

Topicwise Tests

Tests	Test Activation Date	Test Closing Date	Test Syllabus	No. of Ques.	Marks	Timing
TWT-1	15/03/2019	20/02/2020	Theory of Computation-1: Regular expressions and finite automata, Context-free grammars and push-down automata	17	25	45 min
TWT-2			Theory of Computation-2: Regular and context-free languages, Grammar, pumping lemma, Turing machines and undecidability.	17	25	45 min
TWT-3			Algorithms -1: Sorting, Asymptotic worst case time and space complexity. Algorithm design techniques: greedy and divide-and-conquer and Searching, Hashing	17	25	45 min
TWT-4			Algorithms-2: Graph search, minimum spanning trees, shortest paths and dynamic programming.	17	25	45 min
TWT-5			Computer Organization and Architecture-1: Instruction pipelining, Machine instructions and addressing modes and control unit.	17	25	45 min
TWT-6			Computer Organization and Architecture-2: ALU, data-path, Memory hierarchy: cache, main memory, secondary storage and I/O interface (interrupt and DMA mode).	17	25	45 min
TWT-7			Databases-1: Er-model. Relational model: relational algebra normalization and indexing (e.g., B and B+ trees).	17	25	45 min
TWT-8			Databases-2: Tuple calculus, SQL, Integrity constraints, File organization, Transactions and concurrency control.	17	25	45 min
TWT-9			Engineering Mathematics-1: Matrices, system of linear equations, eigenvalues and eigenvectors, Random variables. Uniform, normal, exponential, poisson and binomial distributions. Mean, median, mode and standard deviation.	17	25	45 min
TWT-10			Engineering Mathematics-2: Limits, continuity and differentiability. Maxima and minima. Mean value theorem. Integration, determinants and LU decomposition, Conditional probability and Bayes theorem.	17	25	45 min
TWT-11			General Aptitude-1: Numerical Ability: Numerical computation, numerical estimation, numerical reasoning and data interpretation.	17	25	45 min
TWT-12			General Aptitude-2: Verbal Ability: English grammar, sentence completion, verbal analogies, word groups, instructions, critical reasoning and verbal deduction.	17	25	45 min
TWT-13	15/04/2019	20/02/2020	Operating System-1: Memory management, virtual memory and Deadlock and File systems.	17	25	45 min
TWT-14			Operating System-2: Processes, threads, inter-process communication, concurrency, synchronization and CPU scheduling.	17	25	45 min
TWT-15			Programming and Data Structures-1: Programming in C, Arrays, stacks and queues, Recursion.	17	25	45 min
TWT-16			Programming and Data Structures-2: Linked lists, trees, binary search trees, binary heaps and graphs	17	25	45 min
TWT-17			Computer Networks-1: Concept of layering, LAN technologies (Ethernet), Flow and error control techniques, switching, Basics of Wi-Fi, Network security, Authentication, basics of public key and private key cryptography, digital signatures and certificates	17	25	45 min
TWT-18			Computer Networks-2: IPv4/IPv6, routers and routing algorithms (distance vector, link state). TCP/UDP and sockets, congestion control, Application layer protocols (DNS, SMTP, POP, FTP, HTTP) and firewalls	17	25	45 min
TWT-19			Digital Logic-1: Boolean algebra, Combinational and Minimization	17	25	45 min
TWT-20			Digital Logic-2: Sequential circuits, Number representations and computer arithmetic (fixed and floating point).	17	25	45 min

