

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

NPTEL Video Course - Mathematics - NOC:Introduction to Abstract Group Theory

Subject Co-ordinator - Prof. Krishna Hanumanthu

Co-ordinating Institute - IIT - Madras

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

- Lecture 1 - Motivational examples of groups
- Lecture 2 - Definition of a group and examples
- Lecture 3 - More examples of groups
- Lecture 4 - Basic properties of groups and multiplication tables
- Lecture 5 - Problems - 1
- Lecture 6 - Problems - 2
- Lecture 7 - Problems - 3
- Lecture 8 - Subgroups
- Lecture 9 - Types of groups
- Lecture 10 - Group homomorphisms and examples
- Lecture 11 - Properties of homomorphisms
- Lecture 12 - Group isomorphisms
- Lecture 13 - Normal subgroups
- Lecture 14 - Equivalence relations
- Lecture 15 - Problems - 4
- Lecture 16 - Cosets and Lagrange's theorem
- Lecture 17 - S_3 revisited
- Lecture 18 - Problems - 5
- Lecture 19 - Quotient groups
- Lecture 20 - Examples of quotient groups
- Lecture 21 - First isomorphism theorem
- Lecture 22 - Examples and Second isomorphism theorem
- Lecture 23 - Third isomorphism theorem
- Lecture 24 - Cauchy's theorem
- Lecture 25 - Problems - 6
- Lecture 26 - Symmetric groups - I
- Lecture 27 - Symmetric Groups - II
- Lecture 28 - Symmetric groups - III
- Lecture 29 - Symmetric groups - IV

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

www.digimat.in

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

- Lecture 30 - Odd and even permutations - I
- Lecture 31 - Odd and even permutations - II
- Lecture 32 - Alternating groups
- Lecture 33 - Group actions
- Lecture 34 - Examples of group actions
- Lecture 35 - Orbits and stabilizers
- Lecture 36 - Counting formula
- Lecture 37 - Cayley's theorem
- Lecture 38 - Problems - 7
- Lecture 39 - Problems - 8 and Class equation
- Lecture 40 - Group actions on subsets
- Lecture 41 - Sylow Theorem - I
- Lecture 42 - Sylow Theorem - II
- Lecture 43 - Sylow Theorem - III
- Lecture 44 - Problems - 9
- Lecture 45 - Problems - 10