

## **ALLEN Scholarship Admission Test (ASAT)**



#### **SYLLABUS & PATTERN**

### CLASS-XII PASSED STUDENT

#### **PHYSICS**



- · Atomic Physics
- Capacitance
- · Center of Mass
- · Circular Motion
- · Current Electricity
- · Error Analysis
- Friction
- Gravitation (Board Level)
- Kinematics
- Electromagnetic Induction & Alternating Current

- KTG & Thermodynamics
- · Magnetic Effects of Current
- Nuclear Physics
- Properties of Matter
- Ray Optics & Optical Instruments
- · Relative Motion
- · Rigid Body Dynamics
- · Simple Harmonic Motion
- String and Sound Waves
- Wave Optics

## The same

#### **CHEMISTRY**

· Isomerism

- Aromatic Compound
- Aldehyde & Ketone
- Alkyl Halides & Aryl Halides
- Atomic Structure
- Chemical Equilibrium
- · Chemical Kinetics
- · Chemical Bonding
- Co-ordination Compounds
- Electro Chemistry

- General Organic
   Chemistry
- Hydrocarbon
- · Ionic Equilibrium
- Liquid Solution
- Metallurgy
- p-Block Group
- Solid State
- Stoichiometry
- Thermodynamics

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#### IQ

- Blood Relation
- Dices
- · Coding and Decoding
- Calendar
- Cubes
- Counting of Figures
- Clock
- · Direction Sense
- Series
- Ranking Test
- Water Mirror Images

#### **MATHEMATICS**

- · Application of Derivative
- Binomial Theorem
- Circle
- · Complex Number
- Definite Integration + Area
- Ellipse
- Function
- Hyperbola
- · Indefinite Integration
- Inverse Trigonometric Function
- Limit, Continuity & Derivability

- · Method of Differentiation
- Parabola
- Permutation & Combination
- Probability
- Quadratic Expression & Equation
- Straight Line
- Trigonometric Ratios & Identities
- Vector + 3D



#### **BIOLOGY**

- · Anatomy of Flowering Plants
- · Biodiversity of Conservation
- Biomolecules
- Biotechnology-Principles and Processes
- Chordata (Animal Kingdom Part-2)
- Ecosystem
- · Environmental issues
- Evolution : Theories and Evidences
- Excretory Products and Their elimination
- Genetics 1 (Principles of inheritance and variations)

- Genetics 2 (Molecular basis of inheritance)
- Human Reproduction
- Human, Health and Disease
- Microbes in Human Welfare
- Morphology of flowering plants
- Neural control and Coordination
- Non Chordata (Animal Kingdom Part-1)
- Plant Kingdom
- · Respiration in Plants

#### **EXAM PATTERN**

#### **Paper Pattern**

Part-1: IQ, Part-2: Physics; Chemistry; Biology; Mathematics

ONLINE OFFLINE

Pattern of Questions :120 Questions80 QuestionsDuration of Exam :90 Minutes120 Minutes

#### Marking Scheme

+4 for correct answer, -1 for wrong answer

No negative marking in Part-1

#### **Questions Distribution For Online**

Physics: 30, Chemistry: 30, Biology: 30/Mathematics: 30, IQ: 30 Website to appear in online ASAT www.asat.onlinetestseries.in

#### **Questions Distribution For Offline**

Physics: 20, Chemistry: 20, Biology: 20/Mathematics: 20, IQ: 20

Note:

For Online ASAT:- It is compulsory to login at least 30 minutes before exam starting time.

For Offline ASAT:- It is compulsory to reach ASAT examination test center atleast 30 minutes before exam starting time along with ASAT admit card.