

GATE CSE FREE RESOURCES

- Anjali (GATE AIR 13)

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Youtube : <https://www.youtube.com/@anjc24>

Operating System

Youtube Videos	https://youtube.com/playlist?list=PLG9aCp4uE-s17rFjWM8KchGlffXgOzzVP&si=ZMitdCTm8l32csO1
Revision and PYQs Video Solution	https://youtube.com/playlist?list=PLIPZ2_p3RNHixllaarIXGPY-eggJQMxd_&si=RYjiG6EwmysznoMv
NPTEL Lectures	https://youtube.com/playlist?list=PLyqSpQzTE6M9SYI5RqwFYtFYab94gJpWk&si=zMmUw6nYg5o4ZGoA
Standard Textbook	Operating Systems by Avi Silberschatz, Greg Gagne, and Peter Baer Galvin (International 9E) Relavant Chapters in Book : ch 2.1-2.5, 3, 4.1-4.3, 4.6, 5.1-5.3, 6.1-6.10, 7, 8.1-8.6, 9.1-9.6, 9.9, 10, 11.1-11.5, 12.1-12.6
Topicwise PYQs	https://github.com/GATEOverflow/GO-PDFs/releases/tag/gatecse-2025
Free Tests	https://gateoverflow.in/exam/32/go2017-os-1
	https://gateoverflow.in/exam/32/go2017-os-2
	https://gateoverflow.in/exam/32/go2017-os-3
	https://gateoverflow.in/exam/148/operating-systems-gate2020-previous-gate-2

Computer Organization and Architecture (COA)

Youtube Videos	https://youtube.com/playlist?list=PLG9aCp4uE-soxddCBjwMDnEVyc523WbA2&si=MhOhWHFeKSPLCc3D
Revision and PYQs Video Solution	https://youtube.com/playlist?list=PLG9aCp4uE-s2qCKKu2XD3zDK-NFEvE91n&si=3F_wVgig9xcNRAGM
NPTEL Lectures	https://youtube.com/playlist?list=PLgHuckWg979AvcnTpPNZMZyORdL5HvTrgm&si=45QVoI_l38BhQs8l https://youtube.com/playlist?list=PL2F82ECDF8BB71BoC&si=odaLSmgJ4SgSPLJf
Standard Textbook	Computer Organisation by Carl Hamacher Relavant Chapters in Book : ch 1.6, 2.1-2.5, 2.9, 2.10, 4.1-4.2, 4.4-4.6, 5.1, 5.2, 5.4-5.8, 5.9.1, 6.1-6.4, 6.7.1, 7, 8.1-8.5, 8.8

Computer Organization and Design: the Hardware/Software Interface by David A Patterson and John L. Hennessy (5E)

1, 2, 4.1-4.9, 4.14, 5.1-5.10

Topicwise PYQs

<https://github.com/GATEOverflow/GO-PDFs/releases/tag/gatecse-2025>

Free Tests

<https://gateoverflow.in/exam/46/computer-architecture>

<https://gateoverflow.in/exam/83/computer-architecture-2>

<https://gateoverflow.in/exam/153/co-and-architecture-gate2020-previous-gate-1>

<https://gateoverflow.in/exam/154/co-and-architecture-gate2020-previous-gate-2>

<https://gateoverflow.in/exam/168/co-and-architecture-gate2020-previous-gate-3>

<https://gateoverflow.in/exam/169/co-and-architecture-gate2020-previous-gate-4>

Computer Network (CN)

Youtube Videos

<https://youtube.com/playlist?list=PLC36xJgs4dxHT-TxTy3U1slr5RaBJGaLd&si=2NKdNOM8SCj7GV7m>

Revision and PYQs Video Solution

https://youtube.com/playlist?list=PLIPZ2_p3RNHim3NUSNOB7ffyhaE5MSkmE&si=K_BGtR_g1PzzpPRK

NPTEL Lectures

<https://youtube.com/playlist?list=PLbRMhDVUMngf-peFloB7kyiA40EptH1up&si=DrRWF-OoBVLFPv4b>

CN Videos by Jim Kurose (Youtube)

<https://www.youtube.com/@JimKurose/videos>

Standard Textbook

Data Communications and Networking by Behrouz A. Forouzan (5E)

