

Topic list GO2017 vol 1

1. Discrete Mathematics: Combinatory (51)

1. Generating Functions	4	
2. Permutation and Comb	38	
3. Recurrence	6	
4. Summation	3	

2. Discrete Mathematics: Graph Theory (62)

1. Counting	7	
2. Degree Of Graph	13	
3. Euler Graph	1	
4. Graph Coloring	9	
5. Graph Connectivity	20	
6. Graph Isomorphism	2	
7. Graph Matching	1	
8. Graph Planarity	1	
9. Line Graph	1	
10. Regular Graph	1	
11. Spanning Tree	2	
12. Trees	3	
13. Vertex Cover	1	

3. Discrete Mathematics: Mathematical Logic (79)

1. First Order Logic	33	
2. Logical Reasoning	10	
3. Propositional Logic	36	

4. Discrete Mathematics: Set Theory & Algebra (173)

1. Binary Operation	8	
2. Counting	1	
3. Fields	1	
4. Functions	33	
5. Generating Functions	1	
6. Groups	22	
7. Inequality	1	
8. Lattice	9	
9. Lines Curves	1	
10. Mathematical Induction	2	
11. Number Theory	9	
12. Partial Order	12	
13. Polynomials	8	
14. Relations	31	
15. Ring	1	
16. Sets	33	

5. Engineering Mathematics: Calculus (51)

1. Continuity	4	
2. Differentiability	8	
3. Functions	4	
4. Integration	11	
5. Limits	11	
6. Maxima Minima	12	
7. Polynomials	1	

6. Engineering Mathematics: Linear Algebra (69)

1. Determinant	6	
2. Eigen Value	22	
3. Matrices	25	
4. System Of Equations	11	
5. Vector Space	5	

7. Engineering Mathematics: Probability (101)

1. Bayes Theorem	4	
2. Binomial Distribution	5	
3. Conditional Probability	6	
4. Expectation	11	
5. Exponential Distribution	1	
6. Normal Distribution	1	
7. Poisson Distribution	4	
8. Probability	59	
9. Random Variable	8	
10. Uniform Distribution	2	

8. General Aptitude: Numerical Ability (214)

1. Absolute Value	5	
2. Algebra	1	
3. Arithmetic Series	1	
4. Bar Charts	2	
5. Bayes Theorem	3	
6. Cartesian Coordinates	3	
7. Circle	1	
8. Clock Time	3	
9. Complex Number	1	
10. Compound Interest	1	
11. Conditional Probability	2	
12. Cost Market Price	3	
13. Counting	1	
14. Currency Money	1	
15. Data Interpretation	17	
16. Direction Sense	3	
17. Factors	6	
18. Fractions	4	
19. Functions	3	
20. Geometry	9	
21. Inference	1	
22. Limits	1	
23. Logarithms	2	
24. Logical Reasoning	22	
25. Maxima Minima	3	
26. Mean	1	
27. Modular Arithmetic	1	
28. No Of Digits	1	
29. Number Representation	2	
30. Number Series	11	
31. Numerical Computation	14	
32. Odd One	3	
33. Percentage	10	
34. Permutations And Combinations	11	

35. Pie Chart	4	
36. Pigeonhole	1	
37. Polynomials	1	
38. Probability	13	
39. Proportions	1	
40. Quadratic Equations	5	
41. Ratios	5	
42. Sequence	4	
43. Sequence Series	1	
44. Sets	1	
45. Speed Time Distance	11	
46. Statement Argument	1	
47. Statement Sufficiency	1	
48. Statistics	1	
49. Summation	2	
50. System Of Equations	1	
51. Triangles	2	
52. Variance	1	
53. Venn Diagrams	2	
54. Work Time	3	

