

Class XI Biology Olympiad

Eligibility: Students currently studying in Class XI

Unit I: Diversity of Living Organisms

- The Living World
- Biological Classification
- Plant Kingdom
- Animal Kingdom

Unit II: Structural Organisation in Plants and Animals

- Morphology of Flowering Plants
- Anatomy of Flowering Plants
- Structural Organisation in Animals

Unit III: Cell Structure and Function

- Cell: The Unit of Life
- Biomolecules
- Cell Cycle and Cell Division

Unit IV: Plant Physiology

- Transport in Plants
- Mineral Nutrition
- Photosynthesis in Higher Plants
- Respiration in Plants
- Plant Growth and Development

Unit V: Human Physiology

- Digestion and Absorption
- Breathing and Exchange of Gases
- Body Fluids and Circulation
- Excretory Products and their Elimination
- Locomotion and Movement
- Neural Control and Coordination
- Chemical Coordination and Integration

Skills Assessed

- Conceptual understanding
- Interpretation of biological diagrams

- Data and graph analysis
- Application-based reasoning
- Experimental biology and scientific inquiry
- Higher-order thinking (HOTS)

Class XII Biology Olympiad

Eligibility: Students currently studying in Class XII

Section A: Foundation Biology

Unit I: Diversity of Living Organisms

- The Living World
- Biological Classification
- Plant Kingdom
- Animal Kingdom

Unit II: Structural Organisation

- Morphology of Flowering Plants
- Anatomy of Flowering Plants
- Structural Organisation in Animals

Unit III: Cell Biology

- Cell: The Unit of Life
- Biomolecules
- Cell Cycle and Cell Division

Unit IV: Plant Physiology

- Transport in Plants
- Mineral Nutrition
- Photosynthesis in Higher Plants
- Respiration in Plants
- Plant Growth and Development

Unit V: Human Physiology

- Digestion and Absorption
- Breathing and Exchange of Gases
- Body Fluids and Circulation
- Excretory Products and their Elimination

- Locomotion and Movement
- Neural Control and Coordination
- Chemical Coordination and Integration

***Section B: Advanced Biology**

Unit VI: Reproduction

- Sexual Reproduction in Flowering Plants
- Human Reproduction
- Reproductive Health

Unit VII: Genetics and Evolution

- Principles of Inheritance and Variation
- Molecular Basis of Inheritance
- Evolution

Unit VIII: Biology and Human Welfare

- Human Health and Disease
- Microbes in Human Welfare

Unit IX: Biotechnology

- Biotechnology: Principles and Processes
- Biotechnology and its Applications

Unit X: Ecology and Environment

- Organisms and Populations
- Ecosystem
- Biodiversity and Conservation
- Environmental Issues