

Description

Algorithms

Curriculum

Time and Space analysis

- Algorithms Lecture 1 -- Introduction to asymptotic notations
22 : 27 min
- Time complexity Analysis of iterative programs
37 : 09 min
- Time analysis of recursive program
24 : 37 min
- comparing various functions to analyse time complexity
25 : 26 min
- Masters theorem
24 : 38 min
- Analyzing Space complexity of iterative and recursive algorithms
46 : 15 min
- Note
- Amortized Analysis
02 : 37 min

- Aggregate Analysis
03 : 32 min

- Example on Aggregate Analysis
07 : 05 min

Sorting Techniques

- Insertion sort algorithm and analysis
27 : 38 min
- Merge sort algorithm, analysis and problems
65 : 09 min
- Quick sort algorithm
44 : 51 min
- Analysis of quick sort and problems on it
32 : 52 min
- introduction to heaps
39 : 43 min
- Max heapify algorithm and complete binary tree
37 : 37 min
- Build max heap algorithm and analysis
15 : 24 min
- Heap sort and analysis
16 : 44 min

- Bubble sort algorithm
06 : 15 min
- Example on Bubble sort
08 : 49 min
- Time complexity analysis for bubble sort
05 : 37 min
- Extract max, increase key and insert key into heap
22 : 11 min
- Bucket sort
06 : 20 min
- Counting sort
05 : 43 min
- Radix-sort(aid)
07 : 31 min
- Analysis of time complexity on radix -sort(AID)
08 : 12 min
- Algorithm of selection sort file
03 : 43 min
- Analysis of selection sort file
13 : 36 min

Greedy algorithms

- Introduction to Greedy algorithms
07 : 08 min
- Greedy knap sack algorithm
32 : 23 min
- Huffman codes
42 : 59 min
- More examples on Huffman codes
12 : 08 min
- Job sequencing with deadlines
22 : 32 min
- Optimal merge Patterns video mistake at 10:03 mins
- Optimal merge patterns
13 : 42 min

- Introduction to spanning trees and Kirchhoff theorem
37 : 03 min
- MST and examples on prims algorithm
42 : 21 min
- Prims algorithm implementation without min heap
28 : 51 min
- Prims algorithm implement with min heap
29 : 20 min
- Introduction to kruskal algorithm and examples on it
40 : 30 min
- Kruskal's algorithm using Disjoint sets
07 : 13 min
- Example on kruskal's using Disjoint sets
08 : 53 min
- Amortized Analysis
02 : 37 min
- Aggregate Analysis
03 : 32 min
- Example on Aggregate Analysis
07 : 05 min
- Data Structure for Disjoint Sets
03 : 32 min
- Operations on Disjoint Sets
04 : 42 min
- Linked list representation of disjoint sets
05 : 10 min
- Time complexity for linked list representation of Disjoint Sets
05 : 21 min
- Amortized analysis of disjoint sets using linked list representation
06 : 37 min
- Disjoint set forest
04 : 47 min

- Union by rank
02 : 37 min
- Analysis union by rank
11 : 15 min
- Path compression
06 : 14 min
- Time complexity using the Heuristics
05 : 31 min
- Connected components using Disjoints
04 : 47 min
- Example on connected components using Disjoint sets
04 : 55 min

Dijkstra Algorithm

- Dijkstra algorithm example1
17 : 56 min
- Dijkstra algorithm example2
04 : 38 min
- Dijkstra algorithm
11 : 40 min
- Negative weight edges and dijkstra algorithm
18 : 12 min

Dynamic programming

- Introduction to Dynamic programming
13 : 01 min

Matrix chain multiplication -- Dynamic Programming

- matrix multiplication
05 : 53 min
- chain multiplication introduction
05 : 04 min
- Examples
15 : 47 min
- Optimal substructure and Recursive equations

12 : 53 min

- Recursion tree

13 : 47 min

- Dynamic programming bottom up implementation

28 : 30 min

- Top down dynamic programming memoization algorithm

10 : 27 min

Longest common subsequence

- Introduction to LCS

17 : 22 min

- Optimal substructure and Recursive equations

10 : 08 min

- Recursion tree and unique sub problems

28 : 30 min

- example 1

08 : 15 min

- example 2

12 : 14 min

- Bottom up Dynamic programming algorithm

04 : 34 min

Multi stage graph

- Introduction to multi stage graph

08 : 10 min

- Substructure and recursive equation

09 : 35 min

- Bottom up Dynamic programming algorithm

18 : 40 min

0/1 Knapsack

- Difference between fractional and 0-1 knapsack

08 : 24 min

- Why greedy method fails in 0-1 knapsack

03 : 18 min

- Substructure and Recursive equation
07 : 44 min
- Recursion tree and unique subproblems
09 : 04 min
- Example tracing out bottom up Dynamic programming algorithm
22 : 51 min
- Bottom up Dynamic programming algorithm and analysis
06 : 51 min

Subset sum

- Subset Sum Introduction
11 : 28 min
- Example
21 : 23 min

Travelling salesman problem

- Introduction to TSP
06 : 47 min
- Detecting Optimal substructure
18 : 53 min
- Bottom up dynamic programming algorithm
22 : 55 min

All pairs shortest path -- Floyd Warshall

- Relationship between single source shortest path and all pairs shortest path
05 : 15 min
- Optimal substructure
06 : 52 min
- Example
33 : 07 min
- Time complexity and space complexity of bottom up dynamic programming algorithm
05 : 30 min
- Bottom Dynamic programming algorithm
03 : 38 min

NP Completeness (Not required for GATE) Complexity Classes

- Introduction
06 : 07 min
- Types of algorithms
10 : 37 min
- some examples
06 : 16 min
- Optimisation and Decision problems
14 : 25 min
- We use only decision problems in NP completeness theory
05 : 06 min
- Verification algorithms
08 : 51 min
- P NP Introduction
14 : 39 min
- Polynomial time reduction algorithms
19 : 09 min
- NP hard and NP complete problems
23 : 44 min
- Well know NP complete problems
12 : 12 min

Description

Algo for GATE

Curriculum

Searching Algorithms

- linear search
11 : 04 min
- binary search
08 : 43 min

Sorting Techniques

- Problems on heap and heap sort
18 : 08 min
- Gate 2016 question on sorting
03 : 57 min
- Gate 16 question on sorting
00 : 39 min
- Gate question on heap
03 : 18 min
- Gate question 2015 on Heap
03 : 00 min
- Gate 2015 question 2 on Heap
03 : 04 min
- Gate 2016 question 1 on heap
08 : 55 min
- Gate 2016 question 2 on heap
06 : 58 min
- Gate 2011 question on Heap
01 : 57 min
- Gate 2014 question & 2015 question on heap
02 : 04 min

Dijkstra Algorithm

- Gate 2008 question on dijsktra

15 : 23 min

Bellman-ford algorithm

- Bellman ford introduction
11 : 09 min
- Negative weight edges and Bellman ford
08 : 26 min
- Bellman ford example from coreman
06 : 05 min
- bellman ford algorithm and analysis
05 : 05 min

shortest paths in DAGs

- Shortest paths in DAGs
10 : 26 min

Matrix chain multiplication -- Dynamic Programming

- gate 2011 question
09 : 49 min

Longest common sub sequence

- Gate 2014
15 : 44 min
- Gate 2009
10 : 05 min

Problems on NP completeness(Not required for GATE)

- Problem 1
01 : 59 min
- Problem 2
01 : 28 min
- Problem 3
01 : 59 min
- Problem 4
05 : 34 min
- Problem 5

05 : 10 min

- Problem 6
02 : 21 min
- Problem 7
07 : 29 min
- Problem 8
06 : 48 min
- Problem 9
03 : 30 min
- Problem 10
05 : 54 min
- Problem 11
03 : 19 min

Practice Questions

- practice questions Set-1
- Practice Set-1 Solutions
- Practice questions Set-2
- Practice Set-2 Solutions
- Practice questions Set-3
- Practice Set-3 Solutions
- Practice Questions Set-4
- Practice Set-4 Solutions
- Practice Questions Set-5
- Practice Set-5 Solutions
- Practice Questions Set-6
- Practice Set-6 Solutions
- Practice Questions Set-7
- Practice Set-7 Solutions
- Practice Questions Set-8
- Practice Set-8 Solutions
- Practice Questions Set-9
- Practice Set-9 Solutions
- Practice Questions Set-10
- Practice Set-10 Solutions
- Practice Questions Set-11
- Practice Questions Set-11 Solutions

Description

Aptitude

Curriculum

Averages

- Introduction to Averages
04 : 32 min
- Properties on Averages
06 : 04 min
- Properties 2 to Averages
06 : 16 min
- Example 1 on Averages
04 : 02 min
- Example 2 on Averages
03 : 54 min
- Example 3 on Averages
04 : 02 min
- Example 4 on averages
03 : 16 min
- Example 5 on Averages
02 : 34 min
- Example 6 on Averages
03 : 28 min
- Example 7 on averages
06 : 01 min
- Consecutive numbers
06 : 45 min
- Example 8 on Consecutive numbers
02 : 35 min
- Example 9 on Consecutive Numbers
03 : 41 min

Questions based on Age

- Example 1 in Ages
01 : 13 min
- Example 2 on Ages
02 : 19 min
- Example 3 on Ages
01 : 24 min
- Example 4 on Ages
02 : 32 min
- Example 5 on Ages
02 : 36 min
- Example 6 on Ages
03 : 19 min
- Example 7 on Ages
02 : 13 min
- Example 8 on Ages
01 : 54 min
- Example 9 on Ages
01 : 56 min
- Example 10 on Ages
01 : 23 min
- Example 11 on Ages
02 : 44 min
- Example 12 on Ages
02 : 49 min

Ratios and proportions

- Introduction to ratios
03 : 34 min
- Introduction to Proportions
02 : 32 min
- Example 1 on Ratios & Proportions
02 : 03 min
- Example 2 on Ratios & Proportions
02 : 37 min

- Example 3 on Ratios & proportions
05 : 36 min
- Example 4 on Ratios & Proportions
03 : 36 min
- Example 5 on Ratio & Proportions
06 : 06 min
- Example 6 on Ratios & Proportions
02 : 30 min
- Example 7 on Ratios & Proportions
03 : 26 min

Profit and Loss

- Introduction to Profit and Loss
03 : 46 min
- Example 1 on Profit and Loss
03 : 00 min
- Example 2 on Profit and Loss
02 : 17 min
- Example 3 on Profit and Loss
02 : 25 min
- Example 4 on Profit and Loss
12 : 00 min
- Example 5 on Profit and Loss
05 : 47 min
- Example 6 on Profit and Loss
07 : 44 min
- Example 7 on Profit and Loss
07 : 41 min
- Example 8 on Profit and Loss
10 : 08 min
- Example 9 on Profit and Loss
06 : 02 min
- Example 10 on Profit and Loss

05 : 50 min

- Example 11 on Profit and Loss
05 : 27 min

Simple Interest

- Introduction to Simple Interest
06 : 28 min
- Example 1 on Simple Interest
03 : 22 min
- Example 2 on Simple Interest
02 : 23 min
- Example 3 on Simple Interest
03 : 44 min
- Example 4 on Simple Interest
10 : 29 min
- Example 5 on Simple Interest
02 : 20 min
- Example 6 on simple Interest
05 : 26 min
- Example 7 on Simple Interest
03 : 19 min
- Example 8 on Simple Interest
06 : 55 min

Compound Interest

- Introduction to Compound Interest
10 : 09 min
- Compound Interest Formula
09 : 37 min
- Example 1 on Compound Interest
11 : 04 min
- Example 2 on Compound Interest
06 : 44 min
- Example 3 on Compound Interest

09 : 37 min

- Example 4 on Compound Interest
06 : 25 min
- Example 5 on Compound Interest
04 : 15 min
- Example 6 on Compound Interest
03 : 14 min

Alligation and Mixture

- Introduction to Alligation and Mixtures
10 : 20 min
- Example 1 on Alligation and Mixtures
07 : 18 min
- Example 2 on Alligation and Mixtures
03 : 54 min
- Example 3 on Alligation and Mixtures
04 : 35 min
- Example 4 on Alligation and Mixtures
06 : 20 min
- Example 5 on Alligation and Mixtures
07 : 29 min
- Example 6 on Alligation and Mixtures
05 : 43 min
- Example 7 on Alligation and Mixtures
06 : 58 min
- Example 8 on Alligation and Mixtures
08 : 46 min
- Example 9 on Alligation and Mixtures
07 : 00 min
- Example 10 on Alligation and Mixtures
05 : 53 min
- Example 11 on Alligation and Mixtures
08 : 26 min

- Example 12 on Alligation and Mixtures
06 : 31 min
- Example 13 on Alligation and Mixtures
12 : 17 min
- Example 14 on Alligation and Mixtures
02 : 26 min
- Example 15 on Alligation and Mixtures
04 : 16 min
- Example 16 on Alligation and Mixtures
04 : 53 min

Partnership

- Introduction to Partnership
04 : 11 min
- Example 1 on Partnership
05 : 07 min
- Example 2 on Partnership
03 : 16 min
- Example 3 on Partnership
06 : 11 min
- Example 4 on Partnership
06 : 46 min
- Example 5 on Partnership
03 : 15 min
- Example 6 on Partnership
02 : 20 min
- Example 7 on Partnership
06 : 31 min
- Example 8 on Partnership
03 : 24 min
- Example 9 on Partnership
04 : 55 min
- Example 10 on Partnership
07 : 10 min

Time and Work

- Introduction to Time & Work
06 : 04 min
- Example 1 on Time & Work
06 : 27 min
- Example 2 on Time & Work
04 : 02 min
- Example 3 on Time & Work
04 : 40 min
- Example 4 on Time & Work
09 : 48 min
- Example 5 on Time & Work
05 : 30 min
- Example 6 on Time & Work
04 : 02 min
- Example 7 on Time & Work
05 : 46 min
- Example 8 on Time & Work
05 : 06 min
- Example 9 on Time & Work
05 : 34 min
- Example 10 on Time & Work
02 : 19 min
- Example 11 on Time & Work
07 : 24 min
- Example 12 on Time & Work
04 : 30 min
- Example 13 on Time & Work
06 : 27 min
- Example 14 on Time & Work
12 : 47 min
- Example 15 on Time & Work

07 : 59 min

- Example 16 on Time & Work
05 : 32 min
- Example 17 on Time & Work
04 : 01 min
- Example 18 on Time & Work
05 : 16 min
- Example 19 on Time & Work
03 : 57 min
- Example 20 on Time & Work
02 : 43 min
- Example 21 on Time & Work
02 : 04 min
- Example 22 on Time & Work
01 : 51 min
- Example 23 on Time & Work
04 : 09 min
- Example 24 on Time & Work
03 : 46 min
- Example 25 on Time & Work
03 : 34 min
- Example 26 on Time & Work
09 : 21 min
- Example 27 on Time & Work
05 : 41 min
- Example 28 on Time & Work
05 : 46 min
- Example 29 on Time & Work
06 : 45 min
- Example 30 on Time & Work
03 : 40 min
- Example 31 on Time & Work
05 : 24 min

- Example 32 on Time & Work
06 : 20 min
- Example 33 on Time & Work
03 : 59 min
- Example 34 on Time & Work
04 : 33 min
- Example 35 on Time & Work
07 : 21 min
- Example 36 on Time & Work
04 : 41 min
- Example 37 on Time & Work
04 : 04 min
- Example 38 on Time & Work
02 : 18 min
- Example 39 on Time & Work
03 : 45 min
- Example 40 on Time & Work
04 : 52 min
- Example 40 on Time & Work
04 : 52 min
- Example 41 on Time & Work
02 : 58 min

Mensuration

- Introduction to Mensuration
09 : 15 min
- Example 1 on Mensuration
03 : 24 min
- Example 2 on Mensuration
04 : 01 min
- Example 3 on Mensuration
04 : 06 min
- Example 4 on Mensuration

07 : 04 min

- Quadrilateral

05 : 33 min

- Example 5 on Mensuration

01 : 56 min

- Example 6 on Mensuration

06 : 14 min

- Example 7 on Mensuration

06 : 30 min

- Example 8 on Mensuration

05 : 39 min

- Example 9 on Mensuration

03 : 07 min

- Example 10 on Mensuration

03 : 06 min

- Example 11 on Mensuration

02 : 04 min

- Example 12 on Mensuration

06 : 58 min

- Example 13 on Mensuration

02 : 20 min

- Example 14 on Mensuration

05 : 47 min

- Example 15 on Mensuration

05 : 22 min

- Example 16 on Mensuration

04 : 04 min

- Example 17 on mensuration

04 : 37 min

- Example 18 on Mensuration

02 : 27 min

- Example 19 on Mensuration

04 : 49 min

- Example 20 on Mensuration
03 : 53 min
- Example 21 on Mensuration
06 : 26 min
- Example 22 on Mensuration
01 : 50 min
- Example 23 on Mensuration
04 : 07 min
- cubes and cuboids
06 : 59 min
- Example 24 on Mensuration
03 : 47 min
- Example 25 on Mensuration
02 : 56 min
- Example 26 on Mensuration
04 : 00 min
- Example 27 on Mensuration
04 : 28 min
- Example 28 on Mensuration
06 : 14 min
- Example 29 on Mensuration
01 : 49 min

LCM and HCF

- Introduction to LCM and HCF
07 : 00 min
- Introduction to HCF
09 : 56 min
- Example 1 on HCF and LCM
09 : 11 min
- Example 2 on HCF and LCM
03 : 43 min
- Example 3 on HCF and LCM

01 : 43 min

- Example 4 on HCF and LCM

05 : 18 min

- Example 5 on LCF and HCF

07 : 19 min

- Example 6 on HCF and LCM

06 : 09 min

- Example 7 on HCF and LCM

04 : 59 min

- Example 8 on HCF and LCM

04 : 37 min

- Example 9 on HCF & LCM

06 : 20 min

- Example 10 on HCF & LCM

05 : 03 min

- Example 11 on HCF & LCM

05 : 52 min

Introduction to Permutations and Combinations

- Introduction to permutations and combinations

11 : 11 min

- Properties of nCr -- 1

06 : 50 min

- Properties of nCr --2

06 : 30 min

- Properties of nCr --3

06 : 20 min

- Properties of nCr --4

03 : 36 min

- Example 1 on nCr

04 : 22 min

- Example 2 on nCr

03 : 13 min

- Example 3 on nCr

04 : 30 min

- Example 4 on nCr

05 : 20 min

- Fundamental rules of counting

06 : 33 min

- Row arrangements without repetitions
09 : 25 min
- Examples on row arrangements without repetitions
21 : 48 min
- Row arrangements with repetitions
08 : 17 min
- Examples on Row arrangements with repetitions - 1
08 : 56 min
- Examples on Row arrangements with repetitions - 2
07 : 44 min
- Examples on Row arrangements with repetitions - 3
10 : 48 min
- Examples on Row arrangements with repetitions - 4
05 : 07 min
- Examples on Row arrangements with repetitions - 5
08 : 25 min
- Examples on Row arrangements with repetitions - 6
09 : 20 min
- Examples on Row arrangements with repetitions - 7
17 : 09 min
- Rank in a dictionary
29 : 43 min
- Rank in a dictionary - 2
24 : 52 min
- Circular permutations without repetitions
14 : 01 min
- Circular permutations with repetitions
04 : 03 min
- Examples on circular permutations - 1
09 : 27 min
- Examples on circular permutations - 2
04 : 48 min
- Examples on garland model questions

05 : 08 min

- Introduction to combinations

05 : 13 min

- Examples on combinations - 1

09 : 32 min

- Examples on combinations - 2

09 : 21 min

- Examples on combinations - 3

22 : 06 min

- Examples on combinations - 4

05 : 35 min

- Repetition in combinations

08 : 12 min

- Order

10 : 19 min

- Examples on order

11 : 55 min

- Examples on order - 2

05 : 54 min

- Selections with repetitions

02 : 20 min

- Examples in sections with repetitions - 1

12 : 34 min

- Examples in sections with repetitions - 2

12 : 52 min

- Relation between nPr and nCr

07 : 34 min

- Selections and Arrangements - 1

09 : 45 min

- Selections and Arrangements - 2

07 : 59 min

Time and distance

- Introduction to Time and Distance
07 : 29 min
- Example 1 on Time and Distance
07 : 29 min
- Example 2 on Time and Distance
03 : 48 min
- Example 3 on Time and Distance
03 : 12 min
- Example 4 on Time and Distance
03 : 20 min
- Example 5 on Time and Distance
04 : 21 min
- Example 6 on Time and Distance
03 : 26 min
- Example 7 on Time and Distance
04 : 13 min
- Example 8 on Time and Distance
03 : 18 min
- Example 9 on Time and Distance
10 : 18 min
- Example 10 on Time and Distance
05 : 08 min
- Example 11 on Time and Distance
05 : 58 min
- Introduction to Average Speed
06 : 35 min
- Introduction to Average Speed
06 : 35 min
- Example 12 on Time and Distance
06 : 25 min
- Example 13 on Time and distance
09 : 16 min
- Example 14 on Time and Distance

03 : 24 min

- Example 15 on Time and Distance
05 : 56 min
- Example 16 on Time and Distance
06 : 19 min
- Example 17 on Time and distance
06 : 34 min
- Example 18 on Time and Distance
06 : 50 min
- Example 19 on Time and Distance
06 : 04 min
- Example 20 on Time and Distance
04 : 17 min
- Example 21 on Time and Distance
04 : 35 min
- Introduction to Relative Speed
06 : 21 min
- Example 1 on Relative Speed
04 : 15 min
- Example 2 on Relative Speed
08 : 00 min
- Example 3 on Relative Speed
05 : 19 min
- Example 4 on Relative Speed
06 : 02 min
- Example 5 on Relative Speed
01 : 45 min
- Example 6 on Relative Speed
10 : 24 min
- Example 7 on Relative Speed
05 : 37 min
- Example 8 on Relative Speed
08 : 31 min

