

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

MATHEMATICS

- · Complex Number
- · Application of Derivative
- Binomial Theorem
- Definite Integration + Area
- Hyperbola
- · Function
- · Indefinite Integration
- Ellipse
- · Limit, Continuity & Derivability
- · Method of Differentiation
- Permutation & Combination
- Parabola



- Probability
- Trigonometric Ratio & Identities
- · Straight Line
- Quadratic Expression & Equation
- Vector + 3D
- Circle
- Inverse Trigonometric Function

CHEMISTRY

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

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- · General Organic Chemistry
- Hydrocarbon
- Ionic Equilibrium
- · Liquid Solution
- · p-Block Group
- Mole Concept
- Isomerism
- Redox Reaction
- Thermodynamics

X

BIOLOGY

- Biomolecules
- Anatomy of Flowering Plants
- Biodiversity of Conversation
- Biotechnology Principles and Processes
- · Organism & population
- Excretory Products and Their elimination
- Human Reproduction
- Genetics 1 (Principles of inheritance and variations)
- Evolution : Theories and Evidences



- Genetics 2 (Molecular basis of inheritance)
- Morphology of flowering Plants
- Neural control and coordination
- · Microbes in human welfare
- Human, Health & Disease
- Non Chordata (Animal Kingdom Part-1)
- Plant Kingdom
- · Respiration in Plants
- Chordata (Animal Kingdom Part-2)
- Ecosystem

IQ

- Blood Relation
- Dices
- · Coding and Decoding
- Calendar
- Cubes
- Counting of Figures



- Direction Sense
- Series
- Ranking Test
- Water Mirror Images

EXAM PATTERN

Paper Pattern

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

OFFLINE

Pattern of Questions :

Duration of Exam:

80 Questions 120 Minutes

Marking Scheme

+4 for correct answer, -1 for wrong answer

No negative marking in Part-1

Questions Distribution For Offline

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

Note ·

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