1.1-1.3, 2, 3.6, 8-10, 11.1-2, 12, 13.1-13.2, 17.1, 18-19.2, 20-21.2, 23-24.3, 25.1-25.2, 26

Topicwise PYQs

<https://github.com/GATEOverflow/GO-PDFs/releases/tag/gatecse-2025>

Free Tests

<https://gateoverflow.in/exam/49/computer-networks>

<https://gateoverflow.in/exam/143/computer-networks-gate2020-previous-gate-1>

<https://gateoverflow.in/exam/144/computer-networks-gate2020-previous-gate-2>

Compiler Design (CD)

Youtube Videos

https://youtube.com/playlist?list=PLEbnTDJUr_IcPtUXFy2b1sGRPsLFMghhS&si=9gh9zklL_uPxONSj

https://youtube.com/playlist?list=PLIPZ2_p3RNHj8kDhh1OCIzEha8qhzhfe1f&si=3NofjYSTe5c7nM5u

Revision and PYQs Video Solution	https://youtube.com/playlist?list=PLIPZ2_p3RNHjy3eH_qRlms5dVUTpr9ga&si=5qmgBYDkFhvkZgZH
NPTEL Lectures	https://youtube.com/playlist?list=PL54i8TI-dREaHgsBFNaIWnz-bC9CZkOBb&si=G65o3fHjR549Y2OJ
Compilers Course by Prof. Alex Aiken	https://www.edx.org/learn/computer-science/stanford-university-compilers
Standard Textbook	Compilers : Principles, Techniques, & Tools (Ravi Sethi, Alfred V. Aho, Monica S. Lam, D. Jeffrey Ulman)
Topicwise PYQs	https://github.com/GATEOverflow/GO-PDFs/releases/tag/gatecse-2025
Free Tests	https://gateoverflow.in/exam/139/go2019-compiler1-parsing
	https://gateoverflow.in/exam/47/compiler-design
	https://gateoverflow.in/exam/151/compilers-gate2020-previous-gate-1
	https://gateoverflow.in/exam/152/compilers-gate2020-previous-gate-2
	https://gateoverflow.in/exam/167/compilers-gate2020-previous-gate-3
Theory of Computation (TOC)	
Youtube Videos	https://youtube.com/playlist?list=PLC36xJgs4dxGvebewU4z2CZY0-8nB93E7&si=iKAopfWszFTAf1eL
Revision and PYQs Video Solution	https://youtube.com/playlist?list=PLIPZ2_p3RNHhXeEdbXsi34ePvUjL8I-Q9&si=xymdoFQXQQYK6idE
NPTEL Lectures	https://youtube.com/playlist?list=PLbRMhDVUMngcwWkzVTm_kFH6JW4JCtAUM&si=Vzf6zkHegLy7_NXi
Standard Textbook	An Introduction to Formal Languages and Automata by Peter Linz (6E)
	ch 1.2, 1.3, 2-12, Appendix-A
Topicwise PYQs	https://github.com/GATEOverflow/GO-PDFs/releases/tag/gatecse-2025
Free Tests	https://gateoverflow.in/exam/48/theory-of-computation
	https://gateoverflow.in/exam/84/theory-of-computation-test-2
	https://gateoverflow.in/exam/86/theory-of-computation-previous-gate-1
	https://gateoverflow.in/exam/149/theory-of-computation-gate2020-previous-gate-1
	https://gateoverflow.in/exam/150/theory-of-computation-gate2020-previous-gate-2
	https://gateoverflow.in/exam/170/theory-of-computation-gate2020-previous-gate-3
	https://gateoverflow.in/exam/171/theory-of-computation-gate2020-previous-gate-4

