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

```
NPTEL Video Course - Chemistry and Biochemistry - NOC: Stereochemistry
Subject Co-ordinator - Prof. A. Basak
Co-ordinating Institute - IIT - Kharagpur
Sub-Titles - Available / Unavailable | MP3 Audio Lectures - Available / Unavailable
Lecture 1 - Constitution and Configuration
Lecture 2 - Chirality, Symmetry Elements
Lecture 3 - Project Ion Formulae Rules for Drawing
Lecture 4 - Chirotopicity and Stereogenicity
Lecture 5 - Newmann Projection, Saw Horse Projection, Wedge Formula
Lecture 6 - Chirotopicity and Stereogenicity
Lecture 7 - Absolute Configuration
Lecture 8 - Absolute Configuration (Continued...)
Lecture 9 - Problems on the above topics
Lecture 10 - Topicity
Lecture 11 - Axial Chirality in Allenes, Biphenyls
Lecture 12 - Relative Configuration, Prochiral Faces and Prochiral Centres
Lecture 13 - Chirality in Heteroatom Systems
Lecture 14 - Conformations and Conformers
Lecture 15 - Conformational Analysis of Acyclic Molecules
Lecture 16 - Conformational Analysis of Acyclic Molecules (Continued...)
Lecture 17 - Conformations of Acyclic Molecues Containing Heteroatoms
Lecture 18 - Conformations of Cyclic Systems
Lecture 19 - Conformations of Cyclic Systems (Continued...)
Lecture 20 - Conformation of Cyclobutane and Cyclopentane
Lecture 21 - Conformation of Cyclohexane
Lecture 22 - Energy Changes During Flipping
Lecture 23 - Energy Comparison between Chair and Boat Conformations
Lecture 24 - Conformational Analysis of Substituted Cyclohexanes
Lecture 25 - Conformational Analysis of Substituted Cyclohexanes (Continued...)
Lecture 26 - Conformational Analysis of Substituted Cyclohexanes (Continued...)
Lecture 27 - Conformational Analysis of Substituted Cyclohexanes (Continued...)
Lecture 28 - Conformational Analysis of Systems with Preference for Axial Groups
Lecture 29 - Conformation and Reactivity
```

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

```
Lecture 30 - Conformation and Reactivity (Continued...)

Lecture 31 - Conformation and Reactivity (Continued...)

Lecture 32 - Stereoelectronic Effects

Lecture 33 - Stereoelectronic Effects (Continued...)

Lecture 34 - Substitution and Elimination in Cyclohexane Systems

Lecture 35 - Stereospecific and Stereoselective Reactions and Asymmetric Synthesis (Elementary Idea)

Lecture 36 - Asymmetric Induction

Lecture 37 - Asymmetric Induction

Lecture 38 - Asymmetric Induction (Continued...)

Lecture 39 - Facial Selectivity and Examples of Asymmetric Synthesis

Lecture 40 - Revisiting the Contents Covered
```

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