 | **Programming and Data Structures-2:** Programming in C; Recursion,Arrays, Stacks , Queues, Linked Lists, Trees, Graphs & Hashing | |
| Test-21 | **Verbal Ability:** 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. | |
| Test-22 | **Quantitative Aptitude:** 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 | **Analytical Aptitude:** Logic: deduction and induction, Analogy, Numerical relations and reasoning **Spatial Aptitude:** 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 |
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| **Subject Wise Grand Tests** <br> *(No.of Questions: 30, Time duration: 83 Minutes and Marks: 50 M)* | | |
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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 | 25-03-2023 |
| Test-30 | Algorithms | |
| Test-31 | Databases | |
| Test-32 | Compiler Design | |
| Test-33 | Programming and Data Structures | |
| Test-34 | General Aptitude | |

| Test No | Name of the Test | Date of Activation |
|---------|------------------|---------------------|
| **Multi-Subject Wise Grand Tests** <br> *(No.of Questions: 30, Time duration: 83 Minutes and Marks: 50 M)* | | |
| Test-35 | Programming and Data Structures | |
| 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 | 25-03-2023 |
| 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 |
|---------|------------------|---------------------|
| **Full Length Mock Tests** <br> *(No.of Questions: 65, Time duration: 180 Minutes and Marks: 100 M)* | | |
| Test-43 | Full Length Mock Test-1 | |
| 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 | 01-04-2023 |
| 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 | |