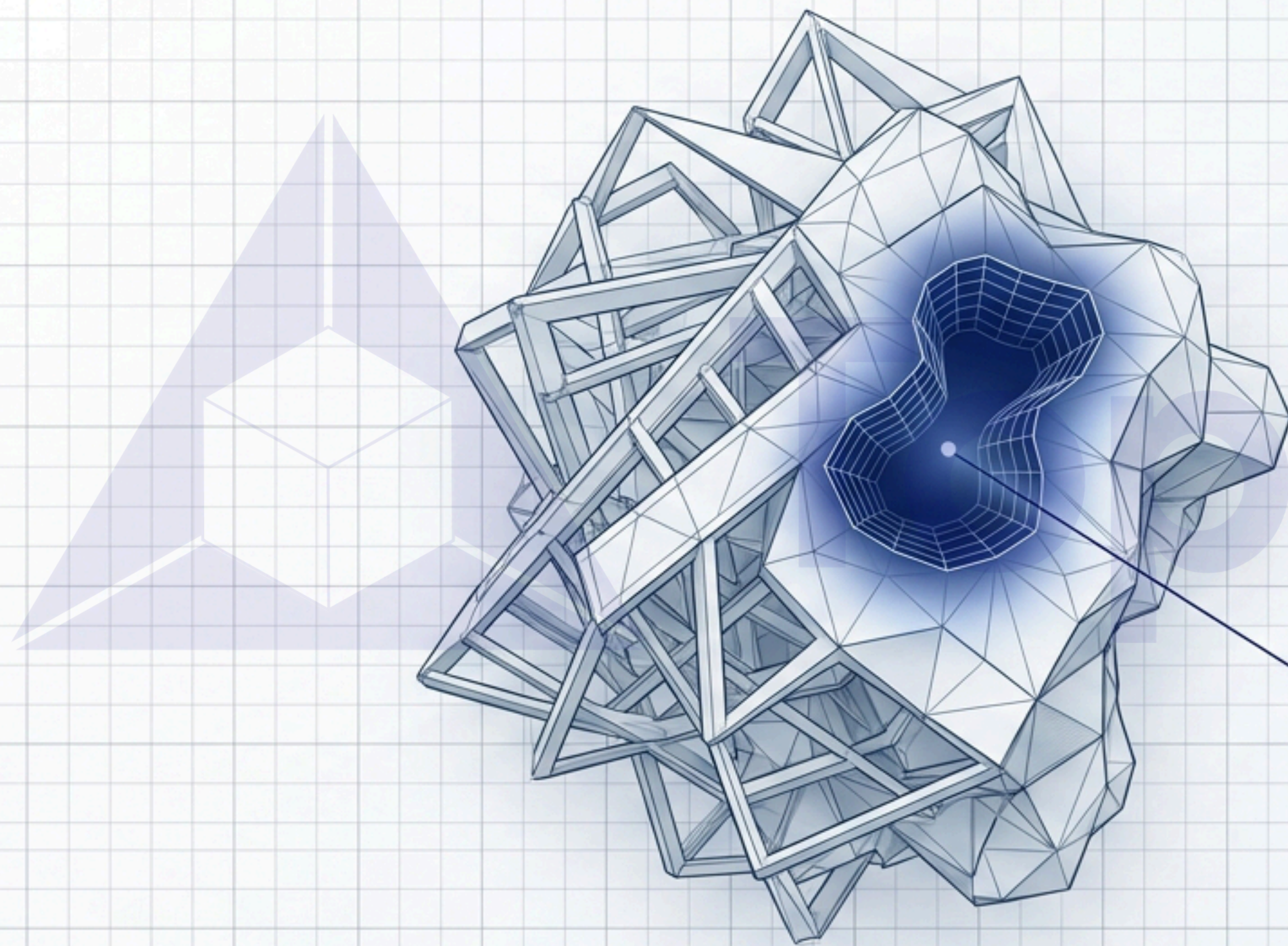


Biological Catalysts with Active Sites

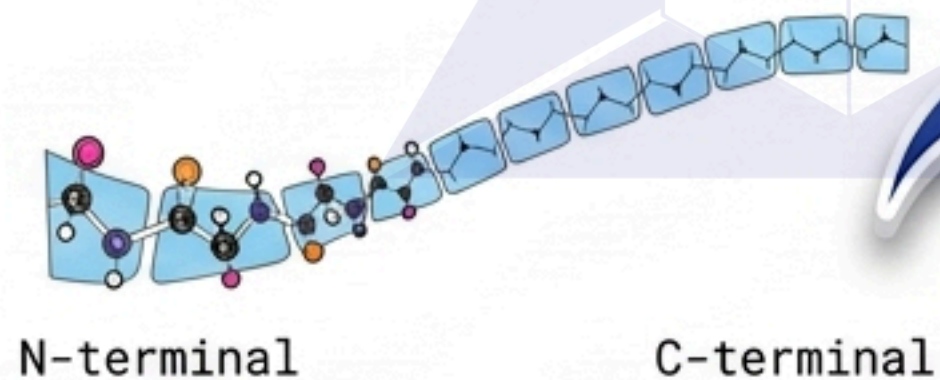


Structure
Dictates Function

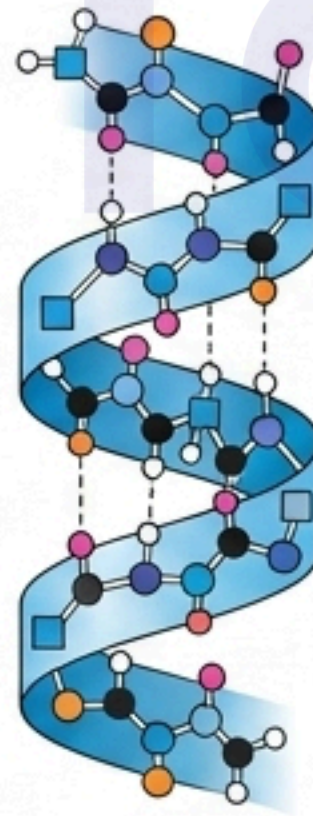
Almost all enzymes are proteins

The Protein Rule

