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

```
NPTEL Video Course - Mining Engineering - NOC: Mining Machinery
Subject Co-ordinator - Prof. Khanindra Pathak
Co-ordinating Institute - IIT - Kharagpur
Sub-Titles - Available / Unavailable | MP3 Audio Lectures - Available / Unavailable
Lecture 1 - Introduction to Mining Machinery - Part A
Lecture 2 - Introduction to Mining Machinery - Part B
Lecture 3 - Introduction to Machine Elements
Lecture 4 - Mechanical Transmission of Power
Lecture 5 - Shafts, Pulleys, Gears, and Geartrains Bearing and Brakes
Lecture 6 - Belt Drives, Chain Drives
Lecture 7 - Prime Movers
Lecture 8 - Fluid Power for Mining Machinery
Lecture 9 - Pneumatic Power for Mining Machinery
Lecture 10 - Steel Wire Rope : Types and Basic Calculation
Lecture 11 - Steel Wire Rope Maintenance
Lecture 12 - Principle of Rock - Tool Interaction
Lecture 13 - Site and Rock Preparation Equipment : Dozer Ripper
Lecture 14 - Site and Rock Preparation Equipment: Ripper
Lecture 15 - Drilling Machines for Mining
Lecture 16 - Site and Rock Preparation Equipment : Scraper
Lecture 17 - Site and Rock Preparation Equipment : Motor Grader
Lecture 18 - Surface Mining Machinery: Machinery for Cyclic Excavation: Electric Rope Shovel
Lecture 19 - Surface Mining Machinery: Machinery for Cyclic Excavation: Hydraulic Excavators and Back Hoe
Lecture 20 - Surface Mining Machinery: Machinery for Cyclic Excavation: Front End Loader
Lecture 21 - Surface Mining Machinery: Machinery for Cyclic Excavation: Dragline
Lecture 22 - Surface Mining Machinery: Machinery for Continuous Excavation: Bucket Wheel Excavator
Lecture 23 - Surface Mining Machinery: Machinery for Continuous Excavation: Bucket Chain Excavators
Lecture 24 - Surface Mining Machinery: Machinery for Continuous Excavation: Continuous Surface Miner
Lecture 25 - Surface Mining Machinery: Machinery for Continuous Excavation: Dredger
Lecture 26 - Underground Mining Machinery Loaders : Gathering Arm Loader
Lecture 27 - Underground Mining Machinery Loaders : Rocker Shovel and Side Discharge Loader
Lecture 28 - Underground Mining Machinery Loaders : Load Haul Dump (LHD) Loader
Lecture 29 - Underground Mining Machinery : Road Header
```

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

Lecture 30 - Underground Mining Machinery Underground Drills and Roof Bolter Lecture 31 - Underground Mining Machinery Continuous Miner Lecture 32 - Underground Mining Machinery Shuttle Car Lecture 33 - Longwall Mining Machinery Shearer Lecture 34 - Longwall Mining Machinery Armored Face Conveyor Lecture 35 - Longwall Mining Machinery Power Support Lecture 36 - Mine Pumps Lecture 37 - Mine Pumps : Special Pumps Lecture 38 - Basic Pumping Theory Lecture 39 - Air Compressor Lecture 40 - Fans for Mining Lecture 41 - Transportation Machinery for Surface Mines Lecture 42 - Automobiles in Mines and Mining Truck Lecture 43 - Off-highway Trucks Lecture 44 - Off-highway Trucks : Rimpull Curves and Tires Lecture 45 - Off-highway Trucks : Performance Lecture 46 - Belt Conveyor Lecture 47 - Belt Conveyor Design Criteria Lecture 48 - Power Requirements for Belt Conveyor Lecture 49 - Belt Conveyor Maintenance Lecture 50 - Aerial Rope Ways Lecture 51 - Machinery for Underground Mine Transport Lecture 52 - Endless Rope Haulage Lecture 53 - Rope Haulage in Underground Mines Lecture 54 - Locomotive Lecture 55 - Equipment for Shaft: Winding Machines Lecture 56 - Mechanics of Hoisting Lecture 57 - Low Profile Dumper Lecture 58 - Maintenance of Mining Machinery Lecture 59 - Maintenance Management Information System Lecture 60 - Non Destructive Testing

\_\_\_\_\_\_