



CUET (PG) CHEMISTRY

EXCLUSIVE LIVE COURSE

Batch Starts: **26th May 2025**

INORGANIC: ATOMIC STR PERIODICITY & CHEMICAL BONDING PHYSICAL: ATOMIC & MOLECULAR STRUCTURE		
26-May-25	Mon	L01: Bohr Model of Hydrogen Atom L01: Introduction and Black Body Radiation
27-May-25	Tue	L02: Bohr Model of Hydrogen Spectrum L02: Photoelectric Effect
28-May-25	Wed	L03: Quantum Numbers L03: Bohr's Theory
29-May-25	Thu	L04: Rules for Electronic Configuration L04: de-Broglie's Equation & Heisenberg's Uncertainty Principle
30-May-25	Fri	L05: Classification of Periodic Table L05: Postulates of Quantum Mechanics - 1
31-May-25	Sat	L06: Slater's Rule L06: Postulates of Quantum Mechanics - 2
01-Jun-25	Sun	Unit Test Unit Test
02-Jun-25	Mon	L07: General Periodic Trends L07: Commutators
03-Jun-25	Tue	L08: Slater Rule L08: Postulates of Quantum Mechanics - 3
INORGANIC: ATOMIC STR PERIODICITY & CHEMICAL BONDING PHYSICAL: ATOMIC & MOLECULAR STRUCTURE		
04-Jun-25	Wed	L09: Electron Affinity L09: Particle in 1D Box
05-Jun-25	Thu	L10: Introduction to Chemical Bonding L10: Particle in 2D, 3D Box and Expectation Value
06-Jun-25	Fri	L11: Shape of Orbital L11: Hydrogen Atom and Spectra
07-Jun-25	Sat	L12: VSEPR Theory L12: Hydrogen Atom Wavefunction and Filling of Orbitals in Atoms
08-Jun-25	Sun	Unit Test Unit Test
INORGANIC: ATOMIC STR PERIODICITY & CHEMICAL BONDING PHYSICAL: PHYSICAL SPECTROSCOPY		
09-Jun-25	Mon	L13: Hybridization L01: Introduction to Physical Spectra
10-Jun-25	Tue	L14: Steric No. 5, 6, 7 L02: Rotational Spectroscopy - Rigid Rotor and Non-Rigid Rotor
11-Jun-25	Wed	L15: Dipole Moment L03: Vibrational Spectra and Harmonic Oscillator
12-Jun-25	Thu	L16: Fajan Rule L04: Anharmonic Oscillator and Electronic Spectra
13-Jun-25	Fri	L17: MOT Theory L05: Introduction to NMR
14-Jun-25	Sat	L18: Heteronuclear Diatomic Molecule -
15-Jun-25	Sun	Unit Test Unit Test
INORGANIC: COORDINATION CHEMISTRY PHYSICAL: CHEMICAL THERMODYNAMICS		
16-Jun-25	Mon	L01: Introduction to Coordination Chemistry L01: Introduction to Thermodynamics
17-Jun-25	Tue	L02: Types of Ligands L02: Mathematical Relations for Thermodynamic Functions
18-Jun-25	Wed	L03: Structural Isomerism L03: State and Path Functions
19-Jun-25	Thu	L04: Geometrical Isomerism L04: Work and Heat
20-Jun-25	Fri	L05: Werner's Theory L05: First Law of Thermodynamics
21-Jun-25	Sat	L06: Valence Bond Theory L06: Heat Capacity and Work Done in Several Processes
22-Jun-25	Sun	Unit Test Unit Test
INORGANIC: ATOMIC STR PERIODICITY & CHEMICAL BONDING PHYSICAL: PS ORGANIC: NP		
23-Jun-25	Mon	L07: Crystal Field Theory L07: Joule Experiment and Joule-Thomson Experiment
24-Jun-25	Tue	L08: Splitting in Td Complexes L08: Degrees of Freedom and Equipartition Principle
25-Jun-25	Wed	L09: Electron Distribution in Complexes L09: Second Law of Thermodynamics and Carnot Cycle
26-Jun-25	Thu	L10: Spectrochemical Series L10: Concept of Entropy and Entropy in Different Processes
27-Jun-25	Fri	L11: Spinels L11: Clausius-Clapeyron Equation
28-Jun-25	Sat	L12: Lattice Energy L12: Gibbs Free Energy and Criteria of Spontaneity
29-Jun-25	Sun	Unit Test Unit Test
30-Jun-25	Mon	L13: Symbiosis & Anti-symbiosis L13: Magic Square and Maxwell Relations
01-Jul-25	Tue	L14: Jahn-Teller Distortion L14: Thermodynamics for Open System and Chemical Potential
02-Jul-25	Wed	L15: Erwing-William Series L15: Third Law of Thermodynamics