- Introduction to trains and Stationary object
07 : 17 min
- Example 1 on Trains
05 : 03 min
- Example 2 on Trains
08 : 10 min
- Example 3 on Trains
07 : 00 min
- Example 4 on Trains
04 : 39 min
- Example 5 on Trains
03 : 47 min
- Example 6 on Trains
03 : 04 min
- Example 7 on Trains
06 : 26 min
- Example 8 on Trains
05 : 13 min
- Example 9 on trains
04 : 46 min
- Example 10 on Trains
04 : 54 min
- Example 1 on races and circular tracks
05 : 00 min
- Example 2 on races and circular tracks
04 : 20 min
- Example 3 on races and circular tracks
07 : 00 min
- Example 4 on races and circular tracks
13 : 06 min
- Example 5 on races and circular tracks
09 : 34 min

- Introduction to boats and streams
04 : 22 min
- Example 1 on Boats and streams
02 : 23 min
- Example 2 on Boats and streams
02 : 13 min
- Example 3 on Boats and streams
01 : 44 min
- Example 4 on Boats and streams
04 : 15 min
- Example 5 on Boats and streams
04 : 55 min
- Example 6 on Boats and streams
07 : 12 min

Verbal Ability

- Parts of Speech
09 : 54 min
- Noun and types
11 : 21 min
- Common Noun
01 : 27 min
- Material Noun
01 : 34 min
- Collective Noun
01 : 08 min
- Example on Concrete Noun
13 : 15 min
- Abstract Noun
18 : 47 min
- Bits of noun with analysis-1
16 : 35 min
- Bits of noun with analysis-2
13 : 23 min

- Bits of noun with analysis-3
38 : 49 min
- Bits of noun with analysis-4
15 : 03 min
- Bits of noun with analysis-5
14 : 32 min
- Bits of noun with analysis-6
13 : 32 min
- Bits of noun with analysis-7
10 : 50 min
- Introduction to pronoun classification of pronouns
09 : 07 min
- Aptitude- personal pronoun-1
11 : 16 min
- personal pronoun-2
11 : 23 min
- Usages of pronouns in case of subject
08 : 21 min
- Usage of pronouns in place of object
07 : 40 min
- Usage of pronouns in before ing form
07 : 34 min
- Usage of pronoun after the verb let
03 : 02 min
- Usage of pronoun when the helping verb of beforms are used
10 : 42 min
- Usage of pronoun after the word than
05 : 47 min
- Usage of pronoun for the conjunction or nor either or neither nor not only but also
09 : 17 min
- Usage of pronoun for the conjunction AND part-1
13 : 50 min

- Usage of pronoun for the conjunction AND part-2
13 : 15 min
- Introduction to emphatic_reflexive pronoun
06 : 52 min
- Prominence of subject usage reflexive pronoun
04 : 42 min
- Prominence of object usage when the subject differs_reflexive
03 : 57 min
- Conversation of object into reflexive pronoun when subject and object are same
04 : 46 min
- Usage of reflexive pronoun after the verb -enjoying-
07 : 51 min
- Usage of reflexive pronoun after the sign words
06 : 08 min
- The verb while have no usage reflexive pronoun
04 : 06 min
- Usage of distributive pronouns
26 : 10 min
- Usage of demonstrative pronoun -1
06 : 48 min
- Usage of demonstrative pronoun -3
03 : 59 min
- Usage of demonstrative pronoun -4
04 : 01 min
- Usage of demonstrative pronoun -5
13 : 46 min
- Usage of demonstrative pronoun -6
06 : 41 min
- Usage of interrogative pronoun rule
06 : 10 min
- Usage of reciprocal pronoun
06 : 43 min
- Usage of indefinite pronoun

06 : 36 min

- Usage of relative pronoun-1
08 : 18 min
- Usage of relative pronoun-2
04 : 32 min
- Usage of relative pronoun-3
08 : 38 min
- Bits of pronoun with analysis-1
12 : 35 min
- Bits of pronoun with analysis-2
06 : 45 min
- Bits of pronoun with analysis-3
08 : 05 min
- Bits of pronoun with analysis-4
08 : 08 min
- Bits of pronoun with analysis-5
06 : 42 min
- Bits of pronoun with analysis-6
10 : 33 min
- Bits of pronoun with analysis-7
06 : 30 min
- Bits of pronoun with analysis-8
05 : 53 min
- Bits of pronoun with analysis-9
10 : 37 min
- Introduction to verb
07 : 23 min
- Conjugation of the verb-1
08 : 55 min
- Conjugation of the verb-2
12 : 48 min
- Usage of the transitive , in transitive, finite, non-finite verb
10 : 10 min

- Spotting of errors on main verbs
14 : 36 min
- Introduction to question tag
11 : 36 min
- Bits of question tag-1
12 : 03 min
- Bits of question tag-2
03 : 30 min
- Bits of question tag for helping verb-1
09 : 14 min
- Bits of question tag for helping verb-2
07 : 06 min
- Bits of question tag for main verb
11 : 34 min
- Bits of question tag for imperative sentence
07 : 30 min
- Explanation for exercise on noun(1-4)
09 : 43 min
- Explanation for exercise on noun(5-8)
11 : 14 min
- Explanation for exercise on noun(9-12)
11 : 44 min
- Explanation for exercise on noun(13-16)
06 : 48 min
- Explanation for exercise on noun 17
04 : 05 min
- Explanation for exercise on noun(18-21)
05 : 48 min
- Explanation for exercise on noun(22-23)
02 : 07 min
- Explanation for exercise on pronoun(1-5)
07 : 09 min

- Explanation for exercise on pronoun(6-11)
06 : 01 min
- Explanation for exercise on pronoun(12-18)
08 : 39 min
- Explanation for exercise on pronoun(19-25)
06 : 46 min
- Explanation for exercise on pronoun(26-28)
05 : 01 min
- Introduction to Tenses
06 : 01 min
- Introduction to Tenses
06 : 01 min
- Example of Universal options
12 : 48 min
- Example of general actions related to Simple present
11 : 03 min
- Verbs of feelings, perception , mental activity abd positions with their uses
12 : 24 min
- Negative sentences
18 : 51 min
- Introduction to present continuous and examples
19 : 51 min
- Example of present continuous tense
10 : 38 min
- Introduction to past continuous and examples
16 : 38 min
- Introduction to present perfect and examples
16 : 23 min
- Introduction to present perfect continuous and example
15 : 35 min
- Introduction to simple past and examples
11 : 20 min
- Introduction to past perfect tense and examples

18 : 43 min

- Introduction of past perfect continuous tense and examples
14 : 07 min
- Introduction of simple future tense and examples
08 : 34 min
- Introduction to future perfect tense and examples
09 : 08 min
- Agreement of the verb with the subject-1
08 : 55 min
- Agreement of the verb with the subject-2
07 : 56 min
- Agreement of the verb with the subject-3
10 : 51 min
- Agreement of the verb with the subject-4
09 : 35 min
- Agreement of the verb with the subject-5
15 : 34 min
- Agreement of the verb with the subject-6
06 : 36 min
- Agreement of the verb with the subject-7
05 : 23 min
- Agreement of the verb with the subject-8
07 : 15 min
- Agreement of the verb with the subject-9
05 : 55 min
- Agreement of the verb with the subject-10
08 : 19 min
- Agreement of the verb with the subject-11
04 : 29 min
- Agreement of the verb with the subject-12
10 : 26 min
- Agreement of the verb with the subject-13
06 : 12 min

- Agreement of the verb with the subject-14
05 : 39 min
- Agreement of the verb with the subject-15
03 : 51 min
- Agreement of the verb with the subject-16
07 : 35 min
- Agreement of the verb with the subject-17
11 : 03 min
- Agreement of the verb with the subject-18
04 : 31 min
- Agreement of the verb with the subject-19
11 : 25 min
- Main verb method
07 : 13 min
- Usage of not only, but also, both and as well as with leading verb method and main verb method
18 : 29 min
- Example of using besides, into, not only but also both and, as well as
11 : 12 min
- Usage of in spite of despite, notwithstanding, but, yet, still though, even though with main verb method
10 : 59 min
- Same word with helping verb method
11 : 47 min
- Bits
06 : 13 min
- If condition
11 : 50 min
- Open condition (positive type)
20 : 42 min
- Introduction to negative sentence
14 : 24 min
- Usage of Imaginary Condition
23 : 26 min

- Improbable Condition _ Unfulfilled Condition
20 : 22 min
- Introduction to Active voice and Passive voice
08 : 42 min
- Assertive Sentence
12 : 22 min
- Voice usage of simple present
10 : 24 min
- Voice usage of Present Continuous
08 : 02 min
- Voice usage of Present Perfect
06 : 59 min
- Voice usage of Simple Past
10 : 00 min
- Voice usage of Past Continuous
07 : 49 min
- Voice usage of Past Perfect
06 : 18 min
- Voice usage of Simple Future
26 : 15 min
- Voice usage of Future Perfect
04 : 50 min
- Conversion from Passive to Active Usage of Present Continuous
08 : 46 min
- Conversion from Passive to Active for Simple Present
09 : 55 min
- Conversion from Passive to Active Usage of Present Perfect
08 : 14 min
- Conversion from Passive to Active Usage of Simple Past
06 : 11 min
- Conversion from Passive to Active Usage of Past Continuous
07 : 08 min

- Conversion from Passive to Active Usage of Past Perfect
04 : 45 min
- Conversion from Passive to Active Usage of Simple Future
05 : 14 min
- Conversion from Passive to Active Usage of Future Perfect
04 : 16 min
- Voice usage of imperative sentence
27 : 47 min
- Introduction and voice usage of Simple Present in interrogative Sentences - 1
14 : 59 min
- Simple present in Interrogative sentences-2
08 : 56 min
- voice usage of present continues
10 : 23 min
- voice usage of present perfect
08 : 02 min
- voice usage of simple past
09 : 08 min
- voice usage of past continues
07 : 31 min
- voice usage of past perfect
06 : 39 min
- voice usage of simple future
06 : 13 min
- Introduction of direct speech
07 : 15 min
- Introduction of indirect speech
12 : 26 min
- Rules to be followed while converting direct to indirect
08 : 43 min
- Rules of assertive sentence
05 : 31 min
- Direct to Indirect of universal actions

13 : 18 min

- Direct to indirect of general actions related to the same tense usage
10 : 44 min
- Direct to indirect of general actions with change of tense
18 : 32 min
- Spotting of direct and indirect speech of assertive sentence
10 : 38 min
- Direct and Indirect speech of imperative speech
21 : 57 min
- Rules of direct and indirect of interrogative sentence
08 : 34 min
- Example of interrogative in direct and indirect speech
19 : 16 min
- Direct and indirect of interrogative with helping verb and auxiliary verb
14 : 46 min
- Rules of Exclamatory sentence
05 : 38 min
- Examples of Exclamatory sentence in direct and indirect speech
07 : 04 min
- Introduction of Adjective(Quality)
08 : 50 min
- Introduction of Adjective(Quantity)
07 : 43 min
- Introduction of Adjective(Numbers)
18 : 33 min
- Introduction of Adverb
13 : 27 min
- Adjective modification
08 : 19 min
- Adverb Modification
02 : 30 min
- Introduction to Degree of comparison
17 : 47 min

- Identification of Degrees
12 : 51 min
- Degree of first model
26 : 31 min
- Degree of second model
13 : 39 min
- Usage and spotting of errors of first model
10 : 14 min
- Usage and spotting of errors of second model
08 : 38 min
- Degrees of Third model
13 : 19 min
- Examples of Degrees in Third model
11 : 19 min
- Spotting of errors of degrees in third model
13 : 19 min
- Degrees of fourth model
10 : 35 min
- Degrees of fifth model
10 : 17 min
- Degrees of sixth model
08 : 17 min
- Examples of degrees of sixth model
12 : 07 min
- Introduction of prepositions
15 : 37 min
- Types of Prepositions
07 : 56 min
- Diagrammatic introduction of prepositions
18 : 01 min
- Usage of preposition 'At'
23 : 05 min

- Usage of preposition 'IN'
26 : 38 min
- Difference between 'in' and 'into'
13 : 42 min
- Usage of preposition 'on'
18 : 19 min
- Difference between 'on' and 'upon'
04 : 20 min
- Usage of preposition 'with'
08 : 17 min
- Usage of preposition 'by'
29 : 51 min
- Usage of preposition 'from,to'
40 : 49 min
- Usage of preposition 'since,for'
26 : 10 min
- Usage of preposition up,down,along,across
08 : 47 min
- Usage of preposition 'of'
16 : 18 min
- Usage of preposition 'off'
11 : 07 min
- Usage of the preposition 'under'
07 : 45 min
- Usage of preposition over,union
08 : 15 min
- Usage of preposition 'Against'
05 : 23 min
- Usage of preposition Between,among
06 : 18 min
- Usage of preposition in,with in
05 : 35 min

Data Sufficiency

- Introduction to Data Sufficiency
07 : 40 min
- Example 1 on Data Sufficient
01 : 35 min
- Example 2 on Data Sufficiency
02 : 57 min
- Example 3 on Data Sufficiency
02 : 30 min
- Example 4 on Data Sufficiency
03 : 01 min
- Example 5 on Data Sufficiency
02 : 55 min
- Example 6 on Data Sufficiency
03 : 49 min
- Example 7 on Data Sufficiency
01 : 51 min
- Example 8 on Data Sufficiency
03 : 35 min
- Example 9 on Data Sufficiency
03 : 35 min
- Example 10 on Data Sufficiency
04 : 05 min
- Example 11 on Data Sufficiency
04 : 43 min
- Example 12 on Data Sufficiency
04 : 55 min
- Example 13 on data sufficiency
05 : 09 min

Equations

- Introduction to Quadratic Equation
09 : 43 min
- Example 1 on Quadratic Equations

05 : 23 min

- Example 2 on Quadratic Equations
03 : 39 min
- Example 3 on Quadratic Equations
03 : 18 min
- Example 4 on Quadratic Equations
03 : 17 min
- Example 5 on Quadratic Equations
02 : 05 min
- Example 6 on Quadratic Equations
02 : 15 min
- Introduction to linear Equations
03 : 30 min
- Example 1 on Linear Equations
05 : 15 min
- Example 2 on Linear Algebra
03 : 50 min

Data- Interpretation

- Introduction to Data Interpretation
02 : 32 min
- Example 1 on pie-chart
08 : 05 min
- Example 2 on Pie Chart
13 : 46 min
- Example 3 on Pie Chart
06 : 46 min
- Example 1 on Bar chart
11 : 15 min
- Example 2 on Bar chart
17 : 03 min
- Example 1 on line graph
07 : 55 min

- Example 2 on line graph
10 : 15 min

Logarithms

- Introduction to Logarithms
03 : 12 min
- Example 1 on Logarithms
01 : 01 min
- Example 2 on logarithms
00 : 49 min
- gate 2011 on logarithms
01 : 53 min
- gate 2015 on logarithms
02 : 20 min

Progression

- Introduction to progression
02 : 16 min
- Example on progression
01 : 10 min
- Gate 2011 on progression
02 : 19 min
- Gate 2013 on Progression
02 : 16 min
- Gate 2014 on progression
00 : 55 min

Surds and Indices

- Introduction to surds
03 : 31 min
- Introduction to Indices
03 : 06 min
- Example 1 on surds and Indices
01 : 49 min
- Example 2 on surds and Indices

01 : 50 min

- gate 2013 on surds and Indices

01 : 37 min

- Gate 2014 on surds and indices

01 : 07 min

Number Systems

- Classification of numbers

02 : 12 min

- Types of numbers

09 : 50 min

- More types on numbers

08 : 16 min

- Rules of divisibility

02 : 06 min

- Rules of divisibility - 2

03 : 29 min

- test of divisibility

04 : 49 min

- test of divisibility-2

06 : 37 min

- Remainder and Quotient

02 : 19 min

- Remainder Theorem

01 : 48 min

- Find the remainder using polynomial theorem

04 : 28 min

- Example 1 on number system

01 : 40 min

- Algebra formulas

04 : 33 min

- cyclicity

04 : 16 min

- Cyclicity of 3,4,5,6
07 : 07 min
- Cyclicity of 7,8,9
05 : 42 min
- Count trailing zeros in factorial of a number
07 : 34 min
- Example on count trailing zeros in factorial of a number
01 : 30 min
- Example on power of x in n!
05 : 41 min
- Finding the number of factors
02 : 41 min
- Introduction to Number system
10 : 29 min
- Conversion to base 10
13 : 29 min
- Conversion from base 10
18 : 59 min
- Gate CS 2010 on number system
05 : 18 min
- Gate 2014 on number system
01 : 52 min

Alphabetic series

- Introduction to alphabet series and Example 1
12 : 34 min
- Example 2 on alphabet series
04 : 36 min
- Example 3 on alphabet series
07 : 18 min
- Gate 2012 question on alphabet series
02 : 29 min
- Gate 2014 on alphabet series
01 : 16 min

- Gate 2016 question on alphabet series
03 : 35 min

Number series

- Introduction to number series and some example
02 : 55 min
- Example 1 on Number series
01 : 56 min
- Example 2 on Number series
05 : 18 min
- Example 3 on Number series
09 : 13 min
- Example 4 on Number series
04 : 33 min
- combination two series
03 : 25 min
- find the wrong term in the given series
02 : 31 min
- miscellaneous series example 1
09 : 44 min
- miscellaneous series example 2
08 : 10 min
- series in A,P,G,P and H,P
04 : 32 min
- Triangular pattern series
08 : 01 min
- gate EC-2014 on number series
01 : 17 min
- gate EC-2014 question on number series 2
01 : 21 min
- gate 2014 on number series
00 : 36 min

Blood Relation

- Introduction to blood relations
03 : 09 min
- Generations
03 : 34 min
- Example 1 on Blood Relation
02 : 20 min
- Example 2 on Blood Relation
01 : 44 min
- Example 3 on Blood Relation
02 : 23 min
- Example 4 on Blood Relation
01 : 55 min
- Example 5 on blood relation
03 : 06 min
- Example 6 on blood relation
03 : 23 min
- example 7 on blood relation
01 : 27 min

Directions and Distance

- Introduction to directions and distance
01 : 59 min
- Example 1 on directions and distance
01 : 49 min
- Example 2 on directions and distance
01 : 33 min
- Example 3 on directions and distance
03 : 21 min
- Example 4 on directions and distance
03 : 21 min
- Example 5 on directions and distance
03 : 51 min
- Example 6 on directions and distance

01 : 57 min

Circular Arrangements

- Introduction to circular arrangements
04 : 00 min
- Basic concept of circular arrangements
03 : 13 min
- Example 1 on circular arrangements
06 : 52 min
- Example 2 on circular arrangements
20 : 53 min

Linear Arrangements

- Introduction to linear arrangements
04 : 57 min
- Example 1 on linear arrangements
04 : 01 min
- Example 2 on linear arrangement
04 : 08 min
- Example 3 on linear arrangement
14 : 58 min
- Example 4 on linear arrangements
05 : 24 min

Coded Inequalities

- Introduction coded inequalities
05 : 54 min
- Example 1 on coded inequalities
07 : 32 min
- Example 2 on coded inequalities
12 : 17 min
- Example 3 on coded inequalities
16 : 25 min

Alphabet Test

- Example -1 on alphabet test
03 : 49 min
- Example 2 on alphabet test
01 : 11 min
- Example 3 on alphabet test
03 : 16 min
- Example 4 on alphabet test
04 : 21 min
- Example 5 on alphabet test
01 : 11 min
- Example 6 on alphabet test
01 : 42 min
- Example 7 on alphabet test
02 : 38 min
- Example 8 on alphabet test
02 : 36 min
- Example 9 on alphabet test
02 : 54 min
- Example 10 on alphabet test
02 : 40 min
- Example 11 on alphabet test
02 : 08 min
- Example 12 on alphabet test
01 : 48 min
- Example 13 on alphabet test
01 : 27 min
- Example 14 on alphabet test
01 : 03 min
- Example 15 on alphabet test
01 : 40 min

Element Series

- Example 1 on element series
03 : 09 min

- Example 2 on element series
03 : 21 min
- Example 3 on element series
02 : 07 min
- Example 4 on element series
01 : 06 min

Ranking (or) Ordering

- Example 1 on ranking
02 : 15 min
- Example 2 on Ranking
03 : 16 min
- Example 3 on Ranking
05 : 49 min
- Example 4 on Ranking
02 : 44 min
- Example 5 on Ranking
02 : 48 min
- Example 6 on Ranking
03 : 20 min
- Example 7 on Ranking
02 : 19 min
- Example 8 on Ranking
01 : 54 min
- Example 9 on Ranking
07 : 31 min

Coding and Decoding

- Introduction to coding and decoding
05 : 56 min
- Example 1 on coding and decoding
01 : 57 min
- Example 2 on coding and decoding
03 : 39 min

- Example 3 on coding and decoding
01 : 15 min
- Example 4 on coding and decoding
01 : 53 min

Percentages

- Introduction to percentages
01 : 53 min
- Example 1 on Percentages
05 : 39 min
- Example 2 on Percentages
02 : 31 min
- Example 3 on Percentages
02 : 31 min
- Example 4 on Percentages
03 : 19 min
- Example 5 on Percentages
02 : 33 min
- Example 6 on Percentages
03 : 01 min
- Example 7 on Percentages
02 : 31 min
- Example 8 on Percentages
02 : 45 min
- Example 9 on Percentages
04 : 10 min
- Example 10 on Percentages
02 : 56 min
- Example 11 on Percentages
03 : 59 min
- Example 12 on Percentages
07 : 15 min
- Example 13 on Percentages

05 : 21 min

- Example 14 on Percentages

01 : 58 min

- Example 15 on Percentages

01 : 41 min

- Example 16 on Percentages

03 : 42 min

- Example 17 on Percentages

01 : 42 min

- Example 18 on Percentages

10 : 09 min

- Example 19 on Percentages

05 : 10 min

- Example 20 on Percentages

06 : 34 min

Crisp Notes for Aptitude

- Numerical Ability Questions
 - Numerical Ability Solutions
 - Verbal Ability Questions
 - Verbal Ability Solutions
 - Ravindrababu Ravula | GATE 2020 Test Series | 166 Tests | 5000+ Questions
- 03 : 08 min