C-Programming	
Youtube Videos	https://youtube.com/playlist?list=PLbE3-5DBkMUKAtaUFgDlpBDbfnyoqvsQ&si=tLgWVRmDfwlMCbvj
NPTEL Lectures	https://youtube.com/playlist?list=PLEAYkSg4uSQ2k6GwNhpgSHodGT8wfvvgwu&si=3Yo1XGiLn7ZURbpm
Standard Textbook	The C Programming Language by Brian Kernighan and Dennis Ritchie (2E)
	ch 1-8
Topicwise PYQs	https://github.com/GATEOverflow/GO-PDFs/releases/tag/gatecse-2025
Free Tests	https://gateoverflow.in/exam/39/go2017-programming-1
	https://gateoverflow.in/exam/80/go_programming-test-2
	https://gateoverflow.in/exam/181/programming-gate2020-previous-gate-1
	https://gateoverflow.in/exam/182/programming-gate2020-previous-gate-2
Data Structures (DS)	
Youtube Videos	https://youtube.com/playlist?list=PLICoAxW0dm5BvHpl_AtPqqjoADnSqcYgp&si=q_Qps7uYmU2RjuLr
Revision and PYQs Video Solution	https://youtube.com/playlist?list=PLG9aCp4uE-s3Rs4AjzGoVcXQCggmOJJ6W&si=YgSf-sgQNlmT2tBd
NPTEL Lectures	https://youtube.com/playlist?list=PLBF3763AF2E1C572F&si=oiRSnliN4ntMIPQL
Standard Textbook	Data Structures And Algorithms Narasimha Karumanchi
Topicwise PYQs	https://github.com/GATEOverflow/GO-PDFs/releases/tag/gatecse-2025
Free Tests	https://gateoverflow.in/exam/52/data-structure-set-2
	https://gateoverflow.in/exam/177/data-structures-gate2020-previous-gate-1
	https://gateoverflow.in/exam/178/data-structures-gate2020-previous-gate-2
	https://gateoverflow.in/exam/179/data-structures-gate2020-previous-gate-3
	https://gateoverflow.in/exam/180/data-structures-gate2020-previous-gate-4
Algorithms	

Youtube Videos	https://youtube.com/playlist?list=PLAXnLdrLnQpRcveZTtD644gM9uzYqJCwr&si=U_A4tdPO33X3xV8I
Revision and PYQs Video Solution	https://youtube.com/playlist?list=PLIPZ2_p3RNHjUCHdJp-_soSSmhgmO4ioT&si=5LN5dM51DjRDMOJ1
NPTEL Lectures	https://youtube.com/playlist?list=PL7DC83C6B3312DF1E&si=pme4ZTL1jou81mt4
Standard Textbook	Introduction to Algorithms, by CLRS (3E)
	ch 1-4, 6-9,10, 11.1-11.4, 12.1-21.3, 15, 16.1-16.3, 17, 21-25.2
	Algorithm Design, Jon Kleinberg and Éva Tardos
	ch 1-6
Topicwise PYQs	https://github.com/GATEOverflow/GO-PDFs/releases/tag/gatecse-2025
Free Tests	https://gateoverflow.in/exam/37/go2017-algorithms-1
	https://gateoverflow.in/exam/82/algorithm-test-2
	https://gateoverflow.in/exam/66/algorithms-previous-gate-1
	https://gateoverflow.in/exam/145/algorithms-gate2020-previous-gate-1
	https://gateoverflow.in/exam/146/algorithms-gate2020-previous-gate-2
Digital Logic	
Youtube Videos	https://youtube.com/playlist?list=PLBlnK6fEyqRjMH3mWf6kwqiTbT798eAOm&si=4CoZ9de3YKT4zHeb
Revision and PYQs Video Solution	https://www.youtube.com/live/h-SDoVo_pwQ?si=PmwmlQ_UHWvUorW/
NPTEL Lectures	https://youtube.com/playlist?list=PL803563859BF7ED8C&si=OXD8r2PBFbS6gbcC
Standard Textbook	Digital Logic and Computer Design by M. Morris Mano
	1.1-1.8, 2.1-2.7, 3-7
Topicwise PYQs	https://github.com/GATEOverflow/GO-PDFs/releases/tag/gatecse-2025
Free Tests	https://gateoverflow.in/exam/33/go2017-digital-1
	https://gateoverflow.in/exam/51/digital-design-set-2
	https://gateoverflow.in/exam/157/digital-logic-gate2020-previous-gate-1
	https://gateoverflow.in/exam/158/digital-logic-gate2020-previous-gate-2

