

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

NPTEL Video Course - Humanities and Social Sciences - Introduction to Logic

Subject Co-ordinator - Dr. A.V. Ravishankar Sarma

Co-ordinating Institute - IIT - Kanpur

Sub-Titles - Available / Unavailable | MP3 Audio Lectures - Available / Unavailable

- Lecture 1 - Identification of Arguments
- Lecture 2 - Non-arguments
- Lecture 3 - Types of Arguments
- Lecture 4 - Nature and Scope of Deductive and Inductive Arguments
- Lecture 5 - Truth, Validity and Soundness
- Lecture 6 - Strength of Inductive arguments, Counter example method
- Lecture 7 - Toulmin's Model of Argumentation
- Lecture 8 - Identification of Formal and Informal Fallacies
- Lecture 9 - Informal Fallacies
- Lecture 10 - Fallacies of Weak Induction and Fallacies arising out of ambiguity in Language
- Lecture 11 - Introduction and motivation for Syllogistic Logic
- Lecture 12 - Aristotle theory of Syllogisms - 1
- Lecture 13 - Syllogistic Poem, Reduction of Syllogisms
- Lecture 14 - Syllogistic Poem, Reduction of Syllogisms
- Lecture 15 - Nature and Scope of Propositional Logic
- Lecture 16 - Syntax of Propositional Logic
- Lecture 17 - Logical Connectives
- Lecture 18 - Truth Table Method
- Lecture 19 - Semantic Tableaux Method for Propositional Logic
- Lecture 20 - Knights and Knaves Puzzles
- Lecture 21 - Semantic Tableaux Method
- Lecture 22 - Natural Deduction Method
- Lecture 23 - Natural Deduction
- Lecture 24 - Conjunctive and Disjunctive Normal Forms
- Lecture 25 - CNF, DNF and satisfiability and Validity
- Lecture 26 - Resolution and refutation method
- Lecture 27 - Resolution and refutation method
- Lecture 28 - Axiomatic Propositional Logic
- Lecture 29 - Hilbert Ackermann Axiomatic system

---

Get Digi-MAT (Digital Media Access Terminal) For High-Speed Video Streaming of NPTEL and Educational Video Courses in LAN

[www.digimat.in](http://www.digimat.in)

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

---

- Lecture 30 - Proofs in the PM system
- Lecture 31 - Hilbert and Ackermann System
- Lecture 32 - Outlines of Predicate Logic
- Lecture 33 - Outlines of Predicate Logic
- Lecture 34 - Building blocks of Predicate Logic
- Lecture 35 - Quantifiers, freedom, bondage
- Lecture 36 - Translation in to predicate Logic
- Lecture 37 - Semantics of Predicate Logic
- Lecture 38 - Truth, satisfiability, validity in Predicate Logic
- Lecture 39 - Formation Trees for wffs in predicate Logic
- Lecture 40 - Semantic Tableaux Method for Predicate Logic
- Lecture 41 - Semantic Tableaux method
- Lecture 42 - Natural Deduction in Predicate Logic
- Lecture 43 - Important theorems in First order Logic
- Lecture 44 - Limitations of first order logic and Introduction to the course