Description

Probability

Curriculum

Introduction

- Sample space and events
14 : 35 min
- Probabilities to events
17 : 03 min

Conditional Probability

- Conditional probability
28 : 03 min
- Example 1 on conditional probability
05 : 19 min
- Example 2 on conditional probability
08 : 02 min
- Example 3 on conditional probability
03 : 51 min
- Properties of conditional probability
08 : 50 min

Multiplication Theorem

- Multiplication theorem
11 : 23 min
- Example 1 on multiplication theorem
11 : 42 min
- Example 2 on the multiplication theorem
18 : 02 min
- Example 3 on the multiplication theorem
04 : 30 min

Independent Events

- Independent events
11 : 13 min

- Example 1 on Independent Events
13 : 43 min
- Example 2 on Independent Events
03 : 46 min
- Example 3 on Independent Events
08 : 40 min
- Example 4 on Independent Events
05 : 54 min
- Example 5 on Independent Events
04 : 34 min
- Example 6 on Independent Events
08 : 04 min
- Example 7 on Independent Events
11 : 20 min
- Example 8 on Independent Events
09 : 49 min
- Example 9 on Independent Events
07 : 03 min
- Example 10 on Independent Events
07 : 41 min
- Example 11 on Independent Events
07 : 58 min
- Example 12 on Independent Events
10 : 50 min

Total Probability

- Total probability
24 : 01 min
- Example 1 Total probability
07 : 03 min
- Example 2 Total probability
06 : 29 min
- Example 3 Total probability

07 : 06 min

- Example 4 Total probability
06 : 48 min
- Example 5 Total probability
05 : 30 min
- Example 6 Total probability
06 : 28 min

Baye's Theorem

- Baye's theorem
17 : 48 min
- Example 1 on Baye's theorem
08 : 53 min
- Example 2 on Baye's theorem
06 : 20 min
- Example 3 on Baye's theorem
11 : 11 min
- Example 4 on Baye's theorem
03 : 34 min
- Example 5 on Baye's theorem
03 : 24 min

Random Variables

- Random variables
13 : 34 min
- Examle on Random variables
08 : 58 min
- Bernoulli Random variable
07 : 51 min
- Binomial Random Variable
10 : 04 min
- Example on Binomial Random variable
04 : 04 min
- Poisson random variable

04 : 42 min

- Example 1 on poisson random variable
03 : 42 min
- Example 2 on poisson random variable
02 : 26 min
- Continuous Random variables
12 : 27 min
- Uniform Random variable
08 : 12 min
- Example on Uniform Random Variable
03 : 55 min
- Exponential Random Variable
03 : 08 min
- Normal Random Variable
05 : 03 min

Expectation

- Expectation
08 : 41 min
- Expectation of Bernoulli Random Variable
05 : 01 min
- Expectation of binomial Random Variable
10 : 47 min
- Expectation of Poisson Random Variable
05 : 17 min
- Expectation of continuous Random Variable
02 : 56 min
- Expectation of Uniform Random Variable
03 : 47 min
- Expectation of Exponential RV
01 : 44 min
- Expectation of Normal RV
04 : 41 min

Mean, median and Mode

- Mean, median and mode
03 : 56 min
- Example 1
02 : 40 min
- Example 2
05 : 33 min

Practice Questions

- Conditional Probability Practice Set
- Distributions Practice Set

Description

Set Theory & Algebra

Curriculum

Sets

- Sets and subsets
06 : 19 min
- Power set
07 : 20 min
- Complement and difference
03 : 19 min
- Union, Intersection and symmetrical difference
03 : 45 min
- Laws of sets
11 : 33 min
- Example 1
05 : 02 min
- Example 2
04 : 58 min
- Example 3
07 : 24 min

Relations

- Introduction to Relations
17 : 39 min
- Reflexive Relation
08 : 04 min
- Example 1 on reflexive relations
09 : 06 min
- Example 2 on reflexive relations
05 : 32 min
- Example 3 on reflexive relations
08 : 31 min

- Irreflexive relations
11 : 21 min
- Example 1 on Irreflexive relations
12 : 34 min
- Example 2 on Irreflexive relations
03 : 34 min
- Example 3 on Irreflexive relations
07 : 42 min
- Example on closure properties
08 : 56 min
- Symmetric relations
07 : 34 min
- Number of symmetric relations
08 : 34 min
- Example 1 on symmetric relations
13 : 35 min
- Example 2 on symmetric relations
03 : 43 min
- Example 3 on symmetric relations
08 : 36 min
- Relation between symmetric and Irreflexive relations
15 : 38 min
- Antisymmetric relation
11 : 39 min
- Number of Antisymmetric relations
04 : 40 min
- Relation between symmetric and anti symmetric relations
12 : 19 min
- Relation between reflexive and anti symmetric relations
08 : 52 min
- Relation between Irreflexive and anti symmetric relations
07 : 28 min
- Antisymmetric properties

09 : 47 min

- Examples of Antisymmetric relations
05 : 34 min
- Asymmetric relations
08 : 51 min
- Number of Asymmetric relations
03 : 43 min
- Reflexive and Asymmetric relations
03 : 29 min
- Irreflexive and Asymmetric relations
09 : 16 min
- Symmetric and Asymmetric relations
09 : 13 min
- Antisymmetric and Asymmetric relations
07 : 36 min
- Properties of asymmetric relations
08 : 05 min
- Transitive relations
07 : 47 min
- Equivalence relations
05 : 47 min
- Examples of equivalence relation
14 : 02 min
- Poset
12 : 02 min
- TOS
06 : 53 min
- GATE Question 1
03 : 29 min
- GATE Question 2
02 : 59 min
- GATE Question 3
06 : 35 min

- GATE Question 5
06 : 54 min
- GATE Question 4
10 : 41 min
- GATE Question 6
07 : 48 min
- GATE Question 7
12 : 47 min
- GATE Question 8
03 : 27 min
- GATE Question 9
05 : 12 min

Partial orders and Lattices

- Poset diagram
08 : 14 min
- Examples on poset diagrams
10 : 41 min
- LUB
11 : 52 min
- GLB
06 : 16 min
- Standard examples
02 : 45 min
- Lattice
08 : 36 min
- Lattice examples
04 : 55 min
- Properties of Lattice
03 : 25 min
- Distributive lattice and sublattice
06 : 48 min
- Bounded lattice

08 : 05 min

- Properties of Bounded lattice

06 : 00 min

- Complement of an element

07 : 49 min

- Complemented lattice

06 : 18 min

- Boolean algebra

04 : 37 min

- Maximal and minimal elements

11 : 53 min

- Example 1

02 : 01 min

- Example 2

04 : 05 min

- Example 3

09 : 49 min

- Example 4

07 : 11 min

- Example 5

08 : 52 min

- Example 6

05 : 07 min

- Example 7

05 : 37 min

- Example 8

13 : 29 min

- Example 9

13 : 05 min

- Example 10

09 : 08 min

- Algebraic structures
10 : 51 min
- Semi group
10 : 41 min
- Monoid
06 : 33 min
- Groups
07 : 40 min
- Abelian group
02 : 22 min
- Example 1
05 : 13 min
- Example 2
08 : 08 min
- Example 3
03 : 45 min
- Example 4
07 : 04 min
- Example 5
04 : 06 min
- Example 6
05 : 25 min
- Example 7
04 : 19 min
- Example 8
06 : 02 min
- Example 9
12 : 56 min
- Example 10
10 : 28 min
- Finite groups
15 : 43 min
- Examples on finite groups

12 : 51 min

- Examples on finite groups
07 : 32 min
- Order
09 : 57 min
- Examples on Order
03 : 54 min
- Subgroups
04 : 47 min
- Theorems on subgroups
06 : 57 min
- Examples on subgroups - 1
04 : 35 min
- Examples on subgroups - 2
03 : 56 min
- Examples on subgroups - 3
02 : 22 min
- Examples on subgroups - 4
07 : 08 min
- Cyclic groups
05 : 15 min
- Examples on cyclic groups
06 : 03 min
- Theorem on cyclic groups
15 : 30 min
- Example on Cyclic groups
11 : 28 min
- Some points on cyclic groups
08 : 23 min

Functions

- Introduction to functions
07 : 33 min

- Counting the functions
06 : 23 min
- Examples on functions
08 : 31 min
- Examples on functions
06 : 14 min
- one-one functions
05 : 51 min
- Onto functions
08 : 14 min
- Examples on Onto functions - 1
04 : 13 min
- Examples on Onto functions - 2
01 : 45 min
- Examples on onto functions - 3
07 : 59 min
- Bijection
03 : 39 min
- Example on Bijection
10 : 07 min
- Inverse Function
05 : 26 min

Practice Questions Set

- Practice Questions Set-1
- Practice Questions Set-2
- Solutions Set-1
- Solutions Set-2

Description

Calculus

Curriculum

Limits

- Introduction to limits
12 : 13 min
- Left hand limit and right hand limit to check if limit exists
15 : 37 min
- Some example on finding whether limit exists or not
08 : 38 min
- Example 1 on Calculus
04 : 18 min
- Example 2 on Calculus
06 : 21 min
- Example 3 on calculus
03 : 58 min
- Example 4 on Calculus
04 : 53 min
- Example 5 on Calculus
03 : 31 min
- Example 6 on calculus
07 : 24 min
- Example 7 on Calculus
05 : 46 min
- Practice questions on Limits
- Solutions

Continuity and Differentiability

- Introduction to Continuity
04 : 36 min
- Example 1 on Continuity
07 : 04 min
- Continuity at end point
09 : 27 min
- Example 2 on continuity

02 : 06 min

- Example 3 on continuity
03 : 33 min
- Example 4 on continuity
08 : 32 min
- Introduction to Differentiability
11 : 16 min
- Example 1 on Differentiability
08 : 18 min
- Example 2 on Differentiability
11 : 45 min
- Example 3 Continuity and Differentiability
06 : 59 min
- Example 4 on Continuity and Differentiability
10 : 27 min
- Example 5 on Continuity and Differentiability
08 : 30 min
- Practice Questions and Solutions

Mean value theorems

- Mean value theorem
05 : 12 min
- Lagrange's mean value theorem
03 : 34 min
- Cauchy's mean value theorem
02 : 09 min
- Example 1 on Mean value theorem
02 : 52 min
- Example 2 on Mean value theorem
03 : 01 min
- Example 3 on Mean value theorem
03 : 53 min
- Example 4 on Mean Value Theorem
01 : 28 min

- Example 5 on Mean Value Theorem
02 : 10 min

Maxima and Minima

- Introduction to Maxima and Minima part
03 : 09 min
- Introduction to Maxima and minima part - 2
08 : 21 min
- Greatest and least values
02 : 43 min
- Local maxima and local minima
04 : 50 min
- Global maxima and global minima in the interval
03 : 07 min
- Method of finding maxima & minima
04 : 51 min
- Example 1 on Maxima & Minima
03 : 58 min
- Example 2 on Maxima & Minima
02 : 16 min
- Example 3 on Maxima & Minima
01 : 45 min
- Example 4 on Maxima & Minima
03 : 50 min
- Gate 2012 on maxima and minima
06 : 08 min

Integrations

- Introduction to Integration
02 : 43 min
- Example 1 on Integration
01 : 36 min
- Example 2 on Integration
01 : 50 min

- Example 3 on integration
05 : 14 min
- Example 4 on Integration
02 : 54 min
- Example 5 on Integrations
04 : 47 min
- Example 6 on Integrations
01 : 46 min
- Example 7 on Integrations
02 : 02 min
- Example 8 on Integrations
02 : 31 min
- Introduction to Definite Integrals
02 : 26 min
- Example 1 on Definite Integrals
03 : 36 min
- Example 2 on Definite Integrals
02 : 42 min
- Example 3 on Definite Integrals
01 : 57 min
- Example 4 on Definite Integrals
01 : 47 min
- Example 5 on Definite Integrals
05 : 43 min
- Example 6 on Definite Integrals
03 : 07 min
- Example 7 on Definite Integrals
04 : 44 min
- Example 8 on Definite Integrals
04 : 16 min
- Example 9 on Definite Integrals
03 : 03 min

- Example 10 on Definite Integrals
08 : 30 min
- Gate 2009 question on Definite Integrals
04 : 50 min
- Gate 2014 question on Definite Integrals
03 : 58 min
- Gate 2011 question on Definite Integrals
03 : 03 min
- Gate 2015 question on Definite Integrals
02 : 11 min
- Practice Questions
- Practice Questions Answers

All the formulae and examples required

- Notes 1
- Notes-2

Description

Graph Theory

Curriculum

Graph Theory

- Introduction to Graph Theory
11 : 08 min
- Hand shaking lemma
10 : 15 min
- Isomorphism
04 : 29 min
- No of Simple Graph
05 : 34 min
- Degree Sequence
02 : 00 min
- Example 1 on Degree Sequence
09 : 18 min
- Example 2 on Degree Sequence
07 : 03 min
- Minimum Degree and Maximum Degree
03 : 23 min
- Example on Minimum and Maximum Degree
02 : 50 min
- Special Graph part 1
07 : 58 min
- Special Graph part 2
13 : 07 min
- Special Graph part 3
15 : 50 min
- Diameter Radius Eccentricity
10 : 36 min
- Walk , Trail
05 : 54 min

- Eulerian Graph
05 : 57 min
- Gate question on Cycle
03 : 08 min
- Connected and Disconnected Graph
02 : 45 min
- Connected Components
04 : 11 min
- Gate 2003 Question I
07 : 57 min
- Gate 2003 Question II
03 : 58 min
- Gate 2003 Question III
12 : 43 min
- Directed Graph
15 : 11 min
- Matching
03 : 07 min
- Number of Perfect Matchings in complete bipartite graph
03 : 40 min
- Perfect Matchings in Complete Graph
07 : 10 min
- Miximual and maximum matching[α']
03 : 03 min
- Vertex Cover
06 : 27 min
- Minimum Vertex Cover[β]
10 : 22 min
- Maximum Matching is equal to minimum vertex cover
02 : 52 min
- Independent sets and covers
11 : 19 min

- Relation b/w Edge cover [β'], vertex cover [β], Independent sets [α] & matching [α']
02 : 03 min
- Cuts and connectivity
09 : 16 min
- Properties of Cuts and Connectivity
09 : 37 min
- Edge Connectivity
03 : 58 min
- Coloring
03 : 02 min
- Chromatic Number
04 : 17 min
- Chromatic Number Lower Bounds
05 : 58 min
- Greedy colouring algorithm
08 : 18 min
- Planarity
20 : 00 min
- Example on euler's formula
03 : 50 min
- Four colour theorem
03 : 07 min
- Hamilton Cycle
03 : 56 min
- Edge Cuts
21 : 12 min

Practice Questions

- Practice Questions
- Solutions

Description

Linear Algebra

Curriculum

Algebra of matrices

- Basic definitions
13 : 44 min
- Addition of Matrices
08 : 34 min
- Scalar multiplication
04 : 40 min
- Matrix multiplication
06 : 08 min
- Properties of matrix multiplication 1
07 : 58 min
- properties of matrix multiplication 2
08 : 29 min
- Triangular, diagonal and scalar matrices
08 : 19 min
- Examples--1
03 : 05 min
- Examples 2
04 : 10 min
- Examples 3
02 : 41 min
- Examples 4
04 : 00 min
- Examples 5
01 : 05 min
- Example 6
06 : 02 min
- Examples 7
07 : 28 min
- Idempotent matrices
07 : 54 min
- idempotent example 1
02 : 43 min
- Idempotent example 2
03 : 30 min
- Involutary matrices
03 : 45 min
- Nilpotent matrices
03 : 17 min
- Traspose of a matrix
05 : 31 min
- Symmetric and skew symmetric matrices

- 06 : 55 min
- Symmetric and skew symmetric matrices examples 1
13 : 21 min
- Symmetric and skew symmetric matrices examples 2
06 : 35 min
- Symmetric and skew symmetric matrices examples 3
06 : 25 min
- Symmetric and skew symmetric matrices examples 4
03 : 40 min
- Symmetric and skew symmetric matrices examples 5
10 : 00 min
- Hermitian and skew hermitian matrices
07 : 47 min
- LU Decomposition Notes

Determinants

- Determinant, minor, co factor
13 : 12 min
- Determinants of upper and lower triangular matrices
08 : 47 min
- Theorems on determinant part 1
16 : 02 min
- Theorems on determinant part 2
14 : 54 min
- Determinants - ex 1
05 : 37 min
- Determinants - ex 2
05 : 31 min
- Determinants - ex 3
02 : 02 min
- Determinants - ex 4
02 : 15 min
- Determinants - ex 5
03 : 12 min
- Determinants - ex 6
03 : 13 min
- Determinants - ex 7
03 : 08 min
- Determinants - ex 8
04 : 42 min
- Determinants - ex 9

02 : 42 min

- Determinants - ex 10
02 : 13 min
- Determinants - ex 11
02 : 51 min
- Determinants - ex 12
02 : 35 min
- Determinants - ex 13
02 : 39 min
- Determinants - ex 14
01 : 28 min
- Determinants - ex 15
02 : 22 min
- Determinants - ex 16
04 : 27 min
- Determinants - ex 17
04 : 08 min
- Determinants - ex 18
05 : 46 min
- Determinants - ex 19
02 : 26 min
- Determinants - ex 20
05 : 07 min
- Determinants - ex 21
02 : 29 min
- Determinants - ex 22
04 : 06 min
- Determinants - ex 23
04 : 07 min
- Determinants - ex 24
04 : 17 min
- Determinants - ex 25
06 : 10 min

- Determinants - ex 26
05 : 05 min
- Determinants - ex 27
02 : 00 min
- Determinants - ex 28
02 : 52 min
- Determinants - ex 29
02 : 47 min
- Determinants - ex 30
05 : 05 min
- Determinants - ex 31
03 : 25 min
- Determinants - ex 32
01 : 49 min
- Determinants - ex 33
02 : 36 min
- Determinants - ex 34
02 : 54 min
- Determinants - ex 35
02 : 59 min
- Determinants - ex 36
02 : 31 min
- Determinants - ex 37
03 : 02 min

Multiplication of Determinants

- Multiplication of determinants
07 : 11 min
- Multiplication of determinants Ex - 1
02 : 38 min
- Multiplication of determinants Ex - 2
06 : 02 min
- Multiplication of determinants Ex - 3

02 : 15 min

- Multiplication of determinants Ex - 4
04 : 41 min
- Multiplication of determinants Ex - 5
02 : 18 min
- Multiplication of determinants Ex - 6
01 : 59 min
- Multiplication of determinants Ex - 7
04 : 50 min
- Multiplication of determinants Ex - 8
03 : 53 min

Cramers Rule

- Cramer's rule
11 : 45 min
- Cramer's rule - ex 1
04 : 05 min
- Cramer's rule - ex 2
02 : 40 min
- Cramer's rule - ex 3
02 : 43 min

Inverse

- Adjoint
08 : 12 min
- Example on adjoint
04 : 52 min
- Inverse of matrices - theorem 1
06 : 28 min
- Inverse of matrices - theorem 2
05 : 44 min
- Inverse of matrices - theorem 3
05 : 21 min
- Inverse of matrices - theorem 4

05 : 31 min

- Example on inverse

03 : 12 min

- Example 1

06 : 31 min

- Example 2

01 : 26 min

- Example 3

01 : 47 min

- Example 4

03 : 29 min

- Example 5

07 : 26 min

- Example 6

03 : 12 min

- Example 7

04 : 50 min

- Example 8

08 : 28 min

- Example 9

03 : 35 min

- 17 Example 10

02 : 01 min

- Example 11

03 : 19 min

- Example 12

02 : 37 min

- Example 13

02 : 44 min

- Example 14

07 : 30 min

- Solving system of linear equations using matrix inversion

07 : 07 min

- Example 1 on linear equations
04 : 59 min
- Example 2 on linear equations
02 : 07 min

Rank of a matrix

- Rank of Matrix
11 : 18 min
- Some more Properties on Rank of a matrix
15 : 59 min
- Some examples on rank
11 : 57 min
- Echelon form
05 : 34 min
- Elementary transformations
05 : 06 min
- Echelon form example 1
06 : 38 min
- Echelon form example 2
02 : 54 min
- Echelon form example 3
04 : 31 min
- Echelon form example 4
03 : 17 min
- Echelon form example 5
03 : 55 min
- Echelon form example 6
03 : 54 min
- Echelon form example 7
03 : 54 min
- Echelon form example 8
02 : 13 min
- Elementary matrix

04 : 16 min

- Converting to normal form - ex 1
06 : 00 min
- Converting to normal form - ex 2
05 : 27 min
- Equivalence of matrices
02 : 52 min

System of linear homogenous equations

- Vectors
04 : 35 min
- Linearly dependent and independent vectors
05 : 22 min
- Example on linearly dependent and independent vectors
06 : 53 min
- Column rank and row rank
03 : 30 min
- System of homogenous linear equations
06 : 49 min
- Theorem on linearly independent solutions and conclusion
07 : 10 min
- Working rule to find the solutions of linear independent equations
08 : 24 min
- Homogeneous equations - ex 1
02 : 45 min
- Homogeneous equations - ex 2
05 : 14 min
- Homogenous equations - ex 3
03 : 12 min
- Homogenous equations - ex 4
07 : 46 min
- Homogeneous equations ex - 5
10 : 45 min

- Homogeneous equations ex - 6
15 : 24 min
- Homogeneous equations ex - 7
12 : 55 min
- Homogeneous equations ex - 8
11 : 45 min
- Homogeneous equations ex - 9
05 : 26 min
- 17 Homogeneous equations ex - 10
01 : 08 min

System of linear non-homogeneous equations

- introduction
07 : 48 min
- Working rule for solving linear non-homogenous equations
05 : 08 min
- Non homogeneous equations - ex 1
12 : 07 min
- Non homogeneous equations - ex 2
03 : 30 min
- Non homogeneous equations - ex 3
07 : 41 min
- Non - homogenous equations ex - 4
05 : 17 min
- Non - homogenous equations ex - 5
05 : 57 min
- Non - homogenous equations - ex 6
02 : 50 min
- Non - homogeneous equations - ex 7
02 : 50 min
- Non - homogeneous equations - ex 8
06 : 32 min
- Non - homogeneous equations - ex 9
10 : 05 min