<https://gateoverflow.in/exam/174/digital-logic-gate2020-previous-gate-3>

<https://gateoverflow.in/exam/175/digital-logic-gate2020-previous-gate-4>

Database Management System (DBMS)

Youtube Videos <https://youtube.com/playlist?list=PLG9aCp4uE-sobu-l8fgDXXhVLO4qVROGy&si=5lies1OyzDGms31i>

Revision and PYQs Video Solution https://youtube.com/playlist?list=PLIPZ2_p3RNHh3otU-TnAK-GkqrVV0O33C&si=8Kazn74m30yhUDvh

NPTEL Lectures <https://youtube.com/playlist?list=PL-wVMhLYPDDkRQoXrQ8IuslSiAWPpSfuJ&si=wEyZRglxdNZgyqXE>

Standard Textbook **Fundamentals of Database Systems by Ramez Elmasri and Shamkant B. Navathe (7E)**

ch 1.3-1.6, 2.1-2.3, 3, 5-8, 9.1, 14.1-14.5, 14.6-14.7(just overview), 15.1-15.4, 16.1-16.7, 17.1-17.6, 20.1-20.5, 21.1-21.4, 21.7

Topicwise PYQs <https://github.com/GATEOverflow/GO-PDFs/releases/tag/gatecse-2025>

Free Tests <https://gateoverflow.in/exam/50/database-systems>

<https://gateoverflow.in/exam/85/dbms-subject-test-2>

<https://gateoverflow.in/exam/155/databases-gate2020-previous-gate-1>

<https://gateoverflow.in/exam/156/databases-gate2020-previous-gate-2>

<https://gateoverflow.in/exam/172/databases-gate2020-previous-gate-3>

<https://gateoverflow.in/exam/173/databases-gate2020-previous-gate-4>

Discrete Maths

Youtube Videos Propositional Logic : https://youtube.com/playlist?list=PLIPZ2_p3RNHhIKxh1_iFeZhygMftHeWW&si=4om73pMxQvuToQvh

Combinatorics : https://youtube.com/playlist?list=PLIPZ2_p3RNHgm_UqwqckMxM68HS4BkjYY&si=ksPAjkwM2cb28NVn

Reccurence Relations : https://youtube.com/playlist?list=PLIPZ2_p3RNHhhTHoo1JBMgscMUvxs4E_4&si=r3THjdW_19iFCAIm

Group Theory : https://youtube.com/playlist?list=PLIPZ2_p3RNHhXvesoXVa8d5O6F4rUi3KR&si=8-CgTfTK2XjdG6Pt

Graph Theory : https://youtube.com/playlist?list=PLIPZ2_p3RNHjQojok-BllgzXEoQKdl-II&si=GGNFwhNSHxhdcJOQ

Generating Function : https://youtube.com/playlist?list=PLIPZ2_p3RNHjQojok-BllgzXEoQKdl-II&si=GGNFwhNSHxhdcJOQ

Set Theory : https://youtube.com/playlist?list=PLIPZ2_p3RNHjHnhdkPWfAlcizVQJ8w4TX&si=aOl21dH2q3NjaDgx

