



ESTD:1991

VANI INSTITUTE

India's No.1 Institute for GATE, ESE & PSU's



GATE - 2019

Online Test Series

Computer Science and Information Technology (CSIT)

Total No.of Tests: 81



Chapter/Topic wise Tests

44



Subject wise / Multi Subject Grand Tests

25



Full Length Mock Tests

12

Features of Test Series

- ★ All India Rank will be given for each test.
- ★ Test wise and overall statistics.
- ★ Comparison with all India Students of VANI INSTITUTE
- ★ Powerful Analytics and Test Report which shows you All India Rank, Accuracy, Marks Distribution
 - ★ Chapter and topic wise
 - ★ Subject wise and Full Length

SUBJECT	SUBJECT CODE	TOPIC/CHAPTER
Discrete Mathematics (DM)	DM-1	Propositional and first order logic. Sets, relations, functions, partial orders and lattices. Groups. Graphs: connectivity, matching, coloring. Combinatorics: counting, recurrence relations, generating functions
	DM-2	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: Random variables. Uniform, normal, exponential, poisson and binomial distributions. Mean, median, mode and standard deviation. Conditional probability and Bayes theorem.
Digital Logic (DL)	DL-1	Boolean algebra. Combinational and sequential circuits. Minimization.
	DL-2	Number representations and computer arithmetic (fixed and floating point).
Computer Organization and Architecture (CO)	CO-1	Instruction pipelining. Memory hierarchy: cache, main memory and secondary storage; I/O interface (interrupt and DMA mode).
	CO-2	Machine instructions and addressing modes. ALU, data-path and control unit.

Programming and Data Structures (PLDS)	PLDS-1	Programming in C. Recursion. Arrays, stacks, queues
	PLDS-2	linked lists, trees, binary search trees, binary heaps, graphs.
Algorithms (AL)	AL-1	Asymptotic worst case time and space complexity. Algorithm design techniques: greedy, divide and conquer
	AL-2	Searching, sorting, hashing, dynamic programming Graph search, minimum spanning trees, shortest paths.
Theory of Computation (TOC)	TOC-1	Regular expressions and finite automata. Context-free grammars and push-down automata.
	TOC-2	Regular and context-free languages, pumping lemma. Turing machines and undecidability.
Compiler Design (CD)	CD-1	Lexical analysis, parsing
	CD-2	syntax-directed translation. Runtime environments. Intermediate code generation.
Operating System (OS)	OS-1	Processes, threads, inter-process communication, concurrency and synchronization. CPU scheduling.
	OS-2	Deadlock. Memory management and virtual memory. File systems.

Databases (DB)	DB-1	ER-model. Relational model: relational algebra, tuple calculus. Integrity constraints, normal forms.
	DB-2	SQL, File organization, indexing (e.g., B and B+ trees). Transactions and concurrency control.
Computer Networks & Network security (CNWNS)	CNWNS-1	Concept of layering. LAN technologies (Ethernet). Flow and error control techniques, switching. IPv4/IPv6, routers and routing algorithms (distance vector, link state).
	CNWNS-2	TCP/UDP and sockets, congestion control. 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.
General Aptitude (GA)	VA	English grammar, sentence completion, verbal analogies, word groups, instructions, critical reasoning and verbal deduction
	NA	Numerical computation, numerical estimation, numerical reasoning and data interpretation

Topic/Chapter wise test – 1st series

- ◆ Each test carries 25 marks and 45 minutes duration
- ◆ Test consists of 5 one mark questions and 10 two marks questions

GPL = GATE Preliminary Level

TEST NO	TOPIC CODES	DATE OF ACTIVATION
CS-01	GPLDM-1	02-06-2018
CS-02	GPLDM-2	05-06-2018
CS-03	GPLDL-1	07-06-2018
CS-04	GPLDL-2	11-06-2018
CS-05	GPLCO-1	14-06-2018
CS-06	GPLCO-2	17-06-2018
CS-07	GPLPLDS-1	20-06-2018
CS-08	GPLPLDS-2	23-06-2018
CS-09	GPLAL-1	26-06-2018
CS-10	GPLAL-2	29-06-2018
CS-11	GPLTOC-1	02-07-2018
CS-12	GPLTOC-2	05-07-2018
CS-13	GPLCD-1	08-07-2018
CS-14	GPLCD-2	11-07-2018
CS-15	GPLOS-1	14-07-2018
CS-16	GPLOS-2	17-07-2018
CS-17	GPLDB-1	20-07-2018
CS-18	GPLDB-2	23-07-2018
CS-19	GPLCNWNS-1	26-07-2018
CS-20	GPLCNWNS-2	27-07-2018
CS-21	GPLVA	28-07-2018
CS-22	GPLNA	31-07-2018