TWT-21			Discrete Mathematics-1: Propositional and first order logic. Sets, relations, functions and counting	17	25	45 min
TWT-22			Discrete Mathematics-2: Partial orders and lattices, groups, Graphs: connectivity, matching, coloring, Recurrence relations and generating functions.	17	25	45 min
TWT-23			Compiler Design-1: Lexical analysis, syntax-directed translation and Intermediate code generation.	17	25	45 min
TWT-24			Compiler Design-2: Parsing, Runtime environments and Intermediate code generation.	17	25	45 min
Single Subject Tests						
SST-1	15/05/2019	20/02/2020	Theory of Computation	33	50	90 min
SST-2			Algorithms	33	50	90 min
SST-3			Computer Organization and Architecture	33	50	90 min
SST-4			Operating System	33	50	90 min
SST-5			Engineering Mathematics	33	50	90 min
SST-6			General Aptitude	33	50	90 min
SST-7	15/06/2019	20/02/2020	Database	33	50	90 min
SST-8			Programming and Data Structures	33	50	90 min
SST-9			Computer Networks	33	50	90 min
SST-10			Digital Logic	33	50	90 min
SST-11			Compiler Design	33	50	90 min
SST-12			Discrete Mathematics	33	50	90 min
Multiple Subject Tests						
MST-1	15/07/2019	20/02/2020	Theory of Computation + Compiler Design	33	50	90 min
MST-2			Algorithms + Programming and Data Structures	33	50	90 min
MST-3			Computer Organization and Architecture + Operating System	33	50	90 min
MST-4			Digital Logic + Discrete Mathematics	33	50	90 min
MST-5			Computer Networks + Databases	33	50	90 min
MST-6			Engineering Mathematics + General Aptitude	33	50	90 min
Full Syllabus Tests						
FST-1	15/08/2019	20/02/2020	Full Syllabus Test-1	65	100	180 min
FST-2			Full Syllabus Test-2	65	100	180 min
FST-3			Full Syllabus Test-3	65	100	180 min
FST-4			Full Syllabus Test-4	65	100	180 min
FST-5	15/09/2019	20/02/2020	Full Syllabus Test-5	65	100	180 min
FST-6			Full Syllabus Test-6	65	100	180 min
FST-7			Full Syllabus Test-7	65	100	180 min
FST-8			Full Syllabus Test-8	65	100	180 min
Candidate has to upload GATE-2020 Admit Card to access below mentioned tests						
GMT-1	04/01/2020	20/02/2020	GATE Mock Test 1	65	100	180 min
GMT-2			GATE Mock Test 2	65	100	180 min
GMT-3			GATE Mock Test 3	65	100	180 min
GMT-4			GATE Mock Test 4	65	100	180 min

GATE 2019 SCHEDULE: COMPUTER SCIENCE & INFORMATION TECHNOLOGY

Test Type	Syllabus [EB-Engineering Branch ; EM- Engineering Mathematics; GA- General Aptitude]	No. of Question	Marks	Duration
Minor Test - 1	EB-Digital Logic: Logic functions, Minimization, Design and synthesis of combinational and sequential circuits, Number representation and computer arithmetic (fixed and floating point).	33	50	90 min
Minor Test - 2	EB- Computer Organization and Architecture Part-I: Machine instructions and addressing modes. ALU, data-path and control unit.	33	50	90 min
Minor Test - 3	EM- Linear Algebra: Matrices, determinants, system of linear equations, eigenvalues and eigenvectors, LU decomposition. Set Theory & Algebra: Sets; Relations; Functions; Groups; Partial Orders; Lattice.	33	50	90 min
GA: Minor Test- 1	Verbal Ability: English grammar, sentence completion, verbal analogies, word groups, instructions, critical reasoning and verbal deduction. Numerical Ability: Numerical computation, numerical estimation, numerical reasoning and data interpretation.	33	50	90 min
Minor Test - 4	EB- Computer Organization and Architecture Part-II: Instruction pipelining. Memory hierarchy: cache, main memory and secondary storage; I/O interface (interrupt and DMA mode).	33	50	90 min
Minor Test - 5	EB- Programming and Data Structures: Programming in C. Recursion. Arrays, stacks, queues, linked lists, trees, binary search trees, binary heaps, graphs.	33	50	90 min
EM: Minor Test- 1	LINEAR ALGEBRA : Matrices, determinants, system of linear equations, eigenvalues and eigenvectors, LU decomposition.	33	50	90 min
Minor Test - 6	GA: General Aptitude(Language and Analytical Skills)	33	50	90 min
Minor Test - 7	EB-Algorithms: Searching, sorting, hashing. Asymptotic worst case time and space complexity. Algorithm design techniques: greedy, dynamic programming and divide-and-conquer. Graph search, minimum spanning trees, shortest paths.	33	50	90 min
GA: Minor Test- 2	Verbal Ability: English grammar, sentence completion, verbal analogies, word groups, instructions, critical reasoning and verbal deduction. Numerical Ability: Numerical computation, numerical estimation, numerical reasoning and data	33	50	90 min