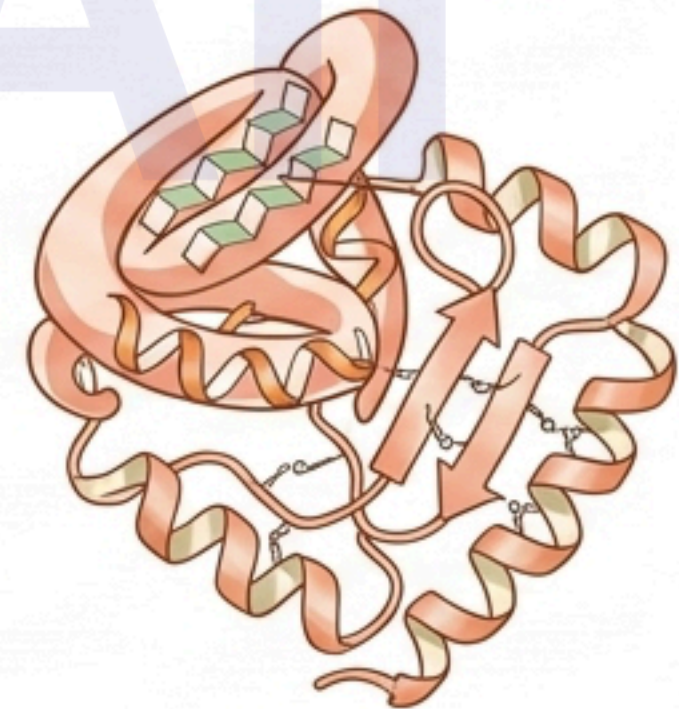
PRIMARY STRUCTURE



SECONDARY STRUCTURE

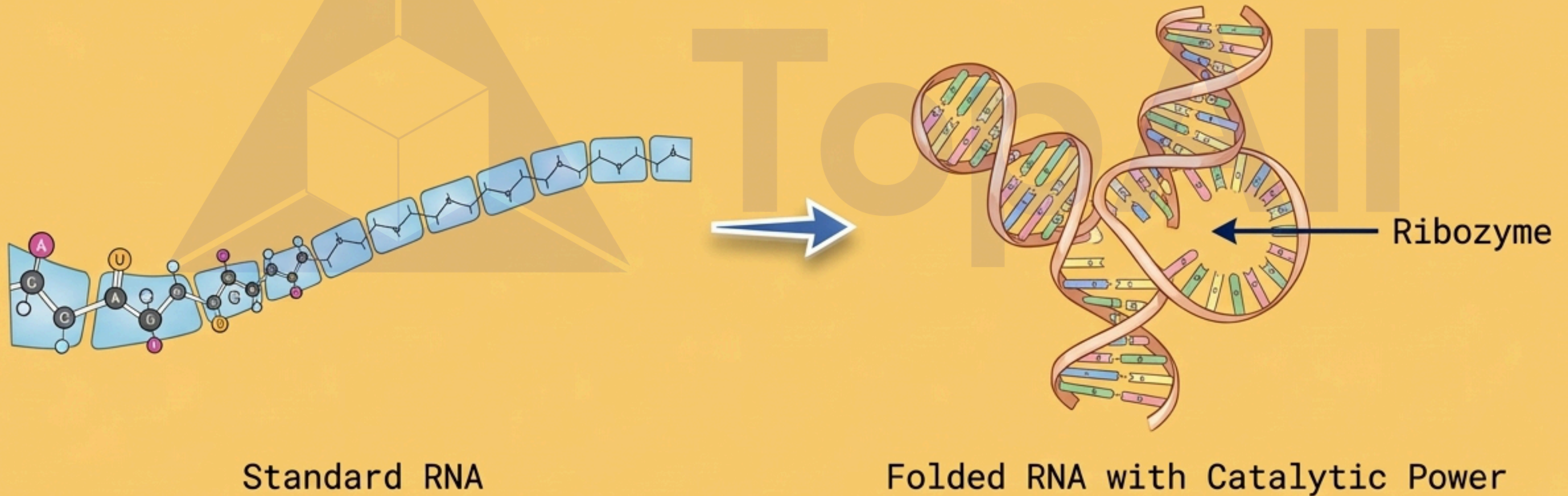


TERTIARY STRUCTURE



Ribozymes

While almost all biological catalysts are proteins, certain nucleic acids possess distinct catalytic power.





