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

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NPTEL Video Course - Civil Engineering - Geosynthetics and Reinforced Soil Structures
Subject Co-ordinator - Dr. K. Rajagopal
Co-ordinating Institute - IIT - Madras
Sub-Titles - Available / Unavailable | MP3 Audio Lectures - Available / Unavailable
Lecture 1 - Introduction & Need for Geosynthetics
Lecture 2 - Types and Functions of Geosynthetics
Lecture 3 - Polymers in Geosynthetics and Manufacturing Techniques
Lecture 4 - Strength Analysis of Reinforced Soils - I
Lecture 5 - Strength Analysis of Reinforced Soils - II
Lecture 6 - Testing of Geosynthetics - I
Lecture 7 - Testing of Geosynthetics - II
Lecture 8 - Testing of Geosynthetics - III
Lecture 9 - Different Types of Soil Retaining Structures
Lecture 10 - Construction Aspects of Geosynthetic Reinforced Soil Retaining Walls
Lecture 11 - Design Codes for Reinforced Soil Retaining Walls
Lecture 12 - External Stability Analysis of Reinforced Soil Retaining Walls
Lecture 13 - Seismic Loads and Internal Stability Analysis of Reinforced Soil Walls
Lecture 14 - Testing Requirements for Reinforced Soil Retaining Walls
Lecture 15 - Design Example of Reinforced Soil Retaining Walls - I
Lecture 16 - Design Example of Reinforced Soil Retaining Walls - II
Lecture 17 - Design Example of Reinforced Soil Retaining Walls - III
Lecture 18 - Design Example of Reinforced Soil Retaining Walls - IV
Lecture 19 - Case Study of Construction of Very High Tiered Reinforced Soil Walls
Lecture 20 - Controlled Yielding to Reduce Lateral Earth Pressures on Rigid Walls
Lecture 21 - Geosynthetic Reinforced Soil Embankments - I
Lecture 22 - Geosynthetic Reinforced Soil Embankments - II
Lecture 23 - Two-Part Wedge Analysis of Reinforced Soil Embankments
Lecture 24 - Soil Embankments Supported on Geocell Mattresses
Lecture 25 - Accelerated Pre-Consolidation of Soft Clay Soils Using Geosynthetics
Lecture 26 - Geosynthetic Reinforced Pile Systems for High Embankments
Lecture 27 - Geosynthetic Encasement for Stronger and Stiffer Stone Columns
Lecture 28 - Response of Footings Resting on Reinforced Foundation Soils
Lecture 29 - Bearing Capacity Analysis of Footings Resting on Reinforced Foundation Soils
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Lecture 30 - Design and Construction of Container Yards Using Geosynthetics

Lecture 31 - Geosynthetics in Flexible Pavements - I

Lecture 32 - Geosynthetics in Flexible Pavements - II

Lecture 33 - Geosynthetics in Flexible Pavements and Carbon Foot Print Analysis

Lecture 34 - Filtration of Soils Using Geosynthetics

Lecture 35 - Drainage Applications of Geosynthetics

Lecture 36 - Erosion Control of Soils Using Geosynthetics

Lecture 37 - Sustainable Infrastructure Development & Natural Geosynthetics

Lecture 38 - Introduction to Geosynthetics in Landfills

Lecture 39 - Case Study of the Construction of Airport Runway at Pakyong, Sikkim Using Geosynthetics (Guest I Lecture 40 - Landfill Engineering Systems (Guest Lecture)