





# **TEST SYLLABUS**



### **Academic Session 2023-24**

## **ADVANCED MAJOR TEST (MT)**

Test Date: 25 February 2024

Course Code: VIKAAS (JA01)

#### **PHYSICS:**

Mathematical tool, Rectilinear motion, Projectile motion, Relative motion, NLM, Friction, WPE, Circular motion, Center of Mass, RBD, SHM, Fluid mechanics, Elasticity & Viscosity, Surface tension, String wave, Sound wave, KTG & Thermodynamics, Calorimentry & Thermal expansion

#### **MATHEMATICS:**

FOM-I, FOM-II, Quadratic Equation, Trigonometry, Sequence and Series, Binomial Theorem, Permutation & Combination, Straight Line, SOT, Circle, Conic section, Statistics

### PHYSICAL / INORGANIC CHEMISTRY:

Introduction to Chemistry, Atomic Structure, Mole Concept, Gaseous State (Ideal + Real), Chemical Equilibrium, Thermodynamics & Thermochemistry, Ionic equilibrium

#### **ORGANIC CHEMISTRY:**

IUPAC Nomenclature & Structural Isomerism, Structural identification & POC, Periodic Table, BIN, Chemical Bonding, GOC-I