

**COMBO ONLINE TEST SERIES**
**GATE 2019 SCHEDULE: COMPUTER SCIENCE & INFORMATION TECHNOLOGY**

Test Date	Test Type	Syllabus [ EB-Engineering Branch ; EM-Engineering Mathematics; GA-General Aptitude]	No. of Question	Marks	Duration
01/07/2018	Minor Test -1	<b>EB-Digital Logic:</b> Logic functions, Minimization, Design and synthesis of combinational and sequential circuits, Number representation and computer arithmetic (fixed and floating point).	33	50	90 min
08/07/2018	Minor Test - 2	<b>EB- Computer Organization and Architecture</b> <b>Part-I:</b> Machine instructions and addressing modes. ALU, data-path and control unit.	33	50	90 min
15/07/2018	Minor Test - 3	<b>EM- Linear Algebra:</b> Matrices, determinants, system of linear equations, eigenvalues and eigenvectors, LU decomposition. <b>Set Theory &amp; Algebra:</b> Sets; Relations; Functions; Groups; Partial Orders; Lattice.	33	50	90 min
18/07/2018	<b>GA: Minor Test- 1</b>	<b>Verbal Ability:</b> English grammar, sentence completion, verbal analogies, word groups, instructions, critical reasoning and verbal deduction. <b>Numerical Ability:</b> Numerical computation, numerical estimation, numerical reasoning and data interpretation.	33	50	90 min
22/07/2018	Minor Test - 4	<b>EB- Computer Organization and Architecture</b> <b>Part-II:</b> Instruction pipelining. Memory hierarchy: cache, main memory and secondary storage; I/O interface (interrupt and DMA mode).	33	50	90 min
29/07/2018	Minor Test - 5	<b>EB- Programming and Data Structures:</b> Programming in C. Recursion. Arrays, stacks, queues, linked lists, trees, binary search trees, binary heaps, graphs.	33	50	90 min
30/07/2018	<b>EM: Minor Test- 1</b>	<b>LINEAR ALGEBRA :</b> Matrices, determinants, system of linear equations, eigenvalues and eigenvectors, LU decomposition.	33	50	90 min
05/08/2018	Minor Test - 6	<b>GA:</b> General Aptitude( Language and Analytical Skills)	33	50	90 min

12/08/2018	Minor Test - 7	<b>EB-Algorithms:</b> 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
15/08/2018	<b>GA: Minor Test- 2</b>	<b>Verbal Ability:</b> English grammar, sentence completion, verbal analogies, word groups, instructions, critical reasoning and verbal deduction. <b>Numerical Ability:</b> Numerical computation, numerical estimation, numerical reasoning and data interpretation.	33	50	90 min
19/08/2018	Minor Test - 8	<b>EB- Theory of Computation:</b> 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
26/08/2018	Minor Test - 9	<b>EM - Calculus:</b> Limits, continuity and differentiability. Maxima and minima. Mean value theorem. Integration.	33	50	90 min
30/08/2018	<b>EM: Minor Test- 2</b>	<b>CALCULUS :</b> Limits, continuity and differentiability. Maxima and minima. Mean value theorem. Integration.	33	50	90 min
02/09/2018	Minor Test - 10	<b>EB-Compiler Design:</b> Lexical analysis, parsing, syntax-directed translation. Runtime environments. Intermediate code generation.	33	50	90 min
09/09/2018	Minor Test -11	<b>EB-Operating System Part-I:</b> Processes, threads, inter-process communication, concurrency and synchronization, Deadlock, CPU scheduling	33	50	90 min
15/09/2018	<b>GA: Minor Test- 3</b>	<b>Verbal Ability:</b> English grammar, sentence completion, verbal analogies, word groups, instructions, critical reasoning and verbal deduction. <b>Numerical Ability:</b> Numerical computation, numerical estimation, numerical reasoning and data interpretation.	33	50	90 min

