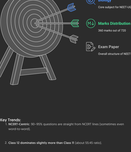
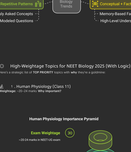
NEET-UG Biology Trend Analysis [2019–2024]

Biology accounts for 50% of the paper – that's **180 marks out of 360**, making it the **single most decisive subject** in NEET-UG. Over the past four years, Biology questions have shown a clear trend:



Key Trends:
- **Theory Dominates:** 80–85% questions are straight from NCERT lines (sometimes even word-for-word).
- **Class 12 dominates slightly more than Class 11** (about 55-45 ratio).
- **Conceptual > Fact-based:** A blend of memory-based facts + high-level understanding.
- **Repetitive Patterns:** Many questions are modeled around previously asked concepts.

NEET UG Biology Trends Analysis



High Weightage Topics for NEET Biology 2025 (With Logic)

Here's a strategic list of **TOP PRIORITY** topics with **why** they're a goldmine:

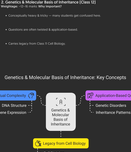
1. Human Physiology (Class 11)

Weightage: ~30-35 marks **Why important?**

Human Physiology Importance Pyramid

- Forms the base for Class 12 chapters like Human Health & Disease, Reproduction, etc.
- Highly conceptual & diagram-based.
- Nearly every year, multiple questions from **Digestion, Respiration, Circulation, Excretion, Nervous, and Muscular Systems.**

Key Systems in Human Physiology



- For students: Master NCERT diagrams and flowcharts.

2. Genetics & Molecular Basis of Inheritance [Class 12]

Weightage: ~25-28 marks **Why important?**

- Conceptually heavy & tricky — many students get confused here.
- Questions are often textual & application-based.
- Carries legacy from Class 11 Cell Biology.

Genetics & Molecular Basis of Inheritance: Key Concepts

- Analogy: If Biology is a language, Genetics is its grammar.

3. Plant Physiology (Class 11)

Weightage: ~18-20 marks **Why important?**

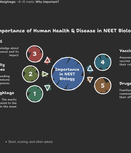
Plant Physiology: Key Concepts and Importance

- Chapters like **Photosynthesis, Respiration in Plants, Transport in Plants** are often underestimated but due high NCERT potential.
- NCERT covers complex mechanisms in simplified ways.
- Fix: Learn flow diagrams and hormone action tables by heart.

4. Reproduction (Both Plants & Humans - Class 12)

Weightage: ~20-22 marks **Why important?**

Importance of Reproduction in NEET Biology



- Easy-to-score + high frequency.
- Fertilization, Menstrual Cycle, and Gametogenesis are hot topics.
- A mix of factual and flow-based logic.

5. Biotechnology (Class 12)

Weightage: ~15-17 marks **Why important?**

NEET Biology Weightage Analysis

- Very conceptual but predictable.
- NEET has shown increasing trend for **Biotech Principles & Applications** (Recombinant DNA tools, PCR, Bioreactors).
- Based on logic – once learnt, it's underscored well.

6. Ecology – This is where Biology meets Technology! – new, exciting & futuristic

7. Human Health & Disease (Class 12)

Weightage: ~8-10 marks **Why important?**

Importance of Human Health & Disease in NEET Biology

- Short, scoring, and often asked.
- Questions on immunity types, AIDS, vaccination, and drugs.
- Very real-world questions.

8. Cell Biology (Class 11)

- Cell: Structure & Function (Class 11)

Weightage: ~8-10 marks **Why important?**

Importance of Cell Biology in NEET

- Pro Tip: Memorize organelles, functions, and biomolecules in tabular form.

Bonus Topics That Often Surprise:

1. **Ecology (Class 12)** – 10-12 marks. Low-hanging if you read NCERT line-by-line.
2. **Biological Classifications & Diversity of Life (Class 11)**. Factual but repetitive questions.
3. **Evolution (Class 12)** – Often ignored but 1-2 questions pop up consistently.

Prioritize Ecology for easy marks, don't ignore Evolution.

Mindset Strategy:

- Study Biology like a textbook.
- Use **highlighters, flowcharts, and daily quick revisions**.
- Read NCERT **multiple times** – 2-4 readings minimum.
- Use **past 10-year NEET papers** to decode patterns.

Mastering NEET Biology