9. General Aptitude: Verbal Ability (180)

1. Closest Word	3	
2. English Grammar	26	
3. Geometry	1	
4. Grammatically Incorrect Sentence	2	
5. Inference	2	
6. Logical Reasoning	15	
7. Meaning	20	
8. Median	1	
9. Most Appropriate Alternative	4	
10. Most Appropriate Word	33	
11. Noun Verb Adjective	1	
12. Odd One	3	
13. Opposite	3	
14. Passage Reading	23	
15. Percentage	1	
16. Phrasal Verbs	1	
17. Probability	1	
18. Speed Time Distance	1	
19. Statements Follow	1	
20. Synonym	5	
21. Tenses	3	
22. Venn Diagrams	1	
23. Verbal Reasoning	22	
24. Word Pairs	7	

Topic list GO2017 vol 2

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3. Asymptotic Notations	21	
4. Dynamic Programming	11	
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6. Greedy Algorithm	8	
7. Identify Function	35	
8. Minimum Maximum	4	
9. Np Completeness	15	
10. Numerical Computation	2	
11. Recurrence	29	
12. Searching	7	
13. Sorting	52	
14. Spanning Tree	31	
15. Time Complexity	32	

2. Compiler Design (157)

1. Abstract Syntax Tree	1	
2. Assembler	5	
3. Code Optimization	4	
4. Compilation Phases	7	
5. Expression Evaluation	1	
6. Expression Tree	1	
7. Grammar	39	
8. Infix Postfix	2	
9. Intermediate Code	7	
10. Left Recursion	1	
11. Lexical Analysis	4	
12. Linking	3	
13. Live Variable	1	
14. Macros	3	
15. Parameter Passing	8	
16. Parsing	42	
17. Programming In C	1	
18. Recursion	1	
19. Register Allocation	4	
20. Runtime Environments	9	
21. Static Single Assignment	2	
22. Syntax Directed Translation	6	
23. Target Code Generation	2	
24. Variable Scope	2	
25. Viable Prefix	1	

3. Programming & DS: DS (198)

1. Abstract Data Type	1	
2. Arrays	14	
3. Binary Search Tree	29	
4. Binary Tree	46	
5. Graphs	6	
6. Hashing	17	
7. Heap	24	
8. Linked Lists	19	
9. Queues	11	
10. Stack	17	
11. Trees	14	

4. Programming & DS: Programming (107)

1. Aliasing	1	
2. Goto	1	
3. Identify Function	4	
4. Loop Invariants	8	
5. Programming Constructs	1	
6. Programming In C	60	
7. Programming Paradigms	3	
8. Pseudo Code	1	
9. Recursion	18	
10. Runtime Environments	9	
11. Type Checking	1	

5. Theory of Computation (268)

1. Closure Property	9	
2. Context Free Language	32	
3. Countable Set	1	
4. Decidability	22	
5. Finite Automata	63	
6. Grammar	1	
7. Identify Class Language	30	
8. Non Determinism	7	
9. Pumping Lemma	1	
10. Pushdown Automata	13	
11. Recursive and RE Languages	13	
12. Regular Expressions	28	
13. Regular Grammar	3	
14. Regular Languages	36	
15. Turing Machine	9	

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1. CO & Architecture (173)

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2. Cache Memory	53	
3. Cisc Risc Architecture	1	
4. Clock Frequency	2	
5. Conflict Misses	1	
6. Data Dependences	2	
7. Data Path	4	
8. Dma	2	
9. Expanding Opcode	1	
10. Instruction Execution	4	
11. Instruction Format	4	
12. Instruction Prefetch	1	
13. Interrupts	8	
14. Io Handling	4	
15. Machine Instructions	14	
16. Memory Interfacing	1	
17. Microprogramming	11	
18. Page Fault	1	
19. Pipelining	34	
20. Runtime Environments	2	
21. Speedup	3	
22. Virtual Memory	3	