16/09/2018	Minor Test - 12	<b>GA:</b> General Aptitude( Language and Analytical Skills)	33	50	90 min
23/09/2018	Minor Test - 13	<b>EB-Operating System Part-II:</b> Memory management and virtual memory, File systems.	33	50	90 min
29/09/2018	<b>EM: Minor Test- 3</b>	<b>SET THEORY &amp; ALGEBRA :</b> Sets; Relations; Functions; Groups; Partial Orders; Lattice. <b>COMBINATORY :</b> Counting; Generating functions; Recurrence relations.	33	50	90 min
30/09/2018	Minor Test -14	<b>EB- Databases Part-I:</b> ER-model. Relational model: relational algebra, tuple calculus, SQL.	33	50	90 min
07/10/2018	Minor Test - 15	<b>EM- Mathematical Logic:</b> Propositional Logic; First Order Logic. <b>Graph Theory:</b> Connectivity;; Matching; Colouring. <b>Combinatory:</b> Counting; Generating functions; Recurrence relations.	33	50	90 min
14/10/2018	Minor Test - 16	<b>EB- Databases Part-II:</b> Integrity constraints, normal forms. File organization, indexing (e.g., B and B+ trees). Transactions and concurrency control.	33	50	90 min
15/10/2018	<b>GA: Minor Test- 4</b>	<b>Verbal Ability:</b> English grammar, sentence completion, verbal analogies, word groups, instructions, critical reasoning and verbal deduction. <b>Numerical Ability:</b> Numerical computation, numerical estimation, numerical reasoning and data interpretation.	33	50	90 min
21/10/2018	Minor Test - 17	<b>EM-Probability:</b> Random variables. Uniform, normal, exponential, poisson and binomial distributions. Mean, median, mode and standard deviation. Conditional probability and Bayes theorem.	33	50	90 min
28/10/2018	Minor Test - 18	<b>EB-Computer Networks Part-I:</b> 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

30/10/2018	<b>EM: Minor Test- 4</b>	<b>MATHEMATICAL LOGIC :</b> Propositional Logic; First Order Logic. <b>GRAPH THEORY</b> : Connectivity; Matching; Colouring.	33	50	90 min
04/11/2018	Minor Test - 19	<b>EB-Computer Networks Part-II:</b> 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
11/11/2018	Minor Test -20	<b>GA:</b> General Aptitude( Language and Analytical Skills)	33	50	90 min
15/11/2018	<b>GA: Minor Test- 5</b>	<b>Verbal Ability:</b> English grammar, sentence completion, verbal analogies, word groups, instructions, critical reasoning and verbal deduction. <b>Numerical Ability:</b> Numerical computation, numerical estimation, numerical reasoning and data interpretation.	33	50	90 min
18/11/2018	Major Test - 1	<b>FULL SYLLABUS</b>	65	100	180 min
25/11/2018	Major Test - 2	<b>FULL SYLLABUS</b>	65	100	180 min
30/11/2018	<b>EM: Minor Test- 5</b>	<b>PROBABILITY :</b> Random variables. Uniform, normal, exponential, poisson and binomial distributions. Mean, median, mode and standard deviation. Conditional probability and Bayes theorem.	33	50	90 min
02/12/2018	Major Test - 3	<b>FULL SYLLABUS</b>	65	100	180 min
09/12/2018	Major Test - 4	<b>FULL SYLLABUS</b>	65	100	180 min
16/12/2018	Major Test - 5	<b>FULL SYLLABUS</b>	65	100	180 min
30/12/2018	Major Test - 6	<b>FULL SYLLABUS</b>	65	100	180 min
06/01/2019	Major Test -7	<b>FULL SYLLABUS</b>	65	100	180 min
13/01/2019	Major Test - 8	<b>FULL SYLLABUS</b>	65	100	180 min
20/01/2019	Major Test - 9	<b>FULL SYLLABUS</b>	65	100	180 min
27/01/2019	Major Test -10	<b>FULL SYLLABUS</b>	65	100	180 min

**NOTE:**

1. The above mentioned Dates are Opening Dates for Tests and each Test is valid till March 2019.