Subject wise Grand Test – 1st Series

- ◆ Each test carries 50 marks and 90 minutes duration
- ◆ Test consists of 10 one mark questions and 20 two marks questions

TEST NO	SUBJECT CODES	DATE OF ACTIVATION
CS-23	GPLDM	02-08-2018
CS-24	GPLDL	06-08-2018
CS-25	GPLCO	09-08-2018
CS-26	GPLPLDS	13-08-2018
CS-27	GPLAL	17-08-2018
CS-28	GPLTOC	21-08-2018
CS-29	GPLCD	25-08-2018
CS-30	GPLOS	29-08-2018
CS-31	GPLDB	01-09-2018
CS-32	GPLCNWNS	04-09-2018
CS-33	GPLGA	06-09-2018

Full length Mock Test – 1st series

- ◆ Each test carries 100 marks and 3 hours duration

TEST NO	MOCK GATE CODES	DATE OF ACTIVATION
CS-34	PLMock-1	10-09-2018
CS-35	PLMock-2	14-09-2018
CS-36	PLMock-3	19-09-2018

Topic/Chapter wise test – 2nd Series

- ◆ Each test carries 25 marks and 45 minutes duration
- ◆ Test consists of 5 one mark questions and 10 two marks questions

GAL = GATE Advanced Level

TEST NO	TOPIC CODES	DATE OF ACTIVATION
CS-37	GALDM-1	22-09-2018
CS-38	GALDM-2	24-09-2018
CS-39	GALDL-1	27-09-2018
CS-40	GALDL-2	30-09-2018
CS-41	GALCO-1	02-10-2018
CS-42	GALCO-2	04-10-2018
CS-43	GALPLDS-1	07-10-2018
CS-44	GALPLDS-2	09-10-2018
CS-45	GALAL-1	11-10-2018
CS-46	GALAL-2	14-10-2018
CS-47	GALTOC-1	16-10-2018
CS-48	GALTOC-2	19-10-2018
CS-49	GALCD-1	22-10-2018
CS-50	GALCD-2	25-10-2018
CS-51	GALOS-1	28-10-2018
CS-52	GALOS-2	30-10-2018
CS-53	GALDB-1	02-11-2018
CS-54	GALDB-2	05-11-2018
CS-55	GALCNWNS-1	07-11-2018
CS-56	GALCNWNS-2	09-11-2018
CS-57	GALVA	11-11-2018
CS-58	GALNA	11-11-2018

Multi Subject grand Test – 2nd Series

- ◆ Each test carries 50 marks and 90 minutes duration.
- ◆ Test consists of 10 one mark questions 20 two marks questions.

TEST NO	SUBJECT CODES	DATE OF ACTIVATION
CS-59	DM	14-11-2018
CS-60	DL,CO	17-11-2018
CS-61	PLDS	20-11-2018
CS-62	AL,DB	23-11-2018
CS-63	TOC,CD	27-11-2018
CS-64	OS,CNWN	28-11-2018
CS-65	GA	29-11-2018

Full Length Mock Test – 2nd Series

- ◆ Each test carries 100 marks and 3 hours duration

TEST NO	MOCK GATE CODES	DATE OF ACTIVATION
CS-66	ALMock-1	30-11-2018
CS-67	ALMock-2	04-12-2018
CS-68	ALMock-3	09-12-2018

Multi Subject grand Test – 3rd Series

- ◆ Each test carries 50 marks and 90 minutes duration.
- ◆ Test consists of 10 one mark questions and 20 two marks questions.

TEST NO	SUBJECT CODES	DATE OF ACTIVATION
CS-69	DM	13-12-2018
CS-70	DL,CO	17-12-2018
CS-71	PLDS	21-12-2018
CS-72	AL,DB	25-12-2018
CS-73	TOC,CD	31-12-2018
CS-74	OS,CNWNS	01-01-2019
CS-75	GA	03-01-2018

Full Length GATE Mock Test – 3rd Series

- ◆ Each test carries 100 marks and 3 hours duration

TEST NO	MOCK GATE CODES	DATE OF ACTIVATION
CS-76	GATE Mock-1	05-01-2019
CS-77	GATE Mock-2	08-01-2019
CS-78	GATE Mock-3	11-01-2019
CS-79	GATE Mock -4	15-01-2019
CS-80	GATE Mock -5	19-01-2019
CS-81	GATE Mock -6	25-01-2019