Revision and PYQs Video Solution	https://youtube.com/playlist?list=PL3eEXnCBViH-WZfR3PRFfYs7WjUgcBIAZ&si=_QvuJAWFGK_Dswby
NPTEL Lectures	https://youtube.com/playlist?list=PLgMDNELGJ1Ca7hpEIYtWvMXKcTx88OD2O&si=1WcmQtclGosFqSlg
Standard Textbook	Discrete mathematics and its applications by Kenneth H. Rosen (Indian 7E)
	ch 1,2, 4-8, 11.1-11.3
	Discrete mathematics with applications by Susanna S. Epp (4E)
	ch 1, 2.1-2.3, 3, 4(optional), 5.1, 5.5-5.7, 6-10, 11-12(optional)
Topicwise PYQs	https://github.com/GATEOverflow/GO-PDFs/releases/tag/gatecse-2025
Free Tests	https://gateoverflow.in/exam/601/go-classes-2025-weekly-quiz-5-propositional-logic
	https://gateoverflow.in/exam/602/go-classes-2025-weekly-quiz-6-propositional-logic
	https://gateoverflow.in/exam/603/go-classes-2025-weekly-quiz-7-propositional-logic
	https://gateoverflow.in/exam/605/go-classes-2025-weekly-quiz-8-set-theory
	https://gateoverflow.in/exam/614/go-classes-cs-2025-weekly-quiz-6-functions
	https://gateoverflow.in/exam/622/go-classes-cs-2025-weekly-quiz-7-relations
	https://gateoverflow.in/exam/641/go-classes-cs-2025-weekly-quiz-15-lattice-%26-poset
	https://gateoverflow.in/exam/438/discrete-mathematics-propositional-logic-test-1
	https://gateoverflow.in/exam/441/discrete-mathematics-propositional-logic-test-2
	https://gateoverflow.in/exam/447/discrete-mathematics-logic-test-3
	https://gateoverflow.in/exam/456/discrete-mathematics-logic-test-4
	https://gateoverflow.in/exam/191/set-theory-%26-algebra-gate2020-previous-gate-1
	https://gateoverflow.in/exam/192/set-theory-%26-algebra-gate2020-previous-gate-2
	https://gateoverflow.in/exam/193/combinatorics-gate2020-previous-gate-1
	https://gateoverflow.in/exam/194/mathematical-logic-gate2020-previous-gate-1
	https://gateoverflow.in/exam/195/mathematical-logic-gate2020-previous-gate-2
	https://gateoverflow.in/exam/196/graph-theory-gate2020-previous-gate-1
	https://gateoverflow.in/exam/87/set-theory-%26-algebra-previous-gate-1

<https://gateoverflow.in/exam/69/graph-theory-previous-gate-1>

Linear Algebra (LA)

Youtube Videos	https://youtube.com/playlist?list=PLIPZ2_p3RNHhGLQ1ZT37KLpBMAD9oCM4_&si=VpylHczkW8ylqspX
Revision and PYQs Video Solution	https://www.youtube.com/live/7vdSWFVKzZg?si=STl2XSSu8T7S_law
NPTEL Lectures	https://youtube.com/playlist?list=PLFW6lRTa1g8ofZ1giRbqbe_XdXPdkkyqY&si=l3-KeMND-CfmrJzv
Videos for intuition	https://youtube.com/playlist?list=PLZHQObOWTQDPD3MizzM2xVFitgF8hE_ab&si=YAaXZgsrWqvlpwz8
Topicwise PYQs	https://github.com/GATEOverflow/GO-PDFs/releases/tag/gatecse-2025
Free Tests	https://gateoverflow.in/exam/598/go-classes-2025-weekly-quiz-3-fundamental-course-and-linear-algebra
	https://gateoverflow.in/exam/600/go-classes-2025-weekly-quiz-4-linear-algebra
	https://gateoverflow.in/exam/606/go-classes-2025-common-weekly-quiz-5-linear-algebra
	https://gateoverflow.in/exam/68/linear-algebra-previous-gate-1
	https://gateoverflow.in/exam/161/linear-algebra-gate2020-previous-gate-1
	https://gateoverflow.in/exam/162/linear-algebra-gate2020-previous-gate-2

Probability

Youtube Videos	https://youtube.com/playlist?list=PLhLZ_zxDsyOIKbQfKFM05BLYRhUZ7JP-M&si=PhhEGh77ahUsqikf
Revision and PYQs Video Solution	https://youtu.be/_nuQwy9DGMw?si=rr7WOwRJ_FoQqjn8
NPTEL Lectures	https://youtube.com/playlist?list=PLyqSpQzTE6M_JcleDbrVyPnE0PixKs2JE&si=oohtQ1hAn60vNLRK
Standard Textbook	Introduction to probability models / Sheldon M. Ross
For reading	https://www.probabilitycourse.com/
Topicwise PYQs	https://github.com/GATEOverflow/GO-PDFs/releases/tag/gatecse-2025
Free Tests	https://gateoverflow.in/exam/623/go-classes-cs-da-2025-weekly-quiz-6-conditional-probability
	https://gateoverflow.in/exam/628/go-classes-2025-weekly-quiz-13-probability-distributions
	https://gateoverflow.in/exam/67/probability-previous-gate-1