03-Jul-25	Thu	L16: Colour Spectra L16: Thermochemistry
04-Jul-25	Fri	L17: Microstates –
05-Jul-25	Sat	L18: Orgel Diagram –
06-Jul-25	Sun	Unit Test Unit Test
INORGANIC: MAIN GROUP ELEMENTS PHYSICAL: ORGANIC: GENERAL ORGANIC CHEMISTRY		
07-Jul-25	Mon	L01: Boron Family L01: Resonance
08-Jul-25	Tue	L02: Boranes L02: Mesomeric Effect
09-Jul-25	Wed	L03: Wade's Rule L03: Hyperconjugation
10-Jul-25	Thu	L04: Borazine L04: Acidity 1
11-Jul-25	Fri	L05: Carbon Family L05: Acidity 2
12-Jul-25	Sat	L06: Intercalation Compound L06: Basicity
13-Jul-25	Sun	Unit Test Unit Test
14-Jul-25	Mon	L07: Allotropes of Carbon L01: Aromaticity 1
15-Jul-25	Tue	L08: Zintl Ions and Silicates L02: Aromaticity 2
INORGANIC: MAIN GROUP ELEMENTS PHYSICAL: ORGANIC: STEREOCHEMISTRY		
16-Jul-25	Wed	L09: Nitrogen Family L01: Basic Terms
17-Jul-25	Thu	L10: Oxides of Phosphorus L02: Chirality
18-Jul-25	Fri	L11: Phosphazene and Oxygen Family L03: RS Configuration
19-Jul-25	Sat	L12: Halogen Family L04: Relationship Between Molecules
20-Jul-25	Sun	Unit Test Unit Test
21-Jul-25	Mon	L13: S-block L05: Numerical
22-Jul-25	Tue	L14: Alkali and Alkaline Earth Metals L06: Topocity
23-Jul-25	Wed	L15: Metal with Oxygens L07: Conformational 1 – Acyclic
24-Jul-25	Thu	L16: General Method of Isolation and Purification of Elements L08: Conformational 2 – Cyclic
25-Jul-25	Fri	L17: Electrolysis L09: Models of Stereochemistry
26-Jul-25	Sat	L18: Principle and Application of Ellingham Diagram –
27-Jul-25	Sun	Unit Test Unit Test
INORGANIC: PHYSICAL: ELECTROCHEMISTRY ORGANIC: REAGENTS		
28-Jul-25	Mon	L01: Types of Conductance L01: Reduction 1
29-Jul-25	Tue	L02: Relation Between Conductance and Factors Affecting L02: Reduction 2
30-Jul-25	Wed	L03: Transport Number and Method of Determination L03: Reduction 3
31-Jul-25	Thu	L04: Conductance in Dilution and Its Applications L04: Reduction 4
01-Aug-25	Fri	L05: Relation of Conductance with Diffusion, Viscosity L05: Oxidation 1
02-Aug-25	Sat	L06: Debye-Hückel Theory L06: Oxidation 2
03-Aug-25	Sun	Unit Test Unit Test
04-Aug-25	Mon	L07: Conductometric Titration L07: Oxidation 3
05-Aug-25	Tue	L08: Introduction to Electrolysis and Galvanic Cell L08: Oxidation 4
06-Aug-25	Wed	L09: Galvanic Cell 2 L09: Oxidation 5
07-Aug-25	Thu	L10: Reversible Electrodes and Their Types L10: Oxidation 6
08-Aug-25	Fri	L11: Cell EMF and Calculation L11: OMC Based 1
09-Aug-25	Sat	L12: Thermodynamic Relation with EMF and Equilibrium Constant L12: OMC Based 2
10-Aug-25	Sun	Unit Test Unit Test
INORGANIC: PHYSICAL: ORGANIC: ORGANIC SPECTRA		
11-Aug-25	Mon	L13: Concentration Cell and Its Type L01: NMR 1
12-Aug-25	Tue	L14: Liquid Junction Potential L02: NMR 2