	interpretation.			
Minor Test - 8	EB- Theory of Computation: Regular expressions and finite automata. Context-free grammars and push-down automata. Regular and context-free languages, pumping lemma. Turing machines and undecidability.	33	50	90 min
Minor Test - 9	EM - Calculus: Limits, continuity and differentiability. Maxima and minima. Mean value theorem. Integration.	33	50	90 min
EM: Minor Test- 2	CALCULUS : Limits, continuity and differentiability. Maxima and minima. Mean value theorem. Integration.	33	50	90 min
Minor Test - 10	EB-Compiler Design: Lexical analysis, parsing, syntax-directed translation. Runtime environments. Intermediate code generation.	33	50	90 min
Minor Test -11	EB-Operating System Part-I: Processes, threads, inter-process communication, concurrency and synchronization, Deadlock, CPU scheduling	33	50	90 min
GA: Minor Test- 3	Verbal Ability: English grammar, sentence completion, verbal analogies, word groups, instructions, critical reasoning and verbal deduction. Numerical Ability: Numerical computation, numerical estimation, numerical reasoning and data interpretation.	33	50	90 min
Minor Test - 12	GA: General Aptitude(Language and Analytical Skills)	33	50	90 min
Minor Test - 13	EB-Operating System Part-II: Memory management and virtual memory, File systems.	33	50	90 min
EM: Minor Test- 3	SET THEORY & ALGEBRA : Sets; Relations; Functions; Groups; Partial Orders; Lattice. COMBINATORY : Counting; Generating functions; Recurrence relations.	33	50	90 min
Minor Test -14	EB- Databases Part-I: ER-model. Relational model: relational algebra, tuple calculus, SQL.	33	50	90 min

Minor Test - 15	EM- Mathematical Logic: Propositional Logic; First Order Logic. Graph Theory: Connectivity;; Matching; Colouring. Combinatory: Counting; Generating functions; Recurrence relations.	33	50	90 min
Minor Test - 16	EB- Databases Part-II: Integrity constraints, normal forms. File organization, indexing (e.g., B and B+ trees). Transactions and concurrency control.	33	50	90 min
GA: Minor Test- 4	Verbal Ability: English grammar, sentence completion, verbal analogies, word groups, instructions, critical reasoning and verbal deduction. Numerical Ability: Numerical computation, numerical estimation, numerical reasoning and data interpretation.	33	50	90 min
Minor Test - 17	EM-Probability: Random variables. Uniform, normal, exponential, poisson and binomial distributions. Mean, median, mode and standard deviation. Conditional probability and Bayes theorem.	33	50	90 min
Minor Test - 18	EB-Computer Networks Part-I: Concept of layering. LAN technologies (Ethernet). Flow and error control techniques, switching. IPv4/IPv6, routers and routing algorithms (distance vector, link state). TCP/UDP and sockets, congestion control.	33	50	90 min
EM: Minor Test- 4	MATHEMATICAL LOGIC : Propositional Logic; First Order Logic. GRAPH THEORY : Connectivity;Matching; Colouring.	33	50	90 min
Minor Test - 19	EB-Computer Networks Part-II: Application layer protocols (DNS, SMTP, POP, FTP, HTTP). Basics of Wi-Fi. Network security: authentication, basics of public key and private key cryptography, digital signatures and certificates, firewalls.	33	50	90 min
Minor Test -20	GA: General Aptitude(Language and Analytical Skills)	33	50	90 min
GA: Minor Test- 5	Verbal Ability: English grammar, sentence completion, verbal analogies, word groups, instructions, critical reasoning and verbal deduction. Numerical Ability: Numerical computation, numerical estimation, numerical reasoning and data interpretation.	33	50	90 min
Major Test - 1	FULL SYLLABUS	65	100	180 min
Major Test - 2	FULL SYLLABUS	65	100	180 min

EM: Minor Test- 5	PROBABILITY : Random variables. Uniform, normal, exponential, poisson and binomial distributions. Mean, median, mode and standard deviation. Conditional probability and Bayes theorem.	33	50	90 min
Major Test - 3	FULL SYLLABUS	65	100	180 min
Major Test - 4	FULL SYLLABUS	65	100	180 min
Major Test - 5	FULL SYLLABUS	65	100	180 min
Major Test - 6	FULL SYLLABUS	65	100	180 min
Major Test -7	FULL SYLLABUS	65	100	180 min
Major Test - 8	FULL SYLLABUS	65	100	180 min
Major Test - 9	FULL SYLLABUS	65	100	180 min
Major Test -10	FULL SYLLABUS	65	100	180 min