<https://gateoverflow.in/exam/159/probability-gate2020-previous-gate-1>

<https://gateoverflow.in/exam/160/probability-gate2020-previous-gate-2>

Calculus

Youtube Videos Mohit Tyagi YT videos (All videos are not relevant for GATE, I will list out the relevant videos soon)

Revision and PYQs Video Solution https://youtube.com/playlist?list=PLIPZ2_p3RNHi3R5H_NDKCB3aGvtLYLLrz&si=DGxz1haxSAbWSEsq

NPTEL Lectures https://youtube.com/playlist?list=PLEAYkSg4uSQoqgCDkHkJGdUTQOgH1DLdj&si=Rt5U9aaad4jiXdT_

Khan Academy <https://www.khanacademy.org/math/calculus-1>

Topicwise PYQs <https://github.com/GATEOverflow/GO-PDFs/releases/tag/gatecse-2025>

Free Tests <https://gateoverflow.in/exam/659/go-classes-2025-weekly-quiz-21-calculus>

<https://gateoverflow.in/exam/659/go-classes-2025-weekly-quiz-21-calculus>

<https://gateoverflow.in/exam/164/calculus-gate2020-previous-gate-1>

<https://gateoverflow.in/exam/159/probability-gate2020-previous-gate-1>

<https://gateoverflow.in/exam/160/probability-gate2020-previous-gate-2>

Aptitude

Resources, Short Notes, List of Topics <https://youtu.be/IADuDzccEOI?si=nNrSgv5oORGvXLgN>

Free Tests <https://gateoverflow.in/exam/610/go-classes-2025-monthly-quiz-1-general-aptitude>

<https://gateoverflow.in/exam/631/go-classes-cs-da-2025-monthly-quiz-2-general-aptitude>

<https://gateoverflow.in/exam/660/go-classes-cs-da-2025-monthly-quiz-3-general-aptitude>

<https://gateoverflow.in/exam/36/go2017-aptitude-1>

<https://gateoverflow.in/exam/64/general-aptitude-set-2>

FREE MOCK TESTS

Full Length Mock Tests <https://gateoverflow.in/exam/70/go-17-mock-1>

<https://gateoverflow.in/exam/73/go-17-mock-2>

<https://gateoverflow.in/exam/74/go-17-mock-3>

<https://gateoverflow.in/exam/79/go-18-mock-4>

<https://gateoverflow.in/exam/126/test-by-ruturaj-mock-1>

<https://gateoverflow.in/exam/136/applied-course-2019-mock1>

FREE MOCK TESTS

GATE exam

Previous Years GATE as Mocks

<https://gateoverflow.in/exam/594/gate-cse-2024-set-1-original-paper>

<https://gateoverflow.in/exam/595/gate-cse-2024-set-2-original-paper>

<https://gateoverflow.in/exam/430/gate-cse-2023-original-paper>

<https://gateoverflow.in/exam/298/gate-cse-2022>

<https://gateoverflow.in/exam/263/gate-2021>

<https://gateoverflow.in/exam/264/gate-cse-2021-set-2>

<https://gateoverflow.in/exam/218/gate-cse-2020>

<https://gateoverflow.in/exam/141/gate2019>

<https://gateoverflow.in/exam/88/gate2018>

<https://gateoverflow.in/exam/76/gate-2017-set-1>

<https://gateoverflow.in/exam/75/gate-2017-set-2>

<https://gateoverflow.in/exam/8/gate-2016-1>

<https://gateoverflow.in/exam/9/gate-2016-2>

<https://gateoverflow.in/exam/10/gate-2015-1>

<https://gateoverflow.in/exam/11/gate-2015-2>

<https://gateoverflow.in/exam/12/gate-2015-3>

Notes

Notes from standards books for GATE CSE <https://drive.google.com/drive/folders/1oGCYictHLqXE1skdkJ8PnaefBnLrRXwG>

Handwritten Notes <https://github.com/baquer/GATE-and-CSE-Resources-for-Students/blob/master/AnkurGuptaNotes/CompilerDesign.pdf>

Short Notes & Imp Questions <https://youtu.be/gHAXjug36wA?si=lkgiP3lGFIZYKAL7>

Credits for listing out relevant chapters from textbooks : Nikhil Dhama (AIR 8 GATE 2021)