13-Aug-25	Wed	L15: Application of EMF Measurement L03: NMR 3
14-Aug-25	Thu	L16: Potentiometric Titration and Qualitative Analysis L04: IR
15-Aug-25	Fri	– L05: UV
16-Aug-25	Sat	– L06: Mass
17-Aug-25	Sun	Unit Test Unit Test
18-Aug-25	Mon	L01: Introduction to OMC L01: Carbocation 1
19-Aug-25	Tue	L02: Hapticity & Ligands L02: Carbocation 2
20-Aug-25	Wed	L03: 18 Electron Complexes L03: Carbocation 3
21-Aug-25	Thu	L04: Structure of Metal Clusters L04: Carbanion 1
22-Aug-25	Fri	L05: Isolobal Analogy L05: Carbanion 2
23-Aug-25	Sat	L06: Metal Carbonyl Complexes L06: Carbanion 3
24-Aug-25	Sun	Unit Test Unit Test
25-Aug-25	Mon	L07: Metal Olefin Complexes L07: Carbanion 4
26-Aug-25	Tue	L08: Spectroscopy in Carbonyl Complexes L08: Carbanion 5
27-Aug-25	Wed	L09: Questions on OMC L09: Carbanion 5
INORGANIC: BIOINORGANIC CHEMISTRY PHYSICAL: ORGANIC: INTERMEDIATE & NAME REACTION		
28-Aug-25	Thu	L01: Porphyrins, Metallo-porphyrins L10: Carbanion 7
29-Aug-25	Fri	L02: Non-heme Units L11: Carbanion 8
30-Aug-25	Sat	L03: Metalloenzymes L12: Carbene 1
31-Aug-25	Sun	Unit Test Unit Test
01-Sep-25	Mon	L04: Electron Transfer Systems L13: Carbene 2
02-Sep-25	Tue	L05: Metal Storage / Metal Transfer System L14: Carbene 3
03-Sep-25	Wed	L06: Photosynthesis L15: Nitrene 1
04-Sep-25	Thu	L01: Qualitative & Quantitative Analysis L16: Radicals 1
05-Sep-25	Fri	L02: Nuclear Reactions L17: Radicals 2
06-Sep-25	Sat	
07-Sep-25	Sun	Unit Test Unit Test
INORGANIC: PHYSICAL: CHEMICAL EQUILIBRIA ORGANIC:		
08-Sep-25	Mon	L01: Introduction to Chemical Equilibria and Equilibrium Constant
09-Sep-25	Tue	L02: Reaction Free Energy and Reaction Quotient
10-Sep-25	Wed	L03: Le-Chatelier's Principle and Its Affecting Factors
11-Sep-25	Thu	L04: Le-Chatelier's Principle - Addition of Inert Gas
12-Sep-25	Fri	L05: Homogeneous and Heterogeneous Mixtures
13-Sep-25	Sat	L06: Introduction to Ionic Equilibria
14-Sep-25	Sun	Unit Test Unit Test
15-Sep-25	Mon	– L07: Concept of pH and pH Calculation
16-Sep-25	Tue	– L08: Concept of Acid-Base and pH of Mixtures
17-Sep-25	Wed	– L09: Salt Hydrolysis
18-Sep-25	Thu	– L10: Buffer System and Buffer Capacity
19-Sep-25	Fri	– L11: Acid-Base Indicator and Titration
20-Sep-25	Sat	– L12: Solubility and Solubility Product
21-Sep-25	Sun	Unit Test Unit Test
22-Sep-25	Mon	– L13: Introduction and Gibbs Phase Rule
23-Sep-25	Tue	– L14: Phase Equilibria and Clausius-Clapeyron Equation
24-Sep-25	Wed	– L15: One-Component Phase Diagram

