



# ASHA – CUET Simulation and Scholarship Exam

## Syllabus for Category C ( Class 9 & 10 )

### ENGLISH

- Clauses (Noun, Adjective, Adverb)
- Phrasal Verbs
- Idioms and Proverbs
- Sentence Synthesis and Transformation
- Advanced Direct-Indirect Speech
- Conditional Sentences
- Error Correction Exercises
- Fill in the blanks (prepositions, conjunctions, modals)
- Transformation of sentences (voice, narration, conditionals)
- Joining sentences
- Error correction and editing
- Comprehension : Unseen Passage with inferential , factual , vocabulary based questions

### SCIENCE

- Measurements and Experimentation
- Motion in One Dimension
- Newton's Laws of Motion
- Gravitation
- Fluids: Pressure and Buoyancy
- Archimedes' Principle
- Force, Work, Energy, and Power
- Heat and Energy
- Sound
- Electricity and Magnetism (Introductory)
- Machines
- Refraction of Light (Plane surfaces)
- Refraction through Lenses
- Spectrum
- Sound – Reflection, Resonance
- Electricity – Ohm's Law, Series/Parallel Circuits
- Household Electricity
- Magnetism – Electromagnetism, Transformer
- Calorimetry
- The Language of Chemistry (Symbols, Formulae, Equations)
- Chemical Changes and Reactions
- Heredity
- Atomic Structure
- The Periodic Table
- Study of the First Element – Hydrogen
- Study of Gas Laws (Boyle's, Charles')
- Periodic Properties and Variations
- Chemical Bonding
- Study of Acids, Bases, and Salts
- Analytical Chemistry (Simple tests for gases and salts)
- Mole Concept and Stoichiometry
- Electrolysis
- Metallurgy (Iron, Aluminium)
- Study of Compounds (Hydrogen Chloride, Ammonia, Nitric Acid, Sulphuric Acid)
- Organic Chemistry – Hydrocarbons, Alcohols, Carboxylic Acids
- Cell – Structure and Functions
- Tissues: Plant and Animal
- Diversity of Life (Classification of Kingdoms)
- Economic Importance of Bacteria and Fungi
- Nutrition in Plants and Animals
- Excretion in Humans
- Waste Generation and Management
- Ecosystems and Pollution





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- Cell Division
- Human Anatomy and Physiology:
- Circulatory, Nervous, Excretory, Endocrine, Reproductive Systems
- Health and Hygiene – Diseases, Immunity
- Pollution – Air, Water, Soil
- Five Kingdom Classification (Revised Overview)
- Photosynthesis and Transpiration
- Population Growth and Regulation
- Asexual and Sexual Reproduction in Plants

## SOCIAL SCIENCE

- The Harappan Civilization
- Composite Culture
- The Modern Age in Europe
  - Renaissance, Reformation, Industrial Revolution
- The First War of Independence (1857)
- Growth of Nationalism
  - Formation of INC, Moderate and Extremist Movements
- The Struggle for Swaraj
  - Partition of Bengal, Swadeshi Movement
  - Home Rule Movement
- Mahatma Gandhi and the National Movement
  - Non-Cooperation, Civil Disobedience, Quit India Movement
- Forward Bloc and INA
- Independence and Partition of India
- The United Nations
  - Organs, Specialized Agencies (UNESCO, WHO)
- Non-Aligned Movement
- Making of Global World
- Print culture & Modern world
- Earth as a Planet
- Geographic Grid: Latitudes and Longitudes
- Rotation and Revolution
- Structure of the Earth
- Rocks and Landforms
- India: Location, Physical Features
- Climate of India
- Soils in India
- Natural Vegetation of India
- Water Resources (Rivers, Dams)
- Natural Resources of India
  - Soil, Water, Forest, Mineral, Energy
- Agriculture in India
  - Types, Major Crops
- Industries in India
  - Agro-based, Mineral-based, Transport
- Transport and Communication
- Waste Management
  - Reduce, Reuse, Recycle, and Segregation
- Topographical Maps
- Interpretation using Survey of India map sheets
- Map Work
  - India: rivers, mountains, cities, crops, industries, etc.
- Our Constitution & its features
- Fundamental Rights and Duties
- Directive Principles of State Policy
- Union Legislature (Parliament)
  - Lok Sabha and Rajya Sabha: Composition, Powers, Functions
    - The Union Executive
    - The President, Prime Minister, Council of Ministers
    - The Judiciary
    - Supreme Court and High Courts: Composition, Jurisdiction, Functions



