

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

NPTEL Video Course - Multi Disciplinary - NOC:Thermodynamics

Subject Co-ordinator - Prof. Anand T. N. C

Co-ordinating Institute - IIT - Madras

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

Lecture 1 - Basic concepts and definitions - Part 1  
Lecture 2 - Basic concepts and definitions - Part 2  
Lecture 3 - Basic concepts and definitions - Part 3  
Lecture 4 - Tutorial problems on exact and inexact differential  
Lecture 5 - Basic concepts and definitions - Part 4  
Lecture 6 - Work - Part 1  
Lecture 7 - Work - Part 2  
Lecture 8 - Work - Part 3  
Lecture 9 - Work - Part 4  
Lecture 10 - Work - Part 5  
Lecture 11 - Tutorial problem on 'Work' - Part 1  
Lecture 12 - Tutorial problem - Part 2  
Lecture 13 - Tutorial problem on 'Work' - Part 3  
Lecture 14 - Tutorial problem on 'Work' - Part 4  
Lecture 15 - Zeroth law of thermodynamics  
Lecture 16 - Methods of temperature measurement  
Lecture 17 - Modes of heat transfer  
Lecture 18 - Tutorial problem on 'Modes of heat transfer'  
Lecture 19 - Tutorial problem on 'Methods of temperature measurement'  
Lecture 20 - First law of thermodynamics  
Lecture 21 - Tutorial problem  
Lecture 22 - Tutorial problem  
Lecture 23 - Heat and work interactions for a system  
Lecture 24 - Tutorial problem - Part 1  
Lecture 25 - Pure substance  
Lecture 26 - Tutorial problem - Part 2  
Lecture 27 - Ideal gas - Part 1  
Lecture 28 - Ideal gas - Part 2  
Lecture 29 - Tutorial problem - Part 3

---

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 - Tutorial problem - Part 4  
Lecture 31 - Tutorial problem - Part 5  
Lecture 32 - Specific heats at constant pressure and constant volume  
Lecture 33 - Tutorial problem - Part 6  
Lecture 34 - Tutorial problem - Part 7  
Lecture 35 - Ideal gas - Part 3  
Lecture 36 - Ideal gas - Part 4  
Lecture 37 - Ideal gas - Part 5  
Lecture 38 - Tutorial problem - Part 1  
Lecture 39 - Tutorial problem - Part 2  
Lecture 40 - Tutorial problem - Part 3  
Lecture 41 - Tutorial problem - Part 4  
Lecture 42 - Beyond ideal gases - Part 1  
Lecture 43 - Beyond ideal gases - Part 2  
Lecture 44 - Two phase system - Part 1  
Lecture 45 - Two phase system - Part 2  
Lecture 46 - Two phase system  
Lecture 47 - Tutorial problems (2 numbers)  
Lecture 48 - Tutorial problem - Part 1  
Lecture 49 - Tutorial problem - Part 2  
Lecture 50 - Tutorial problem - Part 3  
Lecture 51 - Tutorial problems on two-phase systems (2 numbers)  
Lecture 52 - Tutorial problem (1 number)  
Lecture 53 - Rate equation of the first law of thermodynamics for a control mass and a control volume  
Lecture 54 - Energy equation for a steady-state, steady-flow process in selected engineering devices  
Lecture 55 - Tutorial problems (3 numbers)  
Lecture 56 - Tutorial problem - Part 1  
Lecture 57 - Tutorial problem - Part 2  
Lecture 58 - Quasi-static process revisited  
Lecture 59 - Second law of thermodynamics  
Lecture 60 - Second law of thermodynamics  
Lecture 61 - Second law of thermodynamics  
Lecture 62 - Second law of thermodynamics  
Lecture 63 - Second law of thermodynamics  
Lecture 64 - Second law of thermodynamics  
Lecture 65 - Tutorial problems (2 numbers)  
Lecture 66 - Tutorial problem (1 number)  
Lecture 67 - Tutorial problem (1 number)  
Lecture 68 - Tutorial problem (2 numbers)

---

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 69 - Second law of thermodynamics  
Lecture 70 - Entropy - Part 1  
Lecture 71 - Tutorial problem (1 number)  
Lecture 72 - Entropy - Part 2  
Lecture 73 - Entropy - Part 3  
Lecture 74 - Entropy - Part 4  
Lecture 75 - Tutorial problem (1 number)  
Lecture 76 - Tutorial problem (1 number)  
Lecture 77 - Tutorial problems (2 numbers)  
Lecture 78 - Entropy - Part 5  
Lecture 79 - Entropy - Part 6  
Lecture 80 - Entropy - Part 7  
Lecture 81 - Exergy - Part 1  
Lecture 82 - Exergy - Part 2  
Lecture 83 - Exergy - Part 3  
Lecture 84 - Thermodynamics cycles  
Lecture 85 - Tutorial problem (1 number)  
Lecture 86 - Thermodynamics cycles  
Lecture 87 - Tutorial problem (1 number)  
Lecture 88 - Thermodynamics cycles  
Lecture 89 - Tutorial problem (1 number)