25-Sep-25	Thu	– L16: Two-Component & Three-Component Phase Diagram
26-Sep-25	Fri	– L17: Nernst Distribution Law and Lever Rule
27-Sep-25	Sat	– –
28-Sep-25	Sun	Unit Test Unit Test
INORGANIC: PHYSICAL: ORGANIC: REACTION MECHANISM		
29-Sep-25	Mon	L01: Introduction
30-Sep-25	Tue	L02: SNI
01-Oct-25	Wed	L03: SN2
02-Oct-25	Thu	L04: SNNGP 1
03-Oct-25	Fri	L05: SNNGP 2
04-Oct-25	Sat	L06: Electrophilic Aromatic Substitution
05-Oct-25	Sun	Unit Test Unit Test
06-Oct-25	Mon	– L07: Electrophilic Aromatic Subs 2
07-Oct-25	Tue	– L08: SNAE
08-Oct-25	Wed	– L09: SNEA
09-Oct-25	Thu	– L10: E1 Elimination
10-Oct-25	Fri	– L11: E2 Elimination
11-Oct-25	Sat	– L12: Ei Elimination
12-Oct-25	Sun	Unit Test Unit Test
13-Oct-25	Mon	L13: E1cb Elimination
14-Oct-25	Tue	L14: Name Reaction 1
15-Oct-25	Wed	L15: Name Reaction 2
16-Oct-25	Thu	L16: Addition Reaction
17-Oct-25	Fri	L17: Addition Reaction II
18-Oct-25	Sat	
19-Oct-25	Sun	Unit Test Unit Test
INORGANIC: PHYSICAL: ORGANIC: PERICYCLIC REACTION		
20-Oct-25	Mon	L01: Electrocyclic Reaction 1
21-Oct-25	Tue	L02: Electrocyclic Reaction 2
22-Oct-25	Wed	L03: Electrocyclic Reaction 3
23-Oct-25	Thu	L04: Cycloaddition 1
24-Oct-25	Fri	L05: Cycloaddition 2
25-Oct-25	Sat	L06: Cycloaddition 3
26-Oct-25	Sun	Unit Test Unit Test
27-Oct-25	Mon	L07: Sigmatropic 1
28-Oct-25	Tue	L08: Sigmatropic 2
INORGANIC: PHYSICAL: ORGANIC: HECTROCYCLIC CHEMISTRY		
29-Oct-25	Wed	L01: Introduction
30-Oct-25	Thu	L02: Pyridine Reactions
31-Oct-25	Fri	L03: Five-Member Heterocyclic
01-Nov-25	Sat	L04: Carbohydrates and Amino Acids
02-Nov-25	Sun	Unit Test Unit Test
INORGANIC: PHYSICAL: ORGANIC: NATURAL PRODUCT		
03-Nov-25	Mon	L01: Carbohydrates and Amino Acids
04-Nov-25	Tue	L02: Carbohydrates 2

05-Nov-25	Wed	L03: Amino Acids
06-Nov-25	Thu	L04: Amino Acids
07-Nov-25	Fri	L05: Nucleic Acids and Terpenes
08-Nov-25	Sat	
09-Nov-25	Sun	Unit Test Unit Test
INORGANIC: PHYSICAL: CHEMICAL KINETICS ORGANIC:		
10-Nov-25	Mon	L01: Introduction to kinetics and Empirical rate law
11-Nov-25	Tue	L02: Order, molecular and Integrated rate law
12-Nov-25	Wed	L03: Zero and 1st order reaction
13-Nov-25	Thu	L04: 2 nd , 3 rd order reaction and order determination methods 1
14-Nov-25	Fri	L05: order determination methods 2
15-Nov-25	Sat	L06: rate laws for complex reactions and introduction
16-Nov-25	Sun	Unit Test Unit Test
17-Nov-25	Mon	L07: Complex reactions
18-Nov-25	Tue	L08: Steady state approximation and homogeneous reaction kinetics
19-Nov-25	Wed	L09: Heterogeneous reactions, kinetics, and enzyme catalysis
20-Nov-25	Thu	L10: Arrhenius equation and effect of temperature on rate
21-Nov-25	Fri	L11: Collision theory and TST (Transition State Theory)
22-Nov-25	Sat	L12: Laws of photochemistry and quantum yield
23-Nov-25	Sun	Unit Test Unit Test
INORGANIC: PHYSICAL: ADSORPTION ORGANIC:		
24-Nov-25	Mon	L01: Introduction to surface chemistry and factors affecting adsorption
25-Nov-25	Tue	L02: Adsorption isotherms
26-Nov-25	Wed	L03: Surface area analysis
27-Nov-25	Thu	L04: Gibb's adsorption isotherm and liquid-gas interface
28-Nov-25	Fri	
29-Nov-25	Sat	
30-Nov-25	Sun	Unit Test Unit Test