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## MATHS

### 1. Number System

- Rational and irrational numbers
- Real numbers and their representation on the number line
- Laws of exponents
- Surds and their simplification

### 2. Algebra

- Expansions  $(a \pm b)^2$ ,  $(a \pm b)^3$ , and standard identities
- Factorisation of algebraic expressions
- Linear equations in two variables
- Simultaneous linear equations (elimination, substitution)
- Indices and powers
- Quadratic equations (solution by factorisation, formula)
- Arithmetic and geometric progressions (nth term, sum)
- Linear inequalities (one variable)
- Matrices ( $2 \times 2$  operations, multiplication by scalar)
- Reflection and rotation (transformation geometry)

### 3. Geometry

- Triangles and their properties
- Congruence and similarity
- Angle properties and theorems
- Mid-point theorem
- Basic constructions (angle bisectors, perpendiculars)
- Circle theorems (tangent, chord, arc, angle subtended, cyclic quadrilaterals)
- Constructions (internal/external division, similar triangles)

- Locus (basic definitions and simple problems)

### 4. Mensuration

- Area and perimeter of plane figures (triangle, quadrilateral, circle)
- Surface area and volume of cube, cuboid, and cylinder
- Conversion between units
- Problems involving cost, area, and volume

### 5. Coordinate Geometry

- Cartesian plane
- Plotting points
- Distance between two points
- Section formula (intro level)
- Section formula (internal division)
- Equation of a line (given point and slope)

### 6. Statistics

- Collection and tabulation of data
- Frequency distribution
- Graphical representation – bar graphs, histograms, frequency polygons
- Measures of central tendency – mean, median, mode

### 7. Commercial Mathematics

- Basic concepts of profit, loss, discount
- Simple interest
- Compound interest (without using formula – simple cases)
- Time and work
- Speed, distance, and time
- Percentage





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## LOGICAL REASONING

### 1. Verbal Reasoning

- Series completion (Alphabet, Number, Word)
- Analogy (e.g., Book: Reading:: Pen : Writing)
- Classification/Odd one out
- Coding–decoding (Letter or number-based)
- Blood relations
- Direction sense test
- Logical sequence of words
- Venn diagrams (word problems)
- Puzzle tests (based on seating, ranking, age)
- Statement and conclusions/inferences
- Cause and effect reasoning
- Syllogisms (basic level)

### 2. Non-Verbal Reasoning

- Figure series completion

- Analogy (shape-based)
- Classification of figures
- Mirror and water images
- Paper folding and cutting
- Embedded figures
- Cube and dice problems
- Pattern completion
- Dot situation problems
- Counting figures (triangles, squares, etc.)

### 3. Analytical Reasoning / Problem Solving

- Seating arrangements (linear and circular)
- Calendar-based problems
- Clocks (angles, time calculations)
- Mathematical puzzles
- Inequality reasoning
- Binary logic (True/False problems)
- Data sufficiency

## GENERAL AWARENESS

- Current Affairs
- National and international events
- Awards and honors (Padma Awards, Nobel, sports awards)
- Books and authors
- Important personalities (politics, science, sports)
- Major international days (e.g., Earth Day, Yoga Day)
- Famous Personalities
- National symbols: Flag, anthem, animal, bird, etc.
- Important dates in Indian & world history
- Countries and capitals
- Indian states, rivers, dams, temples
- Scientific instruments and their uses
- National and international games
- Olympic Games, Asian Games, Commonwealth
- Famous sportspersons and recent tournaments
- National sports of countries
- Inventions and discoveries
- Everyday science: water, air, light, food, environment
- Indian scientists & space missions (e.g. ISRO, Chandrayaan, Mangalyaan)
- Important monuments and heritage sites