**You've Learned the Theory.
Let's Test Them Now.**

$$E=mc^2$$



Turn theory into marks with **unlimited MCQs, smart analysis, and focused revision.**

Practice Now



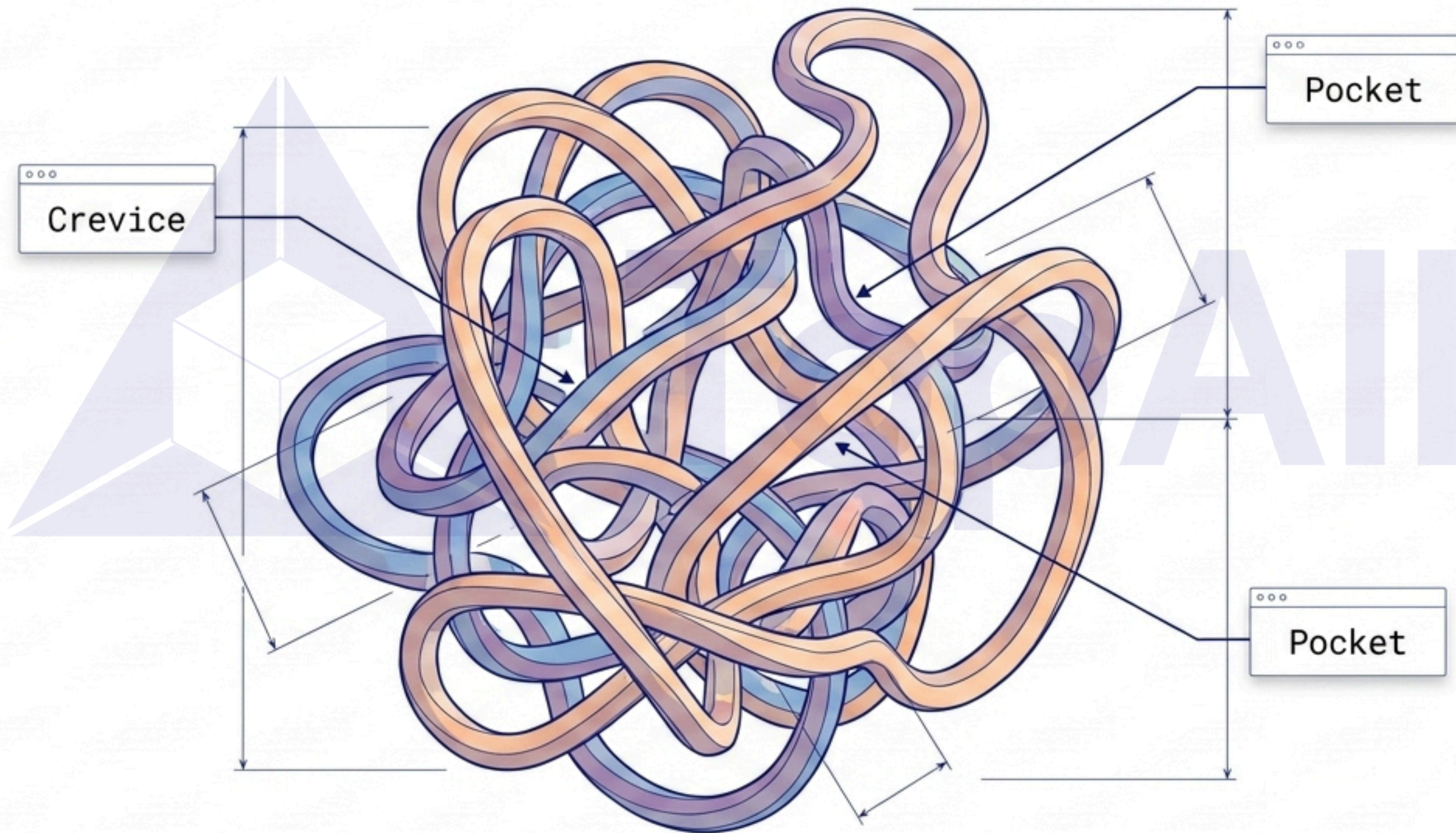
At prep.topall.app

Key Highlights

