NPTEL Video Lecture Topic List - Created by LinuXpert Systems, Chennai

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NPTEL Video Course - Computer Science and Engineering - NOC: Advanced Graph Theory
Subject Co-ordinator - Dr.Rajiv Misra
Co-ordinating Institute - IIT - Patna
Sub-Titles - Available / Unavailable | MP3 Audio Lectures - Available / Unavailable
Lecture 1 - Graph Theory
Lecture 2 - Paths, Cycles and Trails
Lecture 3 - Eulerian Circuits, Vertex Degrees and Counting
Lecture 4 - The Chinese Postman Problem and Graphic Sequences
Lecture 5 - Trees and Distance
Lecture 6 - Spanning Trees and Enumeration
Lecture 7 - Matchings and Covers
Lecture 8 - Independent Sets, Covers and Maximum Bipartite Matching
Lecture 9 - Weighted Bipartite Matching
Lecture 10 - Stable Matchings and Faster Bipartite Matching
Lecture 11 - Factors and Perfect Matching in General Graphs
Lecture 12 - Matching in General Graphs
Lecture 13 - Connectivity and Paths
Lecture 14 - k-Connected Graphs
Lecture 15 - Network Flow Problems
Lecture 16 - Vertex Coloring and Upper Bounds
Lecture 17 - Brooksâ Theorem and Color-Critical Graphs
Lecture 18 - Counting Proper Colorings
Lecture 19 - Planar Graphs
Lecture 20 - Characterization of Planar Graphs
Lecture 21 - Line Graphs and Edge-coloring
Lecture 22 - Hamiltonian Graph, Traveling Salesman Problem and NP-Completeness
Lecture 23 - Connected Dominating Set and Distributed Algorithm
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