



# **VIBRANT ACADEMY (I) Pvt. Ltd.**

## **Syllabus**

**PT-4 (Mains)**

**Date : 24-01-21**

**Course Googol-XIII Phase-V & VI (07 & 21 October Batch)**

---

### **Physics**

Unit & Dimension, Vector, Basic Maths, Kinematics, NLM, Friction, Work Energy Power, Circular Motion, Center of Mass, Rotation, KTG & Thermodynamics, Fluid Mechanics, Geometrical Optics, Electrostatics, Gravitation, Optical Instruments, SHM, Current Electricity.

### **Maths**

Function, ITF, Limit, Conic Section, Straight Line, Circle, Matrices, Determinant, Continuity, Differentiability, P & C.

### **Organic Chemistry**

Isomerism, Biomolecules, G.O.C., Tautomerism, Polymers, Amino acids, Hydrocarbons (Application of Isomers), Reactions of Aromatic compounds, Carbene and Nitrene.

### **Physical Chemistry**

Stoichiometry, Chemical Kinetics, Radioactivity, Chemical Equilibrium, Thermodynamics, Thermochemistry, Ionic equilibrium (Till taught).

### **Inorganic Chemistry**

Periodic Properties, Chemical Bonding, Coordination Compounds, (Till taught), Environmental Chemistry, Hydrogen and its compounds, s,f-block elements and their compounds.