- Non - homogeneous equations - ex 10
06 : 23 min
- Non - homogeneous equations - ex 11
06 : 36 min
- Non - homogeneous equations - ex 12
02 : 17 min
- Non - homogeneous equations - ex 13
03 : 20 min

Eigen values and vectors

- Introduction
16 : 30 min
- Example 1
04 : 24 min
- Example 2
01 : 55 min
- Example 3
02 : 12 min
- Example 4
15 : 10 min
- Example 5
15 : 38 min
- Example 6
14 : 21 min
- Example 7
03 : 52 min
- Example 8
04 : 29 min
- Example 9
03 : 12 min
- Example 10
04 : 15 min
- Example 11

06 : 16 min

- Example 12
04 : 39 min
- Example 13
03 : 36 min
- Cayley-Hamilton theorem
03 : 48 min

LU decomposition

- LU-Decomposition of matrices
01 : 03 min
- LU-Decomposition matrices-1
01 : 59 min
- Example-1 on Lu-Decomposition
02 : 06 min
- Example 2 on LU-Decomposition
03 : 34 min
- LU-Decomposition of matrices-2
03 : 22 min
- LU Decomposition Notes

Practice Questions

- Practice Questions Set-1
- Practice Questions Set-2
- Practice Questions Set-3
- Practice Questions Set-4
- Practice Questions Set-5
- Practice Questions Set-6
- Solutions Set-1
- Solutions Set-2
- Solutions Set-3
- Solutions Set-4
- Solutions Set-5
- Solutions Set-6

Description

Combinatorics and Propositional logic

Curriculum

Recurrence relations

- Introduction
06 : 51 min
- Recurrence relation and solution
14 : 33 min
- Examples
09 : 13 min
- GATE 2014 question
05 : 38 min
- GATE 2002 question
11 : 32 min
- Gate 2008 question
03 : 46 min
- GATE 2012 question
07 : 35 min
- Gate 2008 question
05 : 26 min
- Gate 2015 question
08 : 02 min

Generating functions

- Introduction
05 : 09 min
- Example 1
02 : 39 min

Pigeonhole Principle

- The Pigeonhole Principle
03 : 07 min
- Example-1 on pigeonhole principle

02 : 06 min

- Example-2 on pigeonhole principle
02 : 08 min
- Example-3 on pigeonhole principle
02 : 25 min
- Generalized pigeonhole principle
04 : 06 min
- Example on Generalized pigeonhole principle
03 : 40 min

Introduction to propositional calculus

- Introduction
13 : 08 min
- Connectives \wedge \vee and \sim
07 : 57 min
- Implication
19 : 55 min
- Questions on implication
09 : 47 min
- Bi conditional
09 : 10 min
- Example 1
03 : 52 min
- Example 2
05 : 45 min
- Consistent system
06 : 56 min
- Equivalences
04 : 31 min
- DeMorgan's law
02 : 49 min
- Argument-inference
03 : 05 min

- Rules of inference
13 : 00 min
- Invalid arguments(fallacies)
02 : 10 min
- Example 1 on argument is valid or not
03 : 00 min
- Example 2 on argument is valid or not
09 : 34 min
- Example 1 on premises are consistent or inconsistent
03 : 18 min
- conditional proff
01 : 55 min
- Example using conditional proff
01 : 28 min
- Propositional function
06 : 20 min
- Quantifiers
10 : 12 min
- Relation between the two quantifiers
08 : 50 min
- Distributing quantifiers
10 : 43 min
- Quantifiers with Negation
07 : 52 min
- Examples on negating the quantifiers
05 : 04 min
- Important examples
06 : 33 min
- Translating English statements to propositional functions
10 : 46 min
- Translation continued
10 : 43 min
- Translation returns

16 : 04 min

- Translation revisited

13 : 05 min

- Example on translation

03 : 39 min

- GATE 2012 question

05 : 46 min

- GATE 2014 question

07 : 52 min

- GATE 2009 question

06 : 51 min

Description

Compiler Design

Curriculum

Introduction

- Introduction and various phases of compiler
18 : 37 min
- Introduction to Symbol table
08 : 42 min
- Symbol table entries
05 : 33 min
- Operation of the symbol table
04 : 04 min
- Gate 2012 on symbol table
01 : 27 min
- Various implementation on symbol Table
10 : 08 min
- Introduction to lexical analyser and Grammars
19 : 51 min
- Errors and their recovery in lexical analysis
04 : 34 min
- Ambiguous grammars and making them unambiguous
22 : 59 min
- Note: Small mistake in below video.
- Elimination of left recursion and left factoring the grammars
29 : 46 min

Parsers

- Introduction to parsers and LL(1) parsing
20 : 27 min
- Examples on how to find first and follow in LL(1)
21 : 58 min
- Construction of LL(1) parsing table
27 : 28 min
- Recursive descent parser
07 : 31 min
- Operator grammar and Operator precedence parser
37 : 47 min
- LR parsing, LR(0) items and LR(0) parsing table
19 : 25 min

- LR(0) parsing example and SLR(1) table
22 : 42 min
- Small Mistake in Below video. Before going to below video please [click here](#) to get
- Examples of LR(0) and SLR(1)
20 : 15 min
- Examples of LR(0) and SLR(1)
22 : 02 min
- Note: Mistake in Below video
- CLR(1) and LALR(1) Parsers
27 : 00 min
- conflicts and examples of CLR(1) and LALR(1)
29 : 13 min
- Note: Mistake in below video. Click here to get details.
- Examples of CLR(1) and LALR(1) and comparison of all the parsers
40 : 51 min
- Practice Questions
- Practice Question Solutions

Syntax directed translation

- Syntax directed translation examples
29 : 12 min
- Examples of SDT
29 : 53 min
- S attributed and L attributed definitions
26 : 12 min
- SDT to add type information into symbol table--both S attributed and L attributed
22 : 18 min

Intermediate code generation

- Introduction to intermediate code
07 : 31 min
- various representations of 3 address code
10 : 13 min
- Back patching and conversions to 3 address code
19 : 44 min
- 2-dimensional array to 3 address code
13 : 58 min
- Gate 2007 Question intermediate code generation
08 : 54 min
- Gate 2004 Question intermediate code generation
04 : 00 min
- Gate 2014 Question intermediate code generation

03 : 04 min

Runtime environments

- Runtime environment
21 : 27 min

Code optimisation (Not Required for GATE)

- Introduction to code optimisation
04 : 52 min
- Loop optimisation and basic blocks
07 : 53 min
- Algorithm to find the leaders
13 : 29 min
- Types of loop optimisation
08 : 27 min
- Machine independent optimisation
02 : 52 min
- Machine dependent optimization
04 : 47 min

Practice Questions

- Practice Questions Set-1
- Practice Questions Set-2
- Practice Questions Set-3
- Practice Questions Set-4
- Practice Questions Set-5
- Practice Questions Set-6
- Solutions Set-1
- Solutions Set-2
- Solutions Set-3
- Solutions Set-4
- Solutions Set-5
- Solutions Set-6

Description

Computer Networks

Curriculum

IP address Subnetting Supernetting

- Introduction to Computer network and IP address
49 : 05 min
- Types of Casting:Unicast,Limited Broadcast,Directed Broadcast
16 : 17 min
- Subnets,Subnet Mask,Routing
31 : 06 min
- variable lenght subnet masking (VLSM)
24 : 44 min
- Subnet Masking question
16 : 25 min
- Classless Inter Domain Routing (CIDR)
39 : 44 min
- Subnetting in CIDR, VLSM in CIDR
34 : 40 min
- Some interesting problems on subnet mask
28 : 01 min
- Supernetting or aggregation
30 : 17 min
- Private IP address
07 : 31 min
- Gate 2012 question on IP addressing
06 : 21 min

Flow Control methods

- Delays in CN
14 : 36 min
- Gate 2015 question on Delays
17 : 59 min
- Flow control, Stop and wait
41 : 54 min
- Gate 2015 question on stop and wait protocol
03 : 15 min
- Capacity of pipe and pipelining
43 : 12 min
- Go Back N
48 : 14 min
- Selective Repeat and comparison between all sliding window protocols

- 38 : 35 min
- Gate 2016 question on S-R protocol
04 : 11 min
- Gate 2005 and Gate 2010 questions on SR protocol fundamentals
02 : 35 min
- Gate 2003 question on sliding window protocol
03 : 15 min
- Gate 2006 question on sliding window protocol
02 : 50 min
- Introduction to Access control methods, TDM and Polling
17 : 17 min
- CSMA/CD
41 : 27 min
- Gate 2015 question on CSMACD
03 : 21 min
- back off algorithm for CSMA/CD
22 : 04 min
- Token passing access control method
31 : 33 min
- Gate 2016 question on sloted aloha
06 : 23 min
- Aloha and difference between Flow and access control
17 : 09 min

Error Control Methods

- Error control and CRC
20 : 49 min
- CRC Example
07 : 47 min
- Checksum
06 : 23 min
- Summary
06 : 08 min

ISO/OSI Stack

- ISO-OSI LAYERS
16 : 43 min
- Physical layer
15 : 39 min

- Introduction to DLL
02 : 52 min
- Framing at DLL
36 : 29 min
- Physical addressing
10 : 54 min
- Introduction to network layer
08 : 11 min
- Introduction to transport layer
12 : 53 min
- Lecture How all the layers work together
37 : 27 min
- Session layer and Presentation layer
13 : 53 min
- Gate 2004 question on layering
01 : 07 min

LAN technologies (Token Ring is not required for GATE)

- Ethernet
36 : 55 min
- Gate 2016 question on ethernet
02 : 10 min
- Introduction to Token Ring
48 : 41 min
- Token Ring Frame Format
29 : 29 min
- Minimum length of token ring
15 : 09 min

Switching

- Introduction to switching
09 : 32 min
- Comparison between circuit switching and packet switching
21 : 24 min

- Packetisation in packet switching
23 : 23 min
- Virtual circuits and datagrams
16 : 10 min

Internet Protocol

- Introduction to IP header
14 : 04 min
- Identification, MF,DF and fragment offset
04 : 14 min
- TTL, protocol, Header checksum
23 : 43 min
- Source IP and destination IP
10 : 07 min
- Options
08 : 13 min

Fragmentation

- Difference between segmentation and fragmentation
13 : 43 min
- Fragmentation explained with numerical example
51 : 35 min
- Theory about fragmentation
15 : 15 min
- Reassembly algorithm
12 : 14 min

Protocols and Concepts at Network Layer

- Implementation of broadcasting
10 : 13 min
- ARP
14 : 16 min
- Special address 127
13 : 10 min

- RARP
14 : 03 min
- Bootp and Dhcp
22 : 38 min
- Introduction to ICMP
07 : 47 min
- ICMP feedback messaging
25 : 29 min
- ICMP request and reply messaging
13 : 44 min
- Traceroute - application of ICMP
16 : 09 min
- PMTUD - application of ICMP
06 : 57 min

Routing

- Difference between routing and flooding
09 : 17 min
- Types of routing algorithms
03 : 58 min
- Distance Vector Routing
39 : 19 min
- Count to infinity
30 : 12 min
- Split horizon
15 : 16 min
- Link state routing
29 : 56 min
- Difference between DVR and LSR, RIP and OSPF
12 : 46 min

TCP

- TCP header
03 : 35 min

- Source port, destination port and socket
12 : 49 min
- Sequence number, Acknowledge number and random initial sequence number
18 : 35 min
- Wrap around time and problems on wrap around time
24 : 14 min
- Header length and calculation of acknowledgment number
09 : 59 min
- TCP connection establishment
26 : 44 min
- TCP data transfer after connection establishment
14 : 40 min
- TCP connection termination
13 : 27 min
- PSH flag
07 : 38 min
- URG flag and urgent pointer
20 : 17 min
- RST flag
05 : 15 min
- TCP state transition diagram- connection establishment
08 : 42 min
- TCP state transition diagram - connection release
08 : 39 min
- TCP flow control using advertisement window
13 : 55 min
- TCP checksum
08 : 57 min
- Options in TCP header
04 : 40 min
- Retransmissions in TCP
17 : 53 min
- Introduction to TCP congestion control

17 : 24 min

- TCP congestion control algorithm with an example
16 : 01 min
- TCP timer management
08 : 37 min
- Introduction to timeout timer
05 : 57 min
- Basic algorithm for timeout timer computation
15 : 41 min
- Jacobson's algorithm for timeout computation and Karn's modification
16 : 09 min
- Silly window syndrome
11 : 55 min
- Traffic shaping
02 : 14 min
- Leaky Bucket
03 : 58 min
- Token Bucket
07 : 20 min
- Example on Token Bucket
06 : 22 min

UDP

- Need of UDP
19 : 53 min

Hardware and various devices used in networking (Not required for GATE but we suggest you to go through it)

- Cables, Repeaters and Hubs
16 : 15 min
- Bridges
14 : 08 min
- Spanning tree algorithm in Bridges
15 : 45 min

- Switch
06 : 11 min
- Collision domain and broadcast domain of all devices
06 : 47 min
- Routers
06 : 51 min
- Gateways
24 : 51 min
- Firewalls
22 : 55 min

Application protocols

- Introduction to application layer
04 : 18 min
- DNS
23 : 53 min
- HTTP
16 : 34 min
- FTP
08 : 27 min
- SMTP-POP
16 : 19 min

Problems on IP addressing

- Problem 1
01 : 03 min
- Problem 2
03 : 33 min
- Problem 3
01 : 00 min
- Problem 4
03 : 54 min
- Problem 5
02 : 41 min
- Problem 6
01 : 46 min

Problems on Sliding window protocol

- Problem 7

- 01 : 07 min
- Problem 8
- 03 : 39 min
- Problem 9
- 04 : 25 min
- Problem 10
- 01 : 49 min
- Problem 11
- 02 : 46 min
- Problem 12
- 08 : 21 min
- Problem 13
- 02 : 22 min
- Problem 14
- 04 : 42 min
- Problem 15
- 02 : 27 min
- Problem 16
- 02 : 22 min
- Problem 17
- 02 : 34 min
- Problem 18
- 03 : 22 min
- Problem 19
- 02 : 59 min
- Problem 20
- 02 : 24 min
- Problem 21
- 05 : 04 min
- Problem 22
- 03 : 30 min

Problems on LAN technologies

- Problem 23
- 03 : 23 min
- Problem 24
- 01 : 01 min
- Problem 25
- 03 : 16 min
- Problem 26
- 00 : 56 min
- Problem 27
- 00 : 59 min
- Problem 28
- 01 : 15 min
- Problem 29
- 02 : 42 min
- Problem 30
- 01 : 38 min

- Problem 31
01 : 17 min
- Problem 32
04 : 51 min
- Problem 33
00 : 45 min
- Problem 34
15 : 39 min
- Problem 35
09 : 33 min
- Problem 36
07 : 26 min
- Problem 37
06 : 22 min
- Problem 38
02 : 17 min
- Problem 39
01 : 57 min
- Problem 40
02 : 16 min
- Problem 41
04 : 39 min
- Problem 42
04 : 32 min
- Problem 43
00 : 59 min
- Problem 44
01 : 50 min
- Problem 45
01 : 54 min
- Problem 46
03 : 12 min
- Problem 47
14 : 36 min
- Problem 48
16 : 16 min
- Problem 49
03 : 48 min
- Problem 50
06 : 24 min
- Problem 51
08 : 12 min
- Problem 52
06 : 01 min
- Problem 53
06 : 49 min
- Problem 54
02 : 56 min
- Problem 55

03 : 07 min

TCP/IP problems

- Problem 56
02 : 07 min
- Problem 57
04 : 09 min
- Problem 58
04 : 06 min
- Problem 59
04 : 34 min
- Problem 60
03 : 36 min
- Problem 61
04 : 13 min
- Problem 62
05 : 38 min
- Problem 63
03 : 59 min
- Problem 64
01 : 22 min
- Problem 65
02 : 53 min
- Problem 66
04 : 40 min
- Problem 67
04 : 50 min
- Problem 68
02 : 35 min
- Problem 69
02 : 34 min
- Problem 70
03 : 16 min
- Problem 71
01 : 41 min
- Problem 72
07 : 33 min
- Problem 73
04 : 48 min
- Problem 74
01 : 18 min
- Problem 75
05 : 01 min
- Problem 76
03 : 03 min

Network Security

- Introduction to network security
05 : 20 min

- passive and active attacker
04 : 42 min
- Security service
05 : 10 min
- Cryptography
04 : 57 min
- gate-15 on symmetric key
02 : 57 min
- Modular arithmetic
09 : 32 min
- Multiply Inverse
06 : 18 min
- Euler's Theorem
09 : 43 min
- Euler's Totient function
06 : 35 min
- RSA Algorithm
14 : 22 min
- Primitive root
09 : 18 min
- Discrete logarithm
04 : 29 min
- Diffie-Hellman algorithm
16 : 46 min
- Digital signatures - 1
03 : 24 min
- Digital signatures - 2
08 : 20 min
- Firewalls
13 : 48 min

IPv6 and Wifi

- Need for IPv6

07 : 44 min

- IPV6 header
13 : 45 min
- Traffic class field
19 : 03 min
- Flow label field
18 : 13 min
- Payload length
03 : 13 min
- Next header field
07 : 44 min
- Ordering of extension headers
06 : 00 min
- Hop by hop extension header
07 : 47 min
- Routing extension header - 1
19 : 39 min
- Routing extension header - 2
13 : 23 min
- Fragmentation extension header
15 : 34 min
- Need for security at network layer
09 : 01 min
- Modes of IP security
12 : 10 min
- Authentication header
29 : 02 min
- ESP
11 : 36 min
- IPV6 addresses
08 : 03 min
- IPV6 address representation
07 : 56 min

- Types of IPV6 addresses
07 : 38 min
- Provider based unicast address
09 : 51 min
- Geography based unicast address
03 : 25 min
- Multicasting
08 : 52 min
- Anycast
02 : 58 min
- Some special addresses
05 : 21 min
- Local addresses
07 : 37 min
- IPV4 Vs IPV6
03 : 07 min
- Introduction to WiFi
10 : 21 min

Practice Questions

- Set-1 Questions
- Set-1 Answers
- Set-2 Questions
- Set-2 Answers
- Set-3 Questions
- Set-3 Answers
- Set-4 Questions
- Set-4 Answers
- Set-5 Questions
- Set-5 Answers

Description

CO

Curriculum

Cache

- Introduction to cache memory
14 : 10 min
- Direct mapping
30 : 07 min
- Direct mapping problems
12 : 30 min
- Direct mapping problems 2
14 : 13 min
- Direct mapping Hardware implementation
14 : 10 min
- Disadvantage of Direct mapping
10 : 29 min
- Introduction to associative mapping
10 : 47 min
- Numericals on associative associative
19 : 21 min
- Set associative mapping
09 : 22 min
- Problems on set associative mapping
21 : 12 min
- Problems on set associative mapping -- 2
10 : 24 min
- Comparing all the mappings
08 : 43 min
- Gate 95, 99, 01 and 07 Questions
09 : 34 min
- Gate 2013 question on Set Associative Mapping
07 : 02 min
- Gate 2014 question on Hit Ratio
05 : 53 min
- Gate 1990 question on Set Associative Mapping
03 : 29 min
- Gate 2005 question on Direct Mapping
02 : 12 min
- Gate 2006 question on Hit Latency
17 : 26 min

- Gate 2011 question on Tag directory
03 : 16 min
- Gate 2012 question
03 : 51 min
- Gate 2014 question on Cache Size
08 : 57 min
- Gate 2014 question on Doubling the Association
04 : 39 min
- Gate 2014 question on Set Associative Mapping
04 : 01 min

Memory Interfacing

- Introduction
06 : 11 min
- Memory Hierarchy
06 : 22 min
- 2 Level memory
10 : 29 min
- 3 Level Memory
08 : 30 min
- Example 1
04 : 02 min
- Cache replacement algorithms
04 : 00 min
- Example 1
04 : 34 min
- Example 2
09 : 21 min
- Example 3
07 : 54 min
- Example 4
16 : 08 min
- Example 5

04 : 59 min

- Example 6
05 : 39 min
- Example 7
12 : 17 min
- Cache coherence problem
02 : 32 min
- Methods to avoid cache coherence problem
05 : 37 min
- Memory Interleaving
08 : 35 min
- Gate Question on memory Interleaving
06 : 59 min
- Gate 2006 on memory Interleaving
06 : 07 min
- Gate 2016 on memory hierarchy
01 : 39 min
- Gate 2016 question on memory hierarchy
07 : 22 min
- Gate 2016 question on set associative mapping
05 : 26 min
- Gate 2014 Question on memory hierarchy
04 : 09 min
- Gate 2015 on memory hierarchy
01 : 46 min
- Gate 2004 on Memory hierarchy
02 : 26 min
- Gate 2006 on Memory hierarchy
03 : 10 min

Secondary Memory

- Introduction
06 : 59 min

- Example 1
03 : 15 min
- Example 2
02 : 51 min
- Example 3
05 : 39 min
- Example 4
04 : 27 min
- Example 5
04 : 34 min
- Example 6
03 : 30 min
- Example 7
07 : 21 min

Machine instructions and Addressing modes

- Introduction
12 : 00 min
- Computer organisations based on Registers
15 : 20 min
- Addressing modes
10 : 39 min
- Implied and Immediate mode
07 : 20 min
- Register Mode and Register Indirect mode
12 : 47 min
- Direct and indirect mode
05 : 56 min
- Relative addressing mode
07 : 36 min
- Indexed addressing mode
03 : 27 min
- Base register mode
07 : 39 min

- Gate 2000
01 : 38 min
- Gate 2002
03 : 04 min
- Gate 2004
03 : 47 min
- Gate 2001
01 : 05 min
- Types of instructions
04 : 31 min
- Data transfer instructions
04 : 36 min
- Arithmetic instructions
08 : 42 min
- Logical instructions
09 : 20 min
- Shift instructions
15 : 03 min
- Program control instructions
13 : 28 min
- Flags
16 : 25 min
- Numerical example on flags
21 : 54 min
- Conditional branches
07 : 29 min
- Call and return
16 : 50 min
- Interrupts
25 : 16 min
- RISC and CISC
12 : 17 min

ALU Data path and Control Unit

- Introduction
19 : 31 min
- Bus using multiplexers
15 : 24 min
- Units of a CPU
12 : 02 min
- Connecting all the units
18 : 48 min
- Timing circuit
10 : 39 min
- Instruction decoder
08 : 18 min
- Instruction cycle
06 : 40 min
- Fetch phase
10 : 34 min
- Decode phase and instruction types
44 : 12 min
- Compute EA phase
14 : 42 min
- Execute phase of memory reference instructions-1
13 : 26 min
- Execute phase of memory reference instructions-2
14 : 54 min
- Execute phase of memory reference instructions-3
12 : 18 min
- Execute phase of memory reference instructions-4
12 : 03 min
- Execute phase of register reference instructions-5
07 : 29 min
- Execute phase of IO related instructions
35 : 23 min

- Interrupt driven IO Page
16 : 53 min
- Implementing Interrupts
31 : 46 min
- Hardwired control unit ex - 1
09 : 17 min
- Hardwired control unit ex - 2
06 : 37 min
- Microprogrammed control unit - 1
17 : 19 min
- Microprogrammed control unit - 2
27 : 52 min
- Difference between hardwired and microprogrammed CU
03 : 55 min
- GATE 2004 question on microprogramming
03 : 26 min

IO interface

- Introduction Page
14 : 00 min
- Isolated vs memory mapped IO
09 : 27 min
- Serial vs parallel transmission Page
07 : 40 min
- Synchronous vs asynchronous transmission Page
24 : 03 min
- Modes of IO transfer Page
20 : 27 min
- Priority based interrupt system
15 : 24 min
- Daisy chain or serial connection
11 : 20 min
- Parallel connection
18 : 36 min

- Interrupt overhead
25 : 38 min
- DMA - 1
33 : 45 min
- DMA - 2
08 : 49 min
- Gate question 1
05 : 07 min
- Gate question 2
02 : 04 min
- Gate question 3
08 : 47 min
- Gate question 4
04 : 13 min
- Gate question 5
03 : 00 min
- Gate question 6
03 : 45 min

Pipelining

- Introduction to pipelining
34 : 18 min
- Gate 2000 question
02 : 41 min
- Gate 99 question
07 : 40 min
- GATE 2009 question
07 : 34 min
- Pipeline example
13 : 16 min
- Gate 04 question
05 : 13 min
- GATE 2014 question

03 : 29 min

- GATE 2015 question

04 : 31 min

- Dependencies

04 : 41 min

- Structural dependency - 1

09 : 16 min

- Structural dependency - 2

13 : 31 min

- Control dependency - 1

16 : 12 min

- Control dependency - 2

13 : 56 min

- Control dependency - 3

15 : 24 min

- GATE 2006 question

07 : 58 min

- GATE 2000 question

18 : 40 min

- GATE 2014 question

09 : 52 min

- Branch prediction and speculative execution

19 : 17 min

- Delayed Branching

09 : 59 min

- GATE 2008 question

05 : 53 min

- Data Hazards

17 : 59 min

- Operand forwarding

12 : 02 min

- GATE 2010 question

12 : 02 min

- Register renaming
06 : 03 min
- Gate 2015 question on Pipeline
13 : 31 min
- GATE 11 question
04 : 49 min
- Gate 2014
10 : 00 min

Practice Questions

- Practice Questions Set-1
- Practice Questions Set-2
- Practice Questions Set-3
- Practice Questions Set-4
- Practice Questions Set-5
- Practice Questions Set-6
- Practice Questions Set-7
- Practice Questions Set-8
- Answers Set-1
- Answers Set-2
- Answers Set-3
- Answers Set-4
- Answers Set-5
- Answers Set-6
- Answers Set-7
- Answers Set-8

Description

P and DS

Curriculum

Introduction to C Programming

- Write a program to print Hello world!
06 : 20 min
- Introduction to C - language
24 : 39 min
- Before watching below video please check this doc
- Format specifiers
03 : 20 min
- character input and output
04 : 06 min

Types, Operators and Expressions

- Data types and Sizes
07 : 23 min
- Enum Data Type
03 : 59 min
- Type conversions
08 : 25 min
- Constants
05 : 44 min
- String Constants
06 : 26 min
- Assignment operators
01 : 37 min
- Bit operators
04 : 04 min
- Ternary operator
02 : 09 min
- Increment and decrement operator
02 : 50 min

- Precedence and order of evaluation of operators
12 : 01 min
- Write a program to print Fahrenheit - Celsius Table
16 : 42 min
- Write a program to print Fahrenheit - celsius table (Continue..)
06 : 26 min

Flow Control

- Control flow - if statement
03 : 10 min
- Control flow- if else
05 : 00 min
- Example of if-else Statement
02 : 14 min
- Write a program to Check whether a given number is even or odd
05 : 24 min
- Check the largest number from given numbers
06 : 40 min
- Switch statement
04 : 50 min
- Write a program to make simple Calculator
03 : 04 min
- While loop
03 : 37 min
- Do-While
02 : 40 min
- For loop
04 : 13 min
- Write a program to calculate the sum of natural numbers
03 : 32 min
- Write a program to read input until user enters a positive integer
02 : 29 min
- Continue Statement

06 : 35 min

- Break Statement

06 : 27 min

- Write a program to check whether given number is Prime or not

07 : 54 min

- Write a program to find the factorial of a given number

03 : 49 min

- Write a program to print half pyramid using star

05 : 46 min

- Write a program to count number of digits in an integer

02 : 40 min

- Write a program to check whether given number is armstrong or not

06 : 18 min

- Write a program to print the star pattern-3

07 : 33 min

- Write a program wheather given number is palindrome or not

06 : 59 min

- Write a c program to generate fibanacci sequence

05 : 03 min

Functions

- Functions Introduction

14 : 14 min

- Swaping two variables

10 : 14 min

- Write a custom c-function to implement pow() function

03 : 22 min

Pointers in C

- Introduction to pointers

12 : 23 min

- An example program on pointers

04 : 33 min

- Pointers and functions

07 : 11 min

- Pointers and arrays
17 : 42 min
- Pointer arithmetic or address arithmetic
09 : 19 min
- Character arrays and pointers
11 : 20 min
- Array of pointers and Multidimensional arrays
15 : 52 min
- Multidimensional arrays, pointers and function calls
11 : 20 min
- For below video question
- Question on pointer to pointers and array of pointers
00 : 00 min
- Pointers to functions
10 : 34 min
- Some complex declarations
13 : 16 min

Arrays

- One Dimensional Arrays
11 : 35 min
- Row Major and Column Major order in Two Dimensional Arrays
18 : 40 min
- Binary addressing of Two Dimensional Arrays
18 : 04 min
- Determine wheather two arrays a and b have an element in common
05 : 23 min

Strings

- String operations
09 : 43 min
- Write a c-program using strcpy()
05 : 48 min

- Write a c-program using strcat()
03 : 27 min
- Write a c-program using strcmp()
04 : 38 min
- Write a c-program to count characters
02 : 58 min
- Reverse string
03 : 47 min
- i to a - Convert int n to characters in string S
07 : 49 min
- a to i convert string s to integer n
06 : 47 min
- Write a Output for the following program-1
04 : 43 min
- Write a Output for the following program-2
01 : 51 min
- Write a Output for the following program-3
02 : 42 min
- Write a Output for the following program-4
02 : 22 min
- Write a c program to remove all occurrences of all the character c from the string
08 : 45 min

Storage Classes

- Example on Storage Classes
04 : 10 min
- Example on Static Int
06 : 45 min
- Example on static int-2
05 : 44 min
- Example on global variable
05 : 09 min
- Storage management
12 : 16 min

Structures

- Introduction to structures
10 : 55 min
- Example on structures, arrays and pointers
36 : 16 min
- Self referential structures
04 : 54 min
- Malloc
22 : 19 min

Input/Output

- INPUT-OUTPUT
05 : 58 min
- Formatted for integer input and output
10 : 09 min
- Writing Output Data
03 : 16 min
- Reading Input Data
07 : 15 min
- Format for string input output
03 : 43 min
- Conversion Specification
19 : 02 min
- Example of conversion specifiers
11 : 54 min
- Character INPUT-OUTPUT
00 : 31 min
- Example of Character Input-output
01 : 37 min
- Suppression character in scanf()
02 : 01 min

File Input/Output

- File handling in c
11 : 51 min
- fseek(),ftell()
09 : 45 min
- puts(),gets()
06 : 17 min
- Relationship between putc(),getc(),putchar(),getchar()
02 : 48 min
- File reading and writing by using putc() and getc()
06 : 47 min
- Write a c-program to read stream of characters
16 : 53 min
- Write a C-program to count input lines
01 : 59 min
- Write a c-program by using fscanf(),fprintf()
07 : 57 min

Recursion

- Tracing the recursion
21 : 29 min
- Analysing recursion
15 : 46 min
- Towers of Hanoi
24 : 22 min
- Analysing the recursion program of Towers of Hanoi
25 : 24 min

Assignments

- Assignment-1
- Assignment-2
- Assignment-3
- Assignment-4
- Assignment-5
- Assignment-6
- Assignment-7
- Assignment Solutions Link

Description

DBMS

Curriculum

ER Model

- Introduction to DBMS
10 : 33 min
- Database models
07 : 03 min
- Introduction to ER model
09 : 58 min
- Attributes
11 : 04 min
- Relationships 1 : Many
19 : 25 min
- Relationships 1:1
08 : 05 min
- Relationships M:N examples
09 : 29 min
- Recursive relationships
10 : 33 min
- Attributes to relationships
10 : 02 min
- Weak entity
18 : 20 min
- ER diagram notations
03 : 26 min

Relational Database Model

- Introduction to relational database
15 : 19 min
- Terminology of Relational database
10 : 13 min
- Tuple, tuple values and Null
04 : 04 min
- Constraints on Relational DB schema - Domain constraints
07 : 24 min
- Constraints on Relational database schema - Key constraints
30 : 55 min
- Entity and referential integrity constraints
12 : 35 min

- Actions upon constraint violations
17 : 38 min
- Counting the number of SKs possible - Example 1
06 : 25 min
- Counting the number of SKs possible - Example 2
05 : 35 min
- Counting the number of SKs possible - Example 3
06 : 57 min
- Counting the number of SKs possible - Example 4
03 : 33 min

Conversion of ER model to Relational model

- Step 1
04 : 50 min
- Step 2
08 : 43 min
- step 3
14 : 50 min
- step 4
07 : 38 min
- Step 5
15 : 06 min
- Step 6
04 : 49 min
- Step 7
01 : 47 min
- Summary of ER to RDB conversion
03 : 52 min
- GATE IT 2005 question on ER diagrams
05 : 01 min
- Gate 12 question on converting ER to RDB
02 : 39 min
- GATE IT 04 conversion of ER to RDB

05 : 19 min

- GATE 05 on cascade on delete in case of foreign keys
09 : 07 min
- GATE 2005 question on converting ER to RDB
04 : 21 min
- GATE 08 on converting ER to RDB
08 : 12 min
- GATE 97 question on referential integrity
06 : 01 min

Normalisation

- Introduction to normalisation
12 : 55 min
- Introduction to FDs
12 : 19 min
- FD examples
14 : 24 min
- Gate 2000 question on FDs
03 : 48 min
- GATE 2002 question on FDs
04 : 28 min
- Formal definition of FDs
04 : 34 min
- Various usages of FDs
09 : 55 min
- Closure set of attributes
08 : 05 min
- GATE 2006 question on Closure set of attributes
04 : 49 min
- Determining Candidate keys
10 : 06 min
- GATE 99 question on Candidate keys
10 : 14 min

- GATE 2014 question on Candidate keys
07 : 50 min
- GATE 05 question on Candidate key
09 : 39 min
- GATE 2013 question on candidate key
17 : 59 min
- Examples on candidate key - 1
06 : 34 min
- Examples on candidate key - 2
05 : 31 min
- Examples on candidate key - 3
03 : 53 min
- Examples on candidate key - 4
11 : 13 min
- Examples on candidate key - 5
07 : 54 min
- Examples on candidate key - 6
02 : 38 min
- Examples on candidate key - 7
03 : 29 min
- Candidate key for sub relation - example 1
04 : 04 min
- Candidate key for sub relation - example 2
01 : 49 min
- Candidate key for sub relation - example 3
03 : 15 min
- Checking additional FDs - example 1
09 : 38 min
- Checking additional FDs - example 2
08 : 21 min
- GATE IT 05 question on additional FDs
02 : 32 min
- Equivalence of FDs

05 : 41 min

- Equivalence of FDs - example 1
01 : 49 min
- Equivalence of FDs - example 2
02 : 38 min
- Minimal cover
15 : 52 min
- Minimal cover example 1
05 : 37 min
- 2013 GATE on minimal cover
04 : 22 min
- Lossless decomposition
10 : 37 min
- FD preserving
06 : 19 min
- Decomposition Example 1
04 : 50 min
- Decomposition Example 2
06 : 03 min
- Decomposition Example 3
07 : 15 min
- Decomposition Example 4
19 : 34 min
- Decomposition Example 5
05 : 23 min
- Decomposition Example 6
01 : 47 min
- First Normal Form
10 : 13 min
- Second Normal Form Introduction
10 : 04 min
- 2NF Example 1
03 : 38 min

- 2NF Example 2
07 : 00 min
- 2NF Example 3
12 : 30 min
- Third normal form introduction
08 : 19 min
- 3NF Example 1
10 : 20 min
- 3NF Example 2
05 : 13 min
- 3NF Example 3
21 : 42 min
- 3NF Example 4
11 : 00 min
- Formal definition of 3NF
11 : 19 min
- 3NF Example 5
09 : 47 min
- 3NF example 6
11 : 19 min
- BCNF Introduction
11 : 40 min
- BCNF Example 1
11 : 16 min
- BCNF Example 2
09 : 11 min
- BCNF Example 3
05 : 05 min
- BCNF Example 4
10 : 15 min
- BCNF Example 5
11 : 06 min

- BCNF Example 6
09 : 03 min
- BCNF Example 7
06 : 33 min
- BCNF Example 8
12 : 19 min
- Gate Questions on Normalisation 1
04 : 35 min
- Gate Questions on Normalisation 2
07 : 58 min
- Gate 94 Question on Normalization
09 : 31 min
- Gate 95 Question on Normalization
02 : 39 min
- Gate 97 Question on Normalization
01 : 45 min
- Gate 98 Question on Normalization
01 : 08 min
- Gate 99 , 2002 Question on Normalization
03 : 17 min
- Gate 99 Question on Normalization
03 : 25 min
- Gate 2001 on Normalization
13 : 01 min
- Gate 2000 on Normalization
06 : 10 min
- Gate 2001 on Normalization
02 : 10 min
- Gate 2002 on Normalization
03 : 43 min
- Gate 2004 on Normalization
04 : 10 min
- Gate 2004 Question on Normalization

04 : 58 min

- Gate 2011 on Normalization
04 : 16 min
- Gate 2010 on normalization
04 : 35 min
- gate 2013 on Normalization
12 : 40 min
- Gate 2014 on Normalization
04 : 26 min

Relational Algebra

- Introduction to relational algebra
10 : 33 min
- Selection operation
10 : 39 min
- Projection operation
11 : 22 min
- Gate 98 question on selection and projection
08 : 39 min
- GATE 2012 question on Projection
04 : 31 min
- Rename operation
05 : 39 min
- Set Operations
11 : 14 min
- Cartesian product
10 : 14 min
- Join Operation
05 : 01 min
- Natural Join
10 : 04 min
- Division operation
08 : 22 min

- Complete set of RA operations
01 : 30 min
- Types of join
13 : 05 min
- Extended relational algebra operations
04 : 07 min
- Gate 99 on Relation Algebra
05 : 09 min
- Gate 2000 on Relation Algebra
02 : 41 min
- gate 2002 on Relation Algebra
01 : 18 min
- Gate 2004 on Relation Algebra
09 : 08 min
- Gate 2005 Question on Relation Algebra
06 : 47 min
- Gate IT 2006 Question on Relation Algebra
05 : 18 min
- Gate 2007 Question on Relation Algebra
09 : 47 min
- Gate 2008 on Relational Algebra
07 : 10 min
- Gate 2012 Question on Relation Algebra
05 : 47 min
- Gate 2014 Question on Relation Algebra
09 : 48 min
- Gate 2015 Question on Relation Algebra
03 : 33 min
- Introduction to Relation Calculus
07 : 46 min
- TRC Syntax
05 : 11 min
- Free and Bounded Variables

11 : 04 min

- Example 1 on TRC
08 : 24 min
- Example 2 on TRC
03 : 42 min
- Example 3 on TRC
09 : 40 min
- Example 4 on TRC
09 : 08 min
- Example 5 on TRC
09 : 47 min
- Note: Small Mistake in Below video
- Example 6 on TRC
13 : 45 min
- Example 7 on TRC
09 : 47 min
- Example 8 on TRC
06 : 15 min
- Conversion between quantifiers - 1
08 : 02 min
- Conversion between quantifiers - 2
06 : 05 min
- Conversion between quantifiers - 3
09 : 25 min
- Example 9 on TRC
09 : 46 min
- Example 10 on TRC
12 : 17 min
- Example 11 on TRC
04 : 39 min
- Example 12 on TRC
05 : 12 min
- Gate question 2007 on relational calculus

08 : 00 min

- Gate questions 2006,2008 on relational calculus
03 : 29 min
- Unsafe relational Calculus Expression
03 : 54 min
- Domain relational calculus introduction
06 : 27 min
- Example 1 on DRC
03 : 35 min
- Example 2 on DRC
04 : 47 min
- Example 3 on DRC
04 : 25 min
- Example 4 on DRC
02 : 59 min
- Example 5 on DRC
03 : 15 min
- Gate 2014 Question on Relational Algebra
03 : 20 min

SQL

- Introduction to SQL
04 : 44 min
- Creation of Schema
04 : 03 min
- Create Table
05 : 31 min
- Constrains in SQL
20 : 06 min
- INSERT
07 : 00 min
- Delete and Update
10 : 32 min

- Referential triggered actions
14 : 33 min
- Alter
04 : 34 min
- SELECT
14 : 11 min
- View
04 : 01 min
- Aliasing
05 : 56 min
- Pattern Matching
09 : 36 min
- Set operations
08 : 27 min
- Arithmetic and between operations
09 : 50 min
- Order by
09 : 27 min
- Example on Order By
08 : 32 min
- Dealing with null values - 1
06 : 47 min
- Dealing with null values - 2
05 : 38 min
- Dealing with null values - 3
03 : 03 min
- In operator
06 : 47 min
- Example 1 on In operator
06 : 37 min
- Example 2 on In operator
07 : 01 min
- Any,Some, All

06 : 34 min

- Exists - not exists

09 : 42 min

- Example 1 on Exists - non exists

06 : 49 min

- Example 2 on Exists - non exists

09 : 44 min

- Aggregate functions

05 : 37 min

- Dealing with null values in aggregate functions

05 : 21 min

- Group by - 1

06 : 02 min

- Group by having clause

10 : 14 min

- Gate - 2012 question on SQL

01 : 59 min

- With Clause

06 : 15 min

- Example on with clause

04 : 36 min

- Joins

06 : 42 min

- Examples on joins

06 : 28 min

- Gate 98 question on SQL

05 : 46 min

- Gate 99 question on SQL

01 : 36 min

- Gate 2000 question on SQL

05 : 02 min

- Gate 2003 question on SQL

02 : 44 min

- GATE 2011 question on SQL
04 : 00 min
- Gate 2012 question on SQL
02 : 28 min
- GATE 2014 question on SQL
07 : 42 min
- GATE 2014 question on SQL
07 : 43 min
- Gate 2005 question on SQL
00 : 00 min
- Gate 2003 Question on SQL
05 : 51 min
- Gate 2004 Queation on SQL
04 : 12 min
- Gate 2006 Question on SQL
16 : 47 min
- Gate 2011 question on SQL
05 : 47 min
- gate 2007 question on SQL
11 : 58 min
- Gate 2015 question on SQL
02 : 31 min
- Gate 2014 Question on SQL
06 : 07 min
- Gate 2016 Question on SQL
06 : 08 min
- Gate 2016 quston on SQL
05 : 19 min

Transaction management and concurrency control

- Transaction
11 : 45 min
- ACID Properties

06 : 52 min

- Lost update and dirty read problem
10 : 52 min
- Unrepeatable read and phantom problem
04 : 29 min
- Incorrect summary problem
04 : 03 min
- Number of Schedules
13 : 47 min
- Types of schedules serial schedule
03 : 06 min
- Complete schedule recoverable schedule
10 : 00 min
- Cascading aborts cascade less schedule
10 : 18 min
- Strict Schedule
11 : 18 min
- Serializability
10 : 28 min
- Conflict equivalent schedules
12 : 10 min
- Example 1 on Conflict equivalent schedule
09 : 18 min
- Example 2 on conflict equivalent schedule
14 : 06 min
- Gate 2012 question
06 : 48 min
- Gate 2014 question on conflict serializable schedule
07 : 53 min
- Gate 14 question on conflict serializable schedule
07 : 15 min
- Gate 2014 question conflict serializable schedule
05 : 46 min

- Gate question on conflict serializable schedule
05 : 17 min
- Gate 2016 question on conflict serializable schedule
06 : 45 min
- Gate 16 question on conflict serializable schedule
02 : 23 min
- Gate 2015,16 Question on conflict serializability
02 : 02 min
- View serializability
08 : 25 min
- Comparison between conflict and view serializability
08 : 49 min
- Example 1,2,3 on view serializability
08 : 53 min
- polygraph example on view serializability
07 : 42 min
- Example 4,5 on view serializability
06 : 13 min
- Concurrency control protocols
02 : 49 min
- Locks
12 : 31 min
- 2-phase locking protocol
09 : 44 min
- Strict , Rigorous, Conservative
11 : 18 min
- Example on strict 2pc
03 : 10 min
- Graph based protocol
09 : 09 min
- Time stamp ordering protocol
18 : 20 min

- Examples on Timestamp ordering protocol
08 : 32 min
- Thomas write rule
13 : 35 min

File structures

- File organization
12 : 42 min
- Organization of records in a file
07 : 34 min
- Introduction to indexing
13 : 08 min
- Classification of Indexing
06 : 00 min
- Primary Index
05 : 57 min
- Example on Primary index
13 : 26 min
- Clustering index
03 : 09 min
- Secondary Index
04 : 06 min
- Example on secondary index
14 : 21 min
- Gate question 13,08 on Indexing
02 : 01 min
- B-Trees-1
06 : 22 min
- B-Trees-2
07 : 21 min
- Example 1 on B-trees
07 : 49 min
- Example 2 on B-Trees
05 : 06 min

- Example 3 on B-Trees
04 : 00 min
- Underflow and overflow in b-trees
07 : 05 min
- B-tree search
07 : 21 min
- B-Tree searching algorithm
11 : 51 min
- B-tree insertion algorithm
02 : 39 min
- example 1 on B-Tree insertion
09 : 34 min
- example 2 on B-Tree insertion
17 : 57 min
- Deletion from a B-Tree-1
06 : 19 min
- deletion from a B-Tree-2
04 : 16 min
- B+ trees
13 : 01 min
- Example 1 on B+trees
09 : 32 min
- Searching B+ Trees alorgrthim
09 : 33 min
- Gate question 2015 on b+Trees
03 : 40 min
- Gate question IT 2005 on B+Trees
02 : 20 min
- Gate 2015 question on b+Trees
03 : 10 min
- Gate 2013 on B+Trees
06 : 02 min

- Gate 2016 on B+ Tree
02 : 31 min
- Gate 2010 on B+Trees
02 : 03 min
- Gate 2007 on B+Trees
02 : 50 min
- Gate question 2008 on B-Tree
05 : 16 min
- B+ Tree Insertion
11 : 13 min
- Example on B+Tree Insertion
15 : 18 min
- Difference between B-B+ Tree and Binary search
03 : 06 min
- B+ Tree Deletion
08 : 15 min
- Example 1 on B+ Tree deletion
05 : 03 min
- Example 2 on b+Tree Deletion
03 : 27 min
- Example 3 on B+tree deletion
03 : 25 min

Practice Questions

- Practice Questions and Solutions Set-1

Description

Data Structures

Curriculum

Linked List

- Introduction to Single linked list
13 : 33 min
- Traversing a single linked list
08 : 16 min
- Inserting an element in SLL
20 : 01 min
- Deleting a node from SLL
18 : 22 min
- Printing the elements of SLL using recursion
11 : 54 min
- Reversing an SLL using iterative program
14 : 00 min
- Recursive program for reversing an SLL
15 : 19 min
- Circular linked list
04 : 12 min
- Insertion into doubly linked list
12 : 07 min

Stacks and Queues

- Introduction to stacks
06 : 28 min
- Implementation of stack using arrays
14 : 55 min
- Linked list implementation of stack
12 : 40 min
- Implementation of a Queue using circular array
19 : 13 min

- Implementing a queue using two stacks
25 : 37 min
- Implementing queue using one stack
05 : 25 min
- Infix to postfix conversion algorithm
22 : 52 min
- Postfix evaluation algorithm
08 : 55 min

Trees

- Introduction to tree traversals
14 : 11 min
- Implementation of traversals and time and space analysis
21 : 32 min
- Double order traversal
12 : 34 min
- Triple order traversal
04 : 40 min
- Indirect recursion on trees
12 : 33 min
- Number of binary trees possible
05 : 46 min
- Number of binary trees possible labelled and unlabelled
19 : 43 min
- construction of unique binary tree using In order and preorder
14 : 31 min
- Recursive program to count the number of nodes
14 : 46 min
- Recursive program to count the number of leaves and non leaves
15 : 56 min
- Recursive program to find the full nodes
18 : 55 min
- Recursive program to find the height of a tree
12 : 09 min

- Introduction to BST
09 : 21 min
- Deleting a node from BST
12 : 09 min
- Finding minimum and maximum in a BST
10 : 15 min
- Leaves in complete n-ary tree GATE 98 question
10 : 42 min
- Leaves in complete n-ary tree 2002 question
04 : 42 min
- Recursive program on testing whether a tree is complete binary tree
10 : 17 min
- Expression trees
08 : 56 min
- Various tree representations
13 : 29 min

Graphs

- Introduction to Graphs
09 : 43 min
- Representation of Graphs
09 : 55 min
- Introduction of BFS and DFS
09 : 09 min
- BFS algorithm
16 : 43 min
- BFS analysis in case of linked list implementation of Graph
06 : 53 min
- BFS analysis on adjacency matrix implementation
04 : 20 min
- Breadth First Traversal using BFS
08 : 27 min
- DFS algorithm

15 : 24 min

- Analysis of DFS and DFT
06 : 47 min
- Introduction to Topological Sort
04 : 03 min
- Algorithm for topological sort (Approach-1)
05 : 32 min
- Algorithm for topological sort (Approach 2)
07 : 28 min

Hashing

- Direct Address Table
08 : 35 min
- Introduction to Hashing
17 : 43 min
- Chaining
08 : 37 min
- Open addressing
25 : 17 min
- Linear probing
15 : 24 min
- Quadratic probing
18 : 33 min
- Double hashing
11 : 57 min

Disjoint Sets

- Data Structure for Disjoint Sets
03 : 32 min
- Operations on Disjoint Sets
04 : 42 min
- Linked list representation of disjoint sets
05 : 10 min
- Time complexity for linked list representation of Disjoint Sets

05 : 21 min

- Amortized analysis of disjoint sets using linked list representation

06 : 37 min

- Disjoint set forest

04 : 47 min

- Union by rank

02 : 37 min

- Analysis union by rank

11 : 15 min

- Path compression

06 : 14 min

- Time complexity using the Heuristics

05 : 31 min

- Kruskal's algorithm using Disjoint sets

07 : 13 min

- Example on kruskal's using Disjoint sets

08 : 53 min

- Connected components using Disjoints

04 : 47 min

- Example on connected components using Disjoint sets

04 : 55 min

Curriculum

Process Management

- Introduction to OS
24 : 14 min
- Process, PCB and Attributes
19 : 23 min
- Process States and Multi programming
14 : 44 min
- Process Queues
04 : 35 min
- Process State Transition Diagram and various Schedulers
17 : 21 min
- Question on Process States
02 : 02 min
- Various Times related to Process
07 : 31 min
- CPU scheduling
06 : 56 min
- First Come First Serve
14 : 28 min
- Convoy effect
07 : 24 min
- FCFS example
04 : 55 min
- FCFS with overhead
05 : 34 min
- Introductio to SJF
07 : 45 min
- Analysis of SJF
07 : 58 min
- SJF with prediction of BT
17 : 22 min
- Smallest Remaining Time First (SRTF)
11 : 03 min
- Example on SRTF Gate 2011
03 : 38 min
- Example on SRTF Gate 2007
06 : 20 min
- Round Robin Algorithm
04 : 13 min
- Round Robin example 1
21 : 47 min
- Round Robin example 2

- 11 : 57 min
- Round Robin Example 3
03 : 29 min
- Round Robin example 4
04 : 54 min
- Longest job first
06 : 30 min
- Longest remaining time first
11 : 03 min
- Longest remaining time first Gate 2006 question
03 : 51 min
- Highest Response Ratio Next (HRRN)
13 : 01 min
- Priority scheduling
03 : 10 min
- non preemptive priority scheduling
07 : 58 min
- Pre-emptive priority scheduling
14 : 06 min
- SRTF with processes contains CPU and IO time example 1
14 : 51 min
- Pre-emptive priority with processes contains CPU and IO time
10 : 27 min
- SRTF with processes contains CPU and IO time example 2
05 : 55 min
- Multi level queues and multi level feedback queues
04 : 19 min

Process Synchronization

- Need for Synchronization
21 : 52 min
- Introduction to Synchronization Mechanisms
08 : 20 min
- Conditions for Synchronization Mechanisms
10 : 31 min
- Lock Variables
18 : 23 min
- TSL
17 : 49 min
- Gate 2008 TSL question
07 : 16 min
- Gate 2012 TSL question
19 : 46 min

- Gate 2012 TSL Question Continuation
04 : 03 min
- Gate 2010 question
06 : 09 min
- Disabling Interrupts
04 : 04 min
- Turn Variable or Strict Alteration Method
24 : 26 min
- Interested Variable
13 : 17 min
- Petersons Solution
08 : 39 min
- Tracing Petersons Solution
24 : 57 min
- Synchronization Mechanisms Without Busy Waiting
04 : 47 min
- Sleep and Wake
16 : 55 min
- Introduction to Semaphores
05 : 39 min
- Counting Semaphores
16 : 42 min
- Problems on Counting Semaphores
01 : 54 min
- Binary semaphores or Mutexes
05 : 58 min
- Gate 92 question on mutex
04 : 18 min
- Mutex Example
04 : 07 min
- Mutex example 1
09 : 59 min

- Gate 2013 Question on mutex
17 : 06 min
- Gate 2000 Question mutex
08 : 50 min
- Gate 96 Question on dining philosophers problem
11 : 51 min
- Gate 2003 Question (part 1)
08 : 33 min
- Gate 2003 Question (part 2)
09 : 36 min
- Gate 06 Question on Barrier(part 1)
14 : 57 min
- Gate 06 Question on Barrier(part 2)
07 : 28 min
- Gate 2008 Question on implementing Counting Semaphore using Mutexes
22 : 59 min
- Gate 2010 Question on Mutexes
11 : 25 min
- Gate 2013 Question on Counting Semaphores
09 : 56 min
- Gate 1995 Question on Concurrent Processes and Semaphores
07 : 43 min
- Gate 1993 Question on Concurrent Processes and Semaphores
05 : 41 min

Deadlocks

- Introduction to Deadlocks
10 : 19 min
- Gate 1997 Question and More Examples
33 : 30 min
- Gate 1992 Question
04 : 33 min
- Gate 1993 Question on Minimum Resources required
03 : 51 min

- Gate 2005 Question
06 : 25 min
- Gate 06 Question about necessary condition for Deadlock
14 : 17 min
- Deadlock Handling Mechanisms
10 : 47 min
- Deadlock Prevention
13 : 46 min
- Safe,Unsafe,Deadlock avoidance and Bankers Algo
28 : 26 min
- Gate 2007 Question on Safe State
03 : 31 min
- Question on Safe State
07 : 45 min
- Gate 2014 Question on Bankers Algorithm
10 : 27 min
- Gate 1996 on Bankers Algorithm
07 : 41 min
- Resource Allocation Graph
04 : 05 min
- Resource Allocation Graph Examples
27 : 54 min
- Deadlock Detection and Recovery
07 : 32 min

Memory Management

- Need for Multiprogramming and Memory Management
11 : 53 min
- Object code, Relocation and Linker
40 : 12 min
- Loader
10 : 03 min
- Gate 95 question on Linker

02 : 51 min

- Gate 98 question on Loader
02 : 31 min
- 2001 Question on Relocation
01 : 25 min
- Gate 2004 Question on Linker
03 : 23 min
- Gate 2002 question on Dynamic Linked Libraries
03 : 46 min
- Gate 2003 Question on Linking
04 : 08 min
- Fixed Partitioning
07 : 31 min
- Relocation and Protection in Contiguous Memory Allocation
14 : 31 min
- Dynamic Partitioning
17 : 33 min
- Bit Map for Dynamic Partitioning
13 : 04 min
- Linked List for Dynamic Partitioning
08 : 24 min
- First fit, Next fit, Best fit, Worst fit
18 : 20 min
- Gate 2004 Question on First fit and Best fit
07 : 26 min
- Variable Partitioning
06 : 48 min
- Gate 98 Question on Fixed Partitioning
07 : 40 min
- Summary on Partitioning
10 : 53 min
- Overlays
04 : 32 min

- Gate 98 question on Overlays
02 : 05 min
- Need for Paging
16 : 58 min
- Paging explained with Example
17 : 47 min
- Basics of Binary Addresses
09 : 39 min
- Physical Address Space and Logical Address Space
18 : 53 min
- Page Table
26 : 55 min
- Numerical on paging
22 : 52 min
- Page Table Entry
10 : 27 min
- Gate 2004 question on Page Table Entry
09 : 06 min
- Need for Multi Level Paging
06 : 58 min
- Two-Level Paging Example
33 : 54 min
- Examples on Multi Level Paging
32 : 38 min
- More Examples on Multi Level Pages
20 : 30 min
- Examples on How to make Page Table Fit in One Page
14 : 44 min
- Gate 01 and 99 Question on Paging
06 : 24 min
- Gate theory questions
13 : 01 min

- Gate 2008 question on multi level paging
15 : 16 min
- Gate 2009 question on Multi level Paging
04 : 58 min
- Gate 2002 question Multi level Paging
05 : 05 min
- Gate 2008 IT question
03 : 29 min
- Gate 2013 question on Multi level paging
07 : 27 min
- Finding Optimal Page Size
13 : 39 min
- VM Introduction
21 : 06 min
- TLB
29 : 34 min
- Gate 2008 question on TLB
04 : 20 min
- Numericals on TLB
10 : 16 min
- TLB summary
11 : 55 min
- Page fault
15 : 22 min
- Gate 2011 question on Page fault
06 : 44 min
- Gate 98 question on Page fault
02 : 41 min
- Gate 2000 question on Page fault
08 : 38 min
- Gate 2007 question on page fault and dirty bit
12 : 47 min
- GATE 2003 question on TLB and paging

30 : 57 min

- GATE 2004 question on TLB and Page fault
14 : 35 min
- GATE 2014 question on TLB
06 : 06 min
- Inverted page table
09 : 20 min
- Importance of frame allocation and page replacement
27 : 48 min
- Page replacement algorithm
06 : 25 min
- Questions on Page replacement algorithms 1
10 : 56 min
- Questions on Page replacement algorithms 2
05 : 59 min
- Gate Questions on Page replacement algorithms 3
08 : 24 min
- Gate questions on Page replacement algorithms 4
09 : 25 min
- Gate Questions on Page replacement algorithms 5
06 : 21 min
- Belady's Anamoly
14 : 21 min
- Stack algorithms
21 : 49 min
- 94 question on LRU LFU and FIFO
02 : 57 min
- Gate 2007 question on FIFO
02 : 29 min
- Gate 2010 question on FIFO
03 : 25 min
- some interesting behaviour of optimal page replacement algorithm
22 : 48 min

- Gate 2014 question on LRU, MRU, LIFO, FIFO and optimal
30 : 54 min
- working set algorithm
14 : 23 min
- Page replacement algorithms implementation 1
11 : 53 min
- Page replacement algorithms implementation 2
08 : 52 min
- Page replacement algorithm implementation 3
05 : 17 min
- Segmentation
09 : 50 min
- Segmented Paging
16 : 04 min
- GATE 99 question on segmented paint
08 : 56 min
- EMAT Formulas

File system, I/O and protection

- Attributes and operations on files
18 : 21 min
- Open file tables
09 : 12 min
- Accessing files
08 : 51 min
- Directory structure
10 : 21 min
- Single level VS Two level directory
12 : 03 min
- Tree structured directory
10 : 25 min
- Acyclic Graph structured directory
12 : 49 min

- File systems
03 : 48 min
- File system structure
08 : 30 min
- On disk data structure uses in file system implication
08 : 35 min
- MBR
04 : 42 min
- In memory data structure in file system implementation
06 : 22 min
- Directory implementation
04 : 03 min
- Allocation methods
09 : 54 min
- File allocation table
05 : 14 min
- Gate 14 on FAT
04 : 07 min
- Indexed allocation - 1
04 : 26 min
- Indexed allocation - 2
03 : 42 min
- Indexed allocation - 3
08 : 21 min
- Gate 2012 on indexed allocation
03 : 34 min
- Free space management
03 : 46 min
- Disk scheduling
05 : 44 min
- FCFS scheduling
06 : 25 min
- SSTF scheduling

06 : 19 min

- Scan, C-scan

08 : 40 min

- Look

02 : 08 min

- C - look

05 : 58 min

- Gate 2016 question on C-look

04 : 01 min

Threads and system calls

- System calls Vs function calls

14 : 41 min

- Process control system calls

06 : 19 min

- File related system calls

07 : 24 min

- Device related system calls

02 : 54 min

- Information related system calls

03 : 18 min

- Communications related system calls

04 : 01 min

- Fork System call

15 : 53 min

- Process Vs Threads

23 : 03 min

- User level Vs Kernel level threads

10 : 08 min

- Hybrid threads (Not required for GATE)

07 : 40 min

Practice Questions

- Practice Questions Set-1

- Practice Questions Set-2
- Practice Questions Set-3
- Practice Questions Set-4
- Practice Questions Set-5
- Practice Questions Set-6
- Practice Questions Set-7
- Solutions Set-1
- Solutions Set-2
- Solutions Set-3
- Solutions Set-4
- Solutions Set-5
- Solutions Set-6
- Solutions Set-7

Description

Theory of Computation

Curriculum

DFA

- Introduction to TOC and DFA
60 : 06 min
- Construction of minimal DFA and problems
42 : 22 min
- Construction of DFA and cross product of DFA
13 : 45 min
- DFA and problem
08 : 51 min
- DFA construction
07 : 25 min
- DFA construction of binary no which is divisible by 2 and number system
16 : 17 min
- DFA of binary no which is divisible by 3
08 : 21 min
- DFA of binary no divisible by 4
12 : 19 min
- DFA of strings which starts with 'a'
03 : 50 min
- DFA of strings which contains 'a'
03 : 52 min
- DFA of strings which ends with 'a'
03 : 54 min
- Comparison between different DFAs
03 : 23 min
- DFA of strings which starts with 'ab'
03 : 58 min
- DFA of strings containing 'ab' as substring
04 : 23 min
- DFA of strings which ends with 'ab'
04 : 11 min
- DFA problem and concatenation of DFA
05 : 44 min
- DFA which accepts string starting and ending with different symbol
05 : 59 min
- DFA which accepts string starting and ending with same symbol
07 : 29 min
- Complementation of DFA
07 : 37 min
- DFA which accepts strings in which every 'a' is followed by 'b'
03 : 50 min
- DFA which accepts strings in which every 'a' is never be followed by 'b'

- 03 : 32 min
- Note: Small mistake in below video
- DFA which accepts strings in which every 'a' is followed by 'bb'
- 05 : 15 min
- DFA which accepts strings in which every 'a' is never be followed by 'bb'
- 04 : 05 min
- DFA which accepts strings= { $a^n b^m$ | n, m greater than or equal to 1 }
- 03 : 37 min
- DFA which accepts strings={ $a^n b^m$ | n, m greater than or equal to 0 }
- 03 : 02 min
- DFA which accepts strings={ $a^n b^m c^l$ | n, m, l greater than or equal to 1 }
- 05 : 00 min
- DFA which accepts strings={ $a^n b^m c^l$ | n, m, l greater than equal to 0 }
- 04 : 27 min
- DFA which accepts strings= $a^n b^m c^l$ | n, m, l greater than equal to 0 }
- 01 : 25 min
- DFA which accepts strings such that 2nd symbol from LHS is 'a'
- 04 : 23 min
- DFA which accepts strings of form $a^3 b w a^3$, where 'w' is any string
- 08 : 21 min
- DFA Union, Concatenation, Cross product, Complementaion, Reversal
- 24 : 24 min
- Problems of DFA
- 04 : 03 min
- No.of 2 state DFAs with a designated initial and final state over {a,b}
- 04 : 13 min
- No.of 2 state DFAs with a designated initial state accepting the empty language over {a,b}
- 06 : 33 min
- No.of 2 state DFAs with a designated initial accepting the universal language over {a,b}
- 05 : 16 min
- No.of 3 state DFAs with a designated initial state over {a,b}
- 03 : 32 min
- No.of n state DFAs with a designated initial state over alphabet containing m symbols
- 04 : 07 min

NFA

- Introduction to NFA
- 12 : 35 min
- Examples of NFA
- 05 : 26 min
- Conversion of NFA to DFA
- 05 : 32 min
- Conversion of NFA to DFA
- 05 : 24 min

- conversion of NFA to DFA
13 : 17 min
- conversion of NFA to DFA
07 : 48 min
- Examples to construct NFA
03 : 36 min
- Complementation of NFA
09 : 18 min

Minimisation of DFA

- Minimization of DFA
17 : 20 min
- Minimization of DFA
15 : 10 min
- Minimization of DFA
03 : 39 min
- Minimization of DFA
04 : 03 min
- Minimization of DFA
04 : 40 min

Moore and Mealy

- Moore Machine and Mealy machine
07 : 15 min
- Examples of Moore machine
05 : 21 min
- Examples of Moore machine
04 : 17 min
- Examples of Moore machine
05 : 44 min
- Examples of Moore machine
06 : 09 min
- Examples of Mealy machine
09 : 09 min
- Examples of Mealy machine
03 : 10 min
- Conversion of Moore machine to Mealy machine
08 : 24 min
- Conversion of Moore machine to Mealy machine
04 : 52 min
- Conversion of Mealy machine to Moore machine
08 : 16 min
- Conversion of Mealy machine to Moore machine
05 : 19 min

Epsilon NFA

- Epsilon NFA and conversion of epsilon NFA to NFA
17 : 37 min
- Conversion of epsilon NFA to NFA

08 : 07 min

Families of Formal Languages

- families of languages
10 : 49 min

Regular Expressions and Conversions

- Introduction to Regular Expressions
09 : 11 min
- Examples of Regular expressions
21 : 45 min
- Examples of Regular expressions and identities of RE
23 : 12 min
- Conversion of Finite automata to Regular Expression and vice versa
42 : 50 min

Testing whether a language is regular

- Testing whether a language is regular or not
39 : 00 min
- Pumping lemma for regular languages
12 : 44 min

Grammars

- introduction to grammars
37 : 40 min
- Small Mistake in Below video. Please click to know details.
- Types of grammars and problems on linear grammar and context free grammars
26 : 39 min
- Elimination of epsilon, unit productions and useless symbols from CFG
43 : 41 min
- Note: Small mistake in below video
- CNF introduction
20 : 43 min
- CYK algorithm example 1 using CNF
32 : 03 min
- CYK algorithm example 2 using CNF
14 : 44 min
- GNF introduction and conversion of CFG to PDA
11 : 46 min

PDA

- Before watching below video, Please click here and check this
- introduction to PDA and examples
28 : 53 min

- Examples on PDA
31 : 25 min
- Non deterministic PDA
32 : 59 min
- Testing CFG or not
28 : 08 min

testing whether language is context free language

- Pumping lemma for context free languages
07 : 56 min

Turing machines

- Turing machine example
20 : 27 min
- Turing machine example 2
20 : 27 min
- TM as transducer of 1's complement
07 : 23 min
- TM as transducer for computing 2's complement
06 : 48 min
- TM as adder
07 : 43 min
- TM as comparator
15 : 28 min
- Definition of standard TM
08 : 56 min
- TM as copier
07 : 16 min
- Non-halting TM
05 : 32 min
- Turing thesis
09 : 09 min
- Modifications to standard TM
27 : 07 min
- universal TM and encoding of TM
15 : 27 min

- Linear bounded automata(LBA)
17 : 00 min
- Recursively enumerable and recursive languages
11 : 29 min
- The big picture Page
08 : 22 min
- Unrestricted grammars
06 : 58 min
- Context sensitive grammars example 1
12 : 45 min
- Context sensitive grammars example 2
10 : 37 min
- Important theorem on recursive and RE languages
17 : 22 min

Countability

- Introduction to countable sets
20 : 27 min
- Alternative definition of countability
10 : 01 min
- set of all quotients are countable
07 : 26 min
- Set of all strings over any finite alphabet are countable
09 : 32 min
- Set of all Turing machines are countable
04 : 56 min
- Implications of the fact that the Turing Machines are countable
05 : 11 min
- Diagonalization method to prove that set of all languages are uncountable
15 : 38 min
- Some problems on countability
09 : 45 min

Computability and decidability

- Introduction to computability and decidability
24 : 07 min
- TM halting problem Page
18 : 24 min
- Some undecidable problems based on TM halting problem
06 : 16 min
- PC problem
05 : 58 min
- P and NP problems
16 : 10 min
- Decidability table
06 : 39 min

Properties of CFL's

- CFL's are closed under union,concat and kleene closure
04 : 23 min
- CFG are not closed under intersection and complementation
07 : 16 min
- Decidable problems on CFL'S
03 : 58 min
- Closure Properties Table

Properties of Regular Languages

- RL are closed under union, intersection, concatenation, complementation and kleene closure
08 : 35 min
- RL are closed under difference and reversal
02 : 46 min
- RL are closed under Homomorphism
03 : 45 min
- RL are closed under inverse homomorphism
11 : 04 min
- RL are closed under quotient operation
04 : 55 min
- RL are closed under INIT operation
03 : 30 min

- RL are closed under substitution
01 : 49 min
- RL are not closed under infinite union
02 : 31 min

Decidable problems on Regular Languages

- emptiness problem is decidable
03 : 27 min
- infiniteness problem is decidable
05 : 06 min
- equality problem is decidable
03 : 02 min

Gate questions on TM and undecidability

- Question 1
02 : 12 min
- Question 2
01 : 46 min
- Question 3
01 : 37 min
- Question 4
04 : 02 min
- Question 5
15 : 08 min
- Question 6
04 : 21 min
- Question 7
02 : 29 min
- Question 8
02 : 51 min
- Question 9
02 : 12 min
- Question 10
05 : 00 min

- Question 11
14 : 24 min
- Question 12
03 : 21 min
- Question 13
05 : 05 min
- Question 14
02 : 32 min
- Question 15
01 : 07 min
- Question 16
02 : 06 min
- Question 17
05 : 08 min
- Question 18
03 : 22 min
- Question 19
08 : 27 min
- Question 20
06 : 23 min
- Question 21
02 : 00 min
- Question 22
02 : 02 min

Practice Questions

- Practice Questions Set-1
- Practice Questions Set-2
- Practice Questions Set-3
- Practice Questions Set-4
- Practice Questions Set-5
- Practice Questions Set-6
- Practice Questions Set-7
- Practice Questions Set-8
- Practice Questions Set-9
- Practice Questions Set-10

- Practice Questions Set-11
- Practice Questions Set-12
- Practice Questions Set-13
- Practice Questions Set-14
- Practice Questions Set-15
- Practice Questions Set-16
- Practice Questions Set-17
- Solutions Set-1
- Solutions Set-2
- Solutions Set-3
- Solutions Set-4
- Solutions Set-5
- Solutions Set-6
- Solutions Set-7
- Solutions Set-8
- Solutions Set-9
- Solutions Set-10
- Solutions Set-11
- Solutions Set-12
- Solutions Set-13
- Solutions Set-14
- Solutions Set-15
- Solutions Set-16
- Solutions Set-17

Description

DLD

Curriculum

Logic Functions

- Basic properties of switching algebra
14 : 14 min
- Switching expressions and simplifications
14 : 06 min
- Demorgans law and simplification.
10 : 12 min
- Switching Functions.
09 : 18 min
- Canonical Sum of Products
10 : 31 min
- Canonical Product of sums
08 : 40 min
- Examples of canonical forms
09 : 41 min
- Functional properties
03 : 13 min
- Number of functions
12 : 08 min
- counting the number of functions and neutral functions
09 : 23 min
- Venn diagram representation
11 : 32 min
- Contact representation
10 : 36 min
- Nested function
05 : 05 min
- NAND gate and properties
05 : 29 min
- NOR gate and properties
05 : 16 min
- EX OR gate and properties
11 : 31 min
- EX NOR gate and properties
10 : 39 min
- Properties of EX-OR and EX-NOR
22 : 21 min
- Minimum number of gates required for EX-OR and EX-NOR
04 : 48 min
- Functionally completeness

- 08 : 37 min
- Example 1 on functional completeness
04 : 43 min
- Example 2 on functional completeness
04 : 41 min
- Example 3 on functional completeness
03 : 01 min
- Example 4 on functional completeness
01 : 26 min
- Example 5 on functional completeness
08 : 29 min
- Example 6 on functional completeness
09 : 07 min
- Self dual functions
04 : 49 min
- Number of self dual functions
07 : 59 min
- Self dual functions are closed under complementation
04 : 40 min
- introduction to electronic gates
05 : 25 min
- Positive and negative logic systems
08 : 51 min
- Gate 2016 question on boolean algebra
06 : 45 min

- Gate 2016 question on gray code function
08 : 51 min

Minimization

- Introduction to minimization of Boolean expressions
05 : 07 min
- Irredundant or irreducible expressions
08 : 37 min
- K map introduction
14 : 35 min
- K map simplification
19 : 27 min
- covering functions
09 : 10 min
- Implicants and Prime Implicants
07 : 42 min

- Essential Prime Implicants
14 : 16 min

- Procedure for obtaining Minimal SOP
19 : 53 min

- Minimal SOP Example
08 : 18 min
- Minimal POS
13 : 43 min
- Examples on Minimal POS
06 : 36 min
- Introduction to Don't cares
16 : 46 min
- Examples on don't care set 1
05 : 16 min
- Examples on don't care set 2.1
05 : 36 min
- Examples on don't care set 2.2
03 : 11 min
- Examples on don't care set 2.3
07 : 24 min
- Examples on don't care set 2.4
04 : 06 min
- Examples on don't care set 2.5
02 : 56 min
- Examples on don't care set 3
11 : 56 min
- Finding Minimal Expressions
08 : 45 min
- Branching Technique for Minimising Cyclic Functions
10 : 25 min
- Implicant and Prime Implicant Difference
05 : 37 min
- Converting a Function into Self Dual
07 : 59 min
- Combining Functions having Don't Cares
09 : 56 min

- Prime Implicants and Don't Cares
05 : 03 min
- Number of Minimal Expressions
01 : 47 min
- Beautiful Question on Prime Implicant Chart
07 : 50 min
- Variable Entrant Maps(VEM)
06 : 05 min
- Minimisation using VEM
09 : 17 min
- Example on VEM
07 : 36 min
- finding the free variables
03 : 35 min
- Relationship between Minimal POS SOP in case of don't cares - 1
12 : 48 min
- Relationship between Minimal POS SOP in case of don't cares - 2
09 : 00 min
- Comparing independent variables in minimal SOP and POS.mp4 Lecture Title
04 : 43 min
- Number of irredundant and minimal expressions
20 : 00 min
- don't cares are never included in the prime Implicant chart
10 : 30 min
- Functions involving Functions Example 1
11 : 14 min
- Functions involving Functions example 2
04 : 33 min
- Functions involving Functions Example 3
09 : 40 min
- Examples on KMap
12 : 15 min

- Introduction to Logic Design
10 : 04 min
- AND-OR OR-AND realization
15 : 34 min
- Minimum No of NAND gates example
03 : 00 min
- NOR - NOR example
05 : 20 min
- Minimum No of NOR gates Example
02 : 04 min
- Minimum Noof NOR gates Example
01 : 39 min
- EX-OR and EX-NOR implementation with NOR and NAND gates
07 : 53 min
- Half adder
03 : 31 min
- Half subtracter
03 : 36 min
- Comparator
04 : 46 min
- Introduction to MUX
13 : 54 min
- Proving MUX is functionally complete
06 : 33 min
- Implementing functions with MUX example 1
16 : 03 min
- Implementing functions with MUX example 2
03 : 06 min
- multiplexer with enable input
10 : 12 min
- relationship between select lines and inputs of a mux
05 : 48 min
- cascading multiplexers - ex 1

03 : 49 min

- cascading multiplexers - ex 2

02 : 15 min

- cascading multiplexers - ex 3

03 : 29 min

- Expansion of multiplexers

26 : 02 min

- Assigning select lines while expanding the MUX

08 : 22 min

- Introduction to Demultiplexer

18 : 19 min

- introduction to decoder

11 : 36 min

- implementing functions with decoder example 1

03 : 03 min

- implementing functions with decoder example 2

08 : 54 min

- decoder for function implementation - ex3

03 : 50 min

- converting one code to other code using decoder

16 : 05 min

- ROM implementation using decoder

10 : 37 min

- Implementing Functions using only Decoder

07 : 17 min

- Implementing Functions using Decoder and Multiplexer Example 1

10 : 32 min

- Implementing Functions using Decoder and Multiplexer Example 2

12 : 39 min

- Decoder with Enable Input

11 : 12 min

- Constructing 3x8 Decoder using 1x2 Decode

07 : 49 min

- Constructing 4x2 Decoder using 1x2 Decoder
05 : 39 min
- Constructing 6x64 Decoder using 3x8 Decoder
07 : 44 min
- Expansion of Decoder in general
11 : 26 min
- Constructing 7x128 Decoder using 3x8 Decoder
09 : 29 min
- Expansion of Decoders in another way
12 : 18 min
- Address Expansion of ROM
11 : 44 min
- Word Expansion of ROM
08 : 21 min
- Finding the Address ranges of Devices
03 : 13 min
- Example on Enabling a Device
06 : 32 min
- Finding the address ranges of Memory Devices
15 : 48 min
- Introduction to Encoders
12 : 02 min
- Priority Encoders
06 : 37 min
- Introduction to Hazards
07 : 19 min
- Hazards and test vectors
05 : 14 min
- Examples on Test Vectors
07 : 09 min
- Half Adder
04 : 37 min

- Full Adder
11 : 23 min
- Ripple Carry Adder
10 : 35 min
- Carry Lookahead Adder
16 : 48 min
- Carry look ahead adder implementation
08 : 51 min
- Hybrid adder
07 : 29 min
- Serial adder
07 : 46 min
- Binary adder-subtractor
10 : 23 min
- BCD adder
11 : 58 min
- Invalid combinations for BCD adder
05 : 12 min
- 2 bit comparator
17 : 27 min
- 3, 4 bit comparators
09 : 33 min
- Analysing all the cases of comparators
07 : 47 min
- Gate 2016 question on multiplexer
02 : 16 min
- Time complexity of ripple carry adder
02 : 09 min
- Time complexity carry look ahead adder
11 : 27 min

Sequential Circuits

- Introduction to sequential circuits
04 : 35 min

- latch and flipflop
09 : 25 min
- SR flipflop
28 : 20 min
- clocked flipflops
08 : 59 min
- positive level triggered
05 : 39 min
- edge triggered
04 : 08 min
- JK flipflop
12 : 49 min
- T flipflop
05 : 24 min
- D flipflop
08 : 12 min
- example on flipflop
09 : 32 min
- example on flipflop 2
08 : 40 min
- introduction to flipflop inter conversion
16 : 51 min
- inter conversion of flipflops example
07 : 56 min
- inter conversion of flipflops example 2
06 : 47 min
- inter conversion of flipflops example 3
09 : 47 min
- inter conversion of flipflops example 4
02 : 41 min
- inter conversion of flipflops example 5
01 : 57 min

- introduction to counters
04 : 47 min
- asynchronous and synchronous counters
07 : 14 min
- shift counters
07 : 01 min
- mod 2 ring counters
05 : 26 min
- mod 4 Johnson counter
04 : 12 min
- mod 6 Johnson counter
05 : 37 min
- mod 4 ring counters
11 : 20 min
- mod 4 gray counter using T FF
13 : 51 min
- mod 4 gray counter using D FF
04 : 51 min
- mod 4 gray counter using 1 D and 1 T flipflop
03 : 23 min
- counter using two different FFs
14 : 15 min
- Deriving the clock frequency
05 : 06 min
- self starting and free running
09 : 39 min
- example on selfstarting and free running counters
05 : 40 min
- counter using 3 different FFs
11 : 32 min
- example on combinational circuits and FFs
07 : 26 min
- introduction to asynchronous counters

02 : 45 min

- Mod 8 up counter
24 : 35 min
- Mod 4 up Counter
04 : 08 min
- mod 4 down counter
02 : 04 min
- Mod 8 random counter
06 : 08 min
- model on analysis counting States and sequence generations
13 : 36 min
- Applications of Flip flops
02 : 08 min
- 3 bit shift right register
10 : 13 min
- Example 1 on shift right register
06 : 43 min
- Example 2 on shift right register
04 : 49 min
- Binary to gray convertor
06 : 30 min
- Finding 2's complement
12 : 35 min
- Gate 2001 on counting Sequence
06 : 07 min
- Gate 2004 on SR-Latch
02 : 16 min
- Gate 2014 on counter
02 : 40 min
- Gate 2015 on sequence generation
07 : 35 min
- Gate 2015 on bit sequence
08 : 52 min

- Gate 2015 on sequence generation
07 : 03 min

Number system

- Introduction to Number system
10 : 29 min
- Conversion to base 10
13 : 29 min
- Conversion from base 10
18 : 59 min
- Minimum number of bits required for inter conversion - ex 1
16 : 40 min
- Minimum number of bits required for inter conversion - ex 2
08 : 22 min
- Example 3
07 : 02 min
- Example 4
05 : 48 min
- Example 5
02 : 40 min
- Example 6
03 : 30 min
- Example 7
07 : 38 min
- Example 8
11 : 57 min
- Complementary number system
26 : 39 min
- Why we use complements
14 : 44 min
- Subtraction in diminished radix complement
17 : 51 min
- Examples on diminished radix complement

26 : 23 min

- examples on subtraction in radix complement

27 : 04 min

- Summary of subtraction using complements in case of unsigned numbers

11 : 14 min

- signed number representation

05 : 52 min

- example on signed number representations

21 : 39 min

- Ranges of signed number representations

19 : 31 min

- Examples on Ranges

10 : 02 min

- Sign bit extension

19 : 55 min

- overflow

24 : 08 min

- classification of binary codes

10 : 43 min

- 8421, Excess-3, 3321 codes

19 : 09 min

- Examples on codes

08 : 22 min

- BCD addition

11 : 32 min

- Excess-3 addition

06 : 59 min

- Gray code

13 : 22 min

- Binary to gray and vice versa

13 : 54 min

- Error detection

14 : 00 min

- Error correction
22 : 20 min
- Hamming code
22 : 25 min
- Examples on Hamming code
14 : 49 min
- Floating point Conversion
10 : 18 min
- Floating point representation
18 : 30 min
- Floating point representation
08 : 40 min
- Floating point representation Example 1
13 : 17 min
- 40 Example 2
08 : 26 min
- Example 3
02 : 40 min
- Introduction to Floating point representation
03 : 15 min
- Introduction to IEEE Standards
03 : 06 min
- Single Precision
05 : 57 min
- Double precision
02 : 51 min
- Example 1 on single precision
02 : 54 min
- Example 2 on Single Precision
01 : 39 min
- Example 1 on double Precision
03 : 08 min

- Example 2 on Double Precision
01 : 00 min
- Example on single and double Precision
04 : 57 min
- Gate 2016 on number of integers
03 : 24 min
- Binary multiplication(partial sum method)
07 : 50 min
- Idea behind Booth's algorithm
04 : 31 min
- Booth's algorithm example
05 : 12 min
- Booth's algorithm
14 : 21 min
- Booth algorithm operations flow
03 : 41 min
- Advantages and Dis- Advantages of Booth's algorithm
04 : 08 min
- Example on fractional form
05 : 56 min
- Example on fractional and implicit forms
05 : 25 min

Practice Questions

- Practice Questions Set-1
- Practice Questions Solutions Set-1
- Practice Questions Set-2
- Practice Questions Solutions set-2
- Practice Questions set-3
- Practice Questions set-3 Solutions
- Practice Questions Set-4
- Practice Questions Solutions Set-4
- Practice Questions set-5
- Practice Questions set-5 Solutions
- Practice Questions Set-6
- Practice Questions Solutions Set-6

Description

GATE P and DS

Curriculum

Pointers in C

- Gate 2010 question
02 : 31 min
- 2011 question on character array and pointers
09 : 18 min
- 2008 IT question on string constant
04 : 43 min

Arrays

- Gate 98 question
05 : 34 min
- Gate 2004 question
03 : 58 min

Linked List

- 2008 Gate question on rearranging an SLL
16 : 15 min
- 2010 question on moving a last node to the front of a list
16 : 45 min
- Gate 2002 and 2004 questions
04 : 52 min
- 2003 question on checking if the list is in non decreasing order
22 : 31 min

Stacks and Queues

- GATE 2012 question on circular queue
01 : 54 min
- GATE 2004 question on implementing Queue using circular linked list
05 : 42 min
- GATE 94 question on permutations possible with a stack
04 : 10 min

- Gate 97 question on implementing stack using priority queue
07 : 27 min
- Gate 03 question on average lifetime of an element in the stack
18 : 02 min
- GATE 2006 question on implementing a queue using two stacks
25 : 37 min
- GATE 2000 question on implementing queue using one stack
05 : 25 min

Trees

- GATE 05 question on BST
09 : 08 min
- GATE 05 question on number of BSTs possible
04 : 25 min
- Gate 06 IT question on search sequence
15 : 15 min
- GATE 08 IT question on search sequence
13 : 42 min
- GATE 08 question on identifying INORDER, PREORDER and POSTORDER
05 : 35 min
- GATE question on ways to populate unlabelled binary tree as BST
02 : 09 min
- Introduction to AVL trees and balancing
18 : 18 min
- Constructing AVL trees and time complexity analysis
16 : 51 min
- Construction of AVL tree
22 : 33 min
- Minimum and maximum nodes in an AVL tree of height h
14 : 10 min
- Relationship between nodes of degree 2 and leaves(GATE 95 06)
08 : 52 min
- GATE 96 2008 T-F questions on trees

05 : 01 min

- IT 05 question on the minimum number of nodes in a size balanced tree
15 : 50 min
- GATE 97 question on finding minimum number of nodes on a size balanced tree
19 : 19 min
- GATE 2014 question on expression tree
01 : 53 min
- GATE 2000 question on nested tree representation
06 : 57 min
- GATE 2005 IT question on guessing the root node
05 : 15 min
- GATE IT 06 question on array representation of a binary tree
26 : 11 min
- correction to the above question
01 : 24 min
- Small Mistake below video. Please check this doc when you watch below video
- GATE 2014 question on Left most child and right sibling representation of a tree
13 : 55 min

Recursion

- GATE 2001 question on recursion
15 : 49 min
- GATE 2004 question on recursion
03 : 28 min
- GATE 2005 question on recursion
12 : 12 min
- GATE 2010 question on recursion
00 : 00 min

GRAPHS

- GATE 03 question on DFS
08 : 32 min
- GATE IT 08 question on DFS
07 : 17 min

- GATE 2014 question on the depth of the DFS recursion stack
05 : 18 min
- GATE IT 06 question on DFS on guessing the graph structure
06 : 51 min

Hashing

- GATE 96 and 2014 questions on chaining
05 : 27 min
- GATE 2014 question on chaining and probability
04 : 22 min
- GATE 97 question on chaining and probability
06 : 37 min
- 2008 Gate question on linear probing
07 : 55 min
- 2008 IT question on linear probing
03 : 43 min
- GATE IT 07 question on probability and hashing
02 : 53 min
- GATE 2010 question on probing and permutations
11 : 29 min

Practice Questions Part-1

- Practice Questions Set-1
- Practice Questions Set-2
- Practice Questions Set-3
- Practice Questions Set-4
- Practice Questions Set-5
- Practice Questions Set-6
- Practice Questions Set-7
- Practice Questions Set-8
- Practice Questions Set-9
- Practice Questions Set-10
- Practice Questions Set-11
- Practice Questions Set-12
- Solutions Set-1
- Solutions Set-2
- Solutions Set-3
- Solutions Set-4
- Solutions Set-5
- Solutions Set-6

- Solutions Set-7
- Solutions Set-8
- Solutions Set-9
- Solutions Set-10
- Solutions Set-11
- Solutions Set-12

Description

General Tips

Curriculum

How to watch the videos

- How to revise and remember the topics for long!!
12 : 18 min
- One small request
05 : 26 min
- Take breaks in between.
09 : 53 min
- About updates
05 : 11 min
- 40 days is a lot of time
02 : 32 min
- Revise well in the last 30 days
08 : 13 min
- How to attempt the final GATE question paper
11 : 56 min

Syllabus and recommended books and the sequence to watch

- GATE CS syllabus, marks distribution and recommended books
44 : 42 min
- What is the right age??
18 : 18 min

Keep yourself motivated

- What is your reason??
12 : 19 min
- How to prepare for product based companies??
26 : 01 min
- Mid way is the most important time
29 : 18 min
- We still have two months (December 1st)
17 : 48 min
- This is my story. If was able to do it. You can do it too
38 : 17 min
- Your stress and depression is just a result of failed education system

24 : 09 min

- How to Decrease Anxiety

20 : 54 min

- Two months plan

04 : 10 min

- Four Days Before Exam

14 : 32 min

- Instructions for attempting gate exam

24 : 54 min

Description

JAVA

Curriculum

Introduction

- Introduction to java part -1
14 : 05 min
- Introduction to java part -2
07 : 49 min
- Java- Features of java
08 : 43 min
- Basics_of_java
- Difference between JDK, JVM and JRE
12 : 13 min
- Difference_jvm_jdk
- Just in time compiler
06 : 01 min
- Overview of JIT compiler
02 : 45 min
- Introduction to JVM Architecture
10 : 31 min
- Class loader subsystem>Loading)[JVM]
12 : 27 min
- Class loader subsystem(Linking and Initialization)[JVM]
12 : 27 min
- Over view of stack frame[JVM]
11 : 09 min
- Runtime Data Area[JVM]
15 : 00 min
- Execution Engine[JVM]
11 : 52 min
- JVM_architecture
- Install java8 in ubuntu
03 : 54 min

- Install Java
- Understanding First java program
15 : 10 min
- First Java Program (Code)
03 : 16 min
- First Program
- Java Setup
- Assignment1

Scanner class

- Scanner class
04 : 39 min
- Example on scanner class
04 : 24 min

Variables

- Introduction to Variable
07 : 43 min
- Java is Strongly typed Language
03 : 07 min
- Java variable declaration
05 : 16 min
- Scope and lifetime of a variable
03 : 07 min
- Types of variables in java
05 : 21 min
- Examples on local variable
09 : 03 min
- Example1 Local Variable
- Example2 Local Variable
- Example3 Local Variable
- Instance variables
15 : 13 min
- Examples on Instance variable - 1
17 : 41 min
- Examples on Instance variable - 2

22 : 41 min

- Static variable
10 : 21 min
- Examples on static variable - 1
06 : 52 min
- Examples on static variable - 2
12 : 24 min
- Example on Variables
07 : 31 min
- variables PPT

Datatypes And Literals

- Introduction to Data Types
02 : 21 min
- Primitive Data types
04 : 06 min
- Integer datatypes
06 : 13 min
- Example on Integer data types
03 : 32 min
- Float type
02 : 22 min
- Example on Float type
02 : 15 min
- Boolean type
03 : 58 min
- Char type
11 : 20 min
- Example on char type
11 : 33 min
- Derived data types
01 : 12 min
- User defined data types
03 : 02 min

- Type casting
11 : 59 min
- Example on type casting
03 : 39 min
- Data Types
- Integer Literals
10 : 11 min
- Float, Char and Boolean Literals
09 : 34 min

Operators

- Introduction to operators and Arithmetic operators
03 : 59 min
- Example on Arithmetic operator
06 : 09 min
- Bitwise operators (part -1)
02 : 21 min
- Bitwise operators (part -2)
03 : 43 min
- Bitwise logical operators
02 : 28 min
- Example of bitwise operators
01 : 49 min
- Bitwise Left shift operator
11 : 16 min
- Bitwise right shift
07 : 06 min
- operators
30 : 04 min
- compare two primitives use == operators
02 : 00 min
- Assignment-1

Control statements

- Break statement
04 : 34 min
- Continue statement
06 : 28 min
- Control statements
27 : 16 min
- Assignments

Classes and Objects

- Objects and classes
08 : 42 min
- How to create an object
09 : 23 min
- Classfields
05 : 03 min
- Methods
03 : 18 min
- Difference between instance and local variable
02 : 09 min
- Variable scope
05 : 47 min
- Method overloading
13 : 02 min
- Introduction to constructors
07 : 52 min
- Types of constructors
12 : 28 min
- Difference bw method and constructor
01 : 55 min
- this keyword
03 : 31 min
- this() keyword
04 : 14 min
- Example on this()

01 : 55 min

- Initialization Blocks
10 : 15 min

Static variables and methods

- Static key word
07 : 15 min
- Static method
04 : 55 min
- Example 1 on scope
01 : 09 min
- Example 2 on scope
01 : 14 min

Enum

- Introduction to Enum
05 : 24 min
- Declaring constructors, methods and variables in an enum
07 : 28 min
- Java.Lang.Enum
04 : 28 min
- Example on Enum
02 : 23 min

Object orientation

- Encapsulation
09 : 55 min
- Example on encapsulation
11 : 17 min
- Introduction to Inheritance
07 : 39 min
- Implementation of Inheritance
02 : 34 min
- Example 1 on Inheritance
05 : 42 min

- Example 2 on Inheritance
03 : 56 min
- Usage of access modifier in Inheritance
04 : 51 min
- Super keyword
03 : 14 min
- Super is used to invoke parent class constructor
04 : 09 min
- why this() and super() can't be used together
06 : 13 min
- InstanceOf() keyword
03 : 56 min
- Diamond Problem
03 : 10 min
- Aggregation (HAS-A)
03 : 01 min
- Method overriding (polymorphism)
07 : 43 min
- Rules for method overriding
05 : 59 min
- Example on method overriding vs overloading
10 : 44 min
- Abstraction
10 : 03 min
- Example on abstraction
06 : 12 min
- Interface
09 : 18 min
- final keyword
06 : 35 min
- Design a singleton class
08 : 43 min

- Garbage collection
07 : 43 min
- finalize() method
06 : 13 min
- Example on Garbage collection
04 : 46 min
- Coupling
03 : 15 min
- Cohesion
04 : 07 min
- Assignments

Arrays

- Introduction to arrays
15 : 38 min
- Declaring , constructing, intializing an array
04 : 29 min
- Is array primitive or object
03 : 02 min
- Passing array to methods
06 : 55 min
- Copying array
09 : 40 min
- Program for average rain full using arrays
07 : 41 min
- Command line argument
03 : 27 min
- Parallel array
04 : 44 min
- Two dimensional
05 : 51 min
- Deletion in an array
15 : 38 min
- Find duplicate elements in an array

02 : 34 min

- Write a program to print the number which is occurring odd number of times
02 : 42 min
- Assignment

Strings

- String
06 : 05 min
- comparing strings
08 : 33 min
- String methods
07 : 12 min
- concatenation
03 : 30 min
- Reversing a string
07 : 12 min
- Advantages of immutable class
02 : 55 min
- StringBuffer and StringBuilder
04 : 20 min
- Reverse a string using StringBuffer
03 : 21 min
- Difference between StringBuilder and StringBuffer
02 : 21 min
- Write a java program to count number of vowels in a string
02 : 45 min
- Write a java program to test whether given word is palindrome or not
03 : 30 min
- Write a java program to find first non repeating character in a string
04 : 40 min
- Assignments

Regular Expressions

- Regular Expressions
06 : 05 min

- Searching with meta characters
05 : 15 min
- Quantifiers
05 : 13 min
- Java regex core classes
03 : 34 min
- Example on pattern matching
11 : 41 min
- matches() method
02 : 47 min
- example on split()
03 : 37 min
- Matcher methods
03 : 13 min
- example on matcher methods
05 : 21 min
- Assignment

Packages

- Package
05 : 04 min
- Example on package
05 : 01 min
- Access modifiers
09 : 02 min

Wrapper classes

- Introduction to wrapper class
01 : 50 min
- Example on wrapper class
03 : 59 min
- Wrapper Conversion
06 : 56 min
- Converting primitive numbers to object numbers using constructor method

02 : 46 min

- Auto boxing and unboxing
06 : 30 min
- ==, !=, and equals
03 : 51 min

Threads

- Introduction to Threads
02 : 32 min
- Threads
01 : 34 min
- Example on Threads
03 : 27 min
- Creating threads in java
02 : 57 min
- Thread class constructors
03 : 17 min
- Multiple threads
06 : 23 min
- Getting the reference of the current thread
04 : 15 min
- Thread states and transitions
08 : 59 min
- Thread priorities
04 : 20 min
- Preventing thread execution
05 : 42 min
- yield()
03 : 31 min
- join()
07 : 41 min
- Synchronization
06 : 48 min

- How does synchronization works in java
07 : 54 min
- Can the static methods be synchronized
02 : 33 min
- Some points to be noted
08 : 27 min
- What kind of resources to be synchronized
07 : 59 min
- Thread interaction
09 : 25 min
- Example on thread interaction
12 : 00 min
- Assignment

Exceptional Handling

- Introduction to Exception handling
01 : 54 min
- Types of Exception
03 : 07 min
- Exception Hierachy
04 : 24 min
- Try-catch
07 : 41 min
- Multiple catch block
03 : 44 min
- Nested try-catch
03 : 51 min
- Throws
03 : 54 min
- finally block
03 : 26 min
- when finally is not get executed
01 : 16 min
- User defined Exception

06 : 14 min

- Example on user defined Exception
03 : 17 min
- Thread Dead Lock
02 : 31 min

Inner classes

- Introduction to Inner class
02 : 39 min
- Types of inner class
01 : 01 min
- How to create an object for an Inner class
05 : 27 min
- Referencing the inner or outer instance from within the inner class
06 : 08 min
- Referencing the inner or outer instance from within the inner class
06 : 08 min
- Method local inner class
05 : 22 min
- Anonymous inner class
07 : 28 min
- Example on anonymous inner class
04 : 42 min
- Passing anonymous inner class as a method argument
02 : 59 min
- Static nested classes
02 : 46 min

Generics

- Introduction to generics
10 : 17 min
- Define generic class
06 : 44 min
- Generic interface

03 : 05 min

- constructors and methods as generics

03 : 54 min

- Bounded types

02 : 57 min

- Bounded type in generic methods

01 : 30 min

Collections

- toString() method

06 : 45 min

- equals() method

14 : 44 min

- How string equals work

08 : 04 min

- collection frame work

09 : 38 min

- Methods in collection Interface

07 : 35 min

- List Interface

05 : 09 min

- Array List

03 : 41 min

- Autoboxing with collection

01 : 11 min

- Array vs Array list

06 : 39 min

- Importance of equals

07 : 38 min

- Insertion sort

27 : 37 min

- Merge sort algorithm, analysis

65 : 08 min

- Quick sort algorithm
44 : 50 min
- Analysis of quick sort and problems on it
32 : 51 min
- Sorting collection
04 : 26 min
- Sorting arraylist of strings alphabetically
09 : 50 min
- Comparator interface
07 : 43 min
- searching array and collections
07 : 12 min
- Example on searching arrays and collection
04 : 47 min
- Introduction to vector
02 : 26 min
- Iterator
08 : 31 min
- Enumeration interface
05 : 31 min
- List iterator interface
04 : 24 min
- creating a linked list and deleting a node
11 : 30 min
- Linked list
10 : 06 min
- Stack
04 : 03 min
- Example on Stack
06 : 15 min
- Map interface
07 : 41 min
- hashmap

13 : 49 min

- Example on hashmap

13 : 05 min

- HashTable

02 : 09 min

- LinkedHashMap

13 : 28 min

- SortedMap and NavigableMap interface

06 : 27 min

- TreeMap

06 : 11 min

- Set Interface

04 : 21 min

- HashSet

05 : 43 min

- Important methods in HashSet

04 : 14 min

- Example on HashSet

09 : 14 min

- LinkedHashSet

06 : 37 min

- TreeSet

08 : 04 min

- Queue Interface

04 : 19 min

- Priority Queue

04 : 43 min

- Find smallest and largest element in a given array

03 : 10 min

- Consider a set of strings,write a java program to find the number of duplicates using Hashset

03 : 24 min

- Find the kth smallest element from given set of integers

03 : 52 min

- Given an unsorted array of element find the next largest element than a given element x, in the input array
01 : 54 min
- Given an array A[] and a number x, check for pair in A[] with sum as x
03 : 17 min
- Find the maximum number of times occurring a character in a given string
04 : 05 min
- Assignments

Java IO

- Introduction to java IO
01 : 55 min
- Byte Streams
03 : 38 min
- InputStream
01 : 16 min
- FileInputStream class
05 : 04 min
- Reading Single Byte
05 : 42 min
- OutputStream
03 : 14 min
- FileOutputStream
06 : 35 min
- Example on FileOutputStream
08 : 18 min
- Example 2 on FileOutputStream
04 : 31 min
- Filter streams
06 : 21 min
- BufferedInputStream
04 : 58 min
- BufferedInputStream Methods
07 : 22 min

- BufferedOutputStream
05 : 46 min
- Example on BufferedOutputStream
02 : 27 min
- Data Streams
02 : 24 min
- DataInputStream
01 : 53 min
- DataInputStream
01 : 56 min
- DataOutputStream
01 : 36 min
- Example on DataStreams
03 : 29 min
- File
06 : 13 min
- Character streams
03 : 22 min
- Reader
03 : 42 min
- Writer
03 : 03 min
- InputStreamReader introduction
03 : 17 min
- InputStreamReader
03 : 35 min
- FileReader
02 : 26 min
- FileWriter
08 : 23 min
- BufferedReader methods
04 : 03 min

- `BufferedReader`
01 : 49 min
- Example on `BufferedReader`
06 : 46 min
- `BufferedWriter`
02 : 36 min
- `BufferedWriter` methods
03 : 41 min
- Strandrad Io streams
04 : 01 min
- Reading data from console
02 : 39 min
- Assignments

Serialization and Deserialization

- Seralization
01 : 48 min
- Example on Serialization
02 : 44 min
- Deserialization
03 : 11 min
- ransient keyword
03 : 06 min
- How inheritance affects serialization
02 : 17 min

Socket Programming

- Introduction to socket programming
11 : 21 min
- Creating server
06 : 53 min
- Creating client
09 : 05 min
- Simple client chat
08 : 31 min

- Multiple client single server
11 : 52 min
- Creating user datagram protocol(UDP) servers
08 : 41 min
- simple UDP Server
09 : 07 min
- creating UDP clients
08 : 13 min
- Sample code on UDP client
06 : 45 min
- Assignment

JDBC

- Introduction to API's
07 : 22 min
- Introduction to JDBC
06 : 05 min
- Components of JDBC
02 : 48 min
- JDBC driver
04 : 26 min
- Typical flow of JDBC
02 : 58 min
- Download and install MySql connector
02 : 01 min
- Driver manager class
11 : 52 min
- Example on create connection
03 : 56 min
- Statement
11 : 30 min
- Example on statement
06 : 01 min

- ResultSet
10 : 26 min
- ResultSet methods
04 : 39 min
- Example on ResultSet
08 : 48 min
- Batch processing
02 : 55 min
- Example on batch processing
02 : 29 min
- Best practices to write JDBC code
06 : 50 min

Full Course Assignments

- Assignments
- Multiple choice Questions java
- All Assignments Solutions

Introduction to Database

- Introduction to DBMS
10 : 33 min
- Database models
07 : 03 min
- Introduction to ER model
09 : 58 min
- Attributes
11 : 04 min
- Relationships 1 : Many
19 : 25 min
- Relationships 1:1
08 : 05 min
- Relationships M:N examples
09 : 29 min
- Recursive relationships
10 : 33 min
- Attributes to relationships
10 : 02 min
- Weak entity
18 : 20 min
- ER diagram notations
03 : 26 min

Relational Database Model

- Introduction to relational database
15 : 19 min
- Terminology of Relational database
10 : 13 min
- Tuple, tuple values and Null
04 : 04 min
- Constraints on Relational DB schema - Domain constraints
07 : 24 min
- Constraints on Relational database schema - Key constraints
30 : 55 min
- Entity and referential integrity constraints
12 : 35 min
- Actions upon constraint violations
17 : 38 min

Normalization

- Introduction to normalisation
12 : 55 min
- Introduction to FDs
12 : 19 min
- First Normal Form
10 : 13 min
- Second Normal Form Introduction
10 : 04 min
- Third normal form introduction
08 : 19 min

SQL

- Introduction to SQL
04 : 44 min
- Creation of Schema
04 : 03 min
- Create Table
05 : 31 min

- Constrains in SQL
20 : 06 min
- INSERT
07 : 00 min
- Delete and Update
10 : 32 min
- Referential triggered actions
14 : 33 min
- Alter
04 : 34 min
- SELECT
14 : 11 min
- View
04 : 01 min
- Aliasing
05 : 56 min
- Pattern Matching
09 : 36 min
- Set operations
08 : 27 min
- Arithmetic and between operations
09 : 50 min
- Order by
09 : 27 min
- In operator
06 : 47 min
- Any,Some, All
06 : 34 min
- Exists - not exists
09 : 42 min
- Aggregate functions
05 : 37 min
- Group by - 1

06 : 02 min

- Group by having clause
10 : 14 min
- With Clause
06 : 15 min
- Example on with clause
04 : 36 min
- Joins
06 : 42 min
- Examples on joins
06 : 28 min

File Structures

- File organization
12 : 42 min
- Organization of records in a file
07 : 34 min
- Introduction to indexing
13 : 08 min
- Classification of Indexing
06 : 00 min
- Primary Index
05 : 57 min
- Clustering index
03 : 09 min
- Secondary Index
04 : 06 min

MySQL

- Introduction to mysql
00 : 00 min
- Installing mysql
00 : 00 min
- Connecting with mysql

01 : 55 min

- Mysql database managment system
03 : 34 min
- Tables
04 : 07 min
- mysql insert statement
00 : 00 min
- Update query
02 : 39 min
- Delete statement
01 : 57 min
- select statement
01 : 53 min
- where clause
00 : 39 min
- distinct clause
05 : 09 min
- from clause
00 : 47 min
- order by clause
03 : 37 min
- group by clause
04 : 11 min
- aggregate functions
01 : 13 min
- Having clause
03 : 40 min
- And or condition
03 : 17 min
- like , not like condition
03 : 35 min
- in condition
01 : 39 min

- is null condition
01 : 53 min
- between condition
01 : 19 min
- alter table
06 : 07 min
- modify column in table
02 : 41 min
- DROP column in Table
01 : 03 min
- RENAME column in table
04 : 09 min
- TRUNCATE Table
02 : 34 min
- JOINS
10 : 01 min
- Slides of MySQL

GIT

- Why GIT-Hub
02 : 07 min
- Introduction to Version control system
03 : 16 min
- Local version control system
03 : 12 min
- Centralized and distributed version control system
02 : 48 min
- Introduction to GIT
03 : 52 min
- GIT-Basics
07 : 17 min
- Cloning an Existing Repository
03 : 22 min

- Recording changes in local repository-1
03 : 22 min
- Recording change in a local repository -2
08 : 52 min
- Recording Changes Example
06 : 49 min
- viewing the commit history
02 : 06 min
- undoing things
02 : 24 min
- unstaging a stages file
02 : 35 min
- unmodifying a modified file
02 : 16 min
- Working with remotes-1
06 : 12 min
- Working with remotes-2
09 : 18 min
- Version Control Systems

Net Beans

- Introduction to net beans
13 : 25 min
- How to use git in net beans
09 : 27 min

PROJECT

- Introduction to Text Search Engine
04 : 39 min
- Exact values vs full text search
06 : 08 min
- Inverted index
07 : 39 min
- Text preprocessing
02 : 48 min

- White space tokenizer
03 : 37 min
- Penn tree bank tokenization
03 : 10 min
- case folding
03 : 04 min
- Assignment-1
- Extensible markup language
05 : 39 min
- SAX Parser
03 : 27 min
- Example on SAX Parser
09 : 19 min
- High level design of search engine module-1
03 : 12 min
- High level design of search engine module-2
02 : 51 min
- High level design of search engine module-3
05 : 19 min
- Term Frequency
03 : 20 min
- External sorting
02 : 21 min
- High level design of search engine module-4
00 : 58 min
- Disadvantages with term frequency
01 : 51 min
- Inverted document frequency
02 : 52 min
- How wiki page xml file looks like
03 : 09 min
- Implementation of module-1
10 : 20 min

- Implementation of module-2
10 : 58 min
- Module-3 implementation over view
04 : 27 min
- Building a inverted index
07 : 16 min
- Calculating Term Frequency
02 : 02 min
- Merging external offset files
08 : 40 min
- Internals of merging
05 : 40 min
- Implementation of merging
13 : 58 min
- Creating secondary level indexes to inverted index
07 : 39 min
- Implementation of secondary level indexes to inverted index
07 : 16 min
- Full Project Code

Description

Free Demo GATE Videos.

Curriculum

Algorithms

- Introduction to TSP
06 : 47 min

Digital Logic Design

- Basic properties of switching algebra
14 : 14 min
- Demorgans law and simplification.
10 : 12 min

Computer Organization and Architecture

- Introduction to cache memory
14 : 10 min
- Introduction Page
14 : 00 min

Operating Systems

- Introduction to OS
24 : 14 min
- Need for Synchronization
21 : 52 min

Computer Networks

- Introduction to Computer network and IP address
49 : 05 min
- Problem 1
01 : 03 min
- Problem 7
01 : 07 min
- Problem 2
03 : 33 min
- Problem 8
03 : 39 min
- Problem 3
01 : 00 min
- Problem 9
04 : 25 min
- Problem 4

03 : 54 min

- Problem 10

01 : 49 min

- Problem 5

02 : 41 min

- Problem 6

01 : 46 min