2. Computer Networks (191)

1. Application Layer Protocols	8	
2. Bit Stuffing	1	
3. Bridges	2	
4. Communication	9	
5. Congestion Control	4	
6. Crc Polynomial	3	
7. Cryptography	1	
8. Cdma Cd	5	
9. Distance Vector Routing	6	
10. Dns	1	
11. Encoding	1	
12. Error Detection	6	
13. Ethernet	4	
14. Firewall	1	
15. Hamming Code	1	
16. Huffman Code	1	
17. Icmp	1	
18. Ip Packet	8	
19. Ipv4	8	
20. Lan Technologies	6	
21. Link State Routing	1	
22. Mac Protocol	4	
23. Manchester Encoding	2	
24. Network Addressing	1	
25. Network Communication	1	
26. Network Flow	6	
27. Network Layering	3	
28. Network Protocols	5	
29. Network Security	14	
30. Network Switching	4	
31. Osi Protocol	1	
32. Routers Bridge Hubs Switches	1	
33. Routing	8	
34. Rsa Security Networks	1	

35. Selective Repeat	1	
36. Serial Communication	3	
37. Sliding Window	15	
38. Sockets	4	
39. Stop And Wait	4	
40. Subnetting	16	
41. Tcp	12	
42. Token Bucket	2	
43. Udp	4	
44. Wifi	1	

3. Databases (204)

1. B Tree	22	
2. Candidate Keys	5	
3. Concurrency	1	
4. Conflict Serializable	1	
5. Data Flow Diagrams	1	
6. Data Independence	1	
7. Database Normalization	27	
8. Er Diagram	8	
9. Functional Dependencies	13	
10. Indexing	9	
11. Joins	3	
12. Multivalued Dependency 4nf	1	
13. Natural Join	2	
14. Referential Integrity	3	
15. Relational Algebra	16	
16. Relational Calculus	25	
17. Safe Query	1	
18. Sql	37	
19. Timestamp Ordering	1	
20. Transaction And Concurrency	1	
21. Transactions	24	
22. Uniform Distribution	1	

4. Digital Logic (236)

1. Adder	7	
2. Array Multiplier	2	
3. Boolean Algebra	4	
4. Boolean Expressions	19	
5. Boolean Operations	3	
6. Booth Recoding	1	
7. Booths Algorithm	4	
8. Canonical Normal Form	7	
9. Carry Generator	2	
10. Circuit Output	34	
11. Conjunctive Normal Form	1	
12. Decoder	1	
13. Digital Circuits	3	
14. Digital Counter	7	
15. Dual Function	1	
16. Fixed Point Representation	1	
17. Flip Flop	8	
18. Floating Point Representation	5	
19. Functional Completeness	4	
20. Gray Code	2	
21. Half Adder	2	
22. Hamming Code	1	
23. Ieee Representation	3	
24. K Map	16	
25. Logic Gates	5	
26. Memory Interfacing	1	
27. Min No Gates	4	
28. Min Product Of Sums	1	
29. Min Sum Of Products Form	11	
30. Minimal State Automata	1	
31. Multiplexer	10	
32. Number Representation	48	
33. Phase Shift	1	
34. Prime Implicants	2	

35. Priority Encoder	1	
36. Ram	2	
37. Rom	4	
38. Rs Flip Flop	1	
39. Shift Registers	1	
40. Static Hazard	1	
41. Synchronous Asynchronous Circ	1	
42. Synchronous Circuit	1	
43. Synchronous Counter	1	
44. Xor	1	

5. Operating System (276)

1. Computer Peripherals	1	
2. Concurrency	3	
3. Context Switch	3	
4. Critical Section	1	
5. Disk Scheduling	13	
6. Disks	28	
7. Dma	1	
8. Effective Memory Access	1	
9. File	1	
10. File System	4	
11. Fork	4	
12. Inter Process Communication	1	
13. Interrupts	6	
14. Io Handling	6	
15. Linking	1	
16. Memory Allocation	1	
17. Memory Management	6	
18. Os Protection	1	
19. Overlay	1	
20. Page Replacement	25	
21. Precedence Graph	2	
22. Process	4	
23. Process Schedule	36	
24. Process Synchronization	45	

25. Resource Allocation	26	
26. Runtime Environments	2	
27. Semaphore	6	
28. System Calls	1	
29. Threads	7	
30. User Modes	1	
31. Virtual Memory	37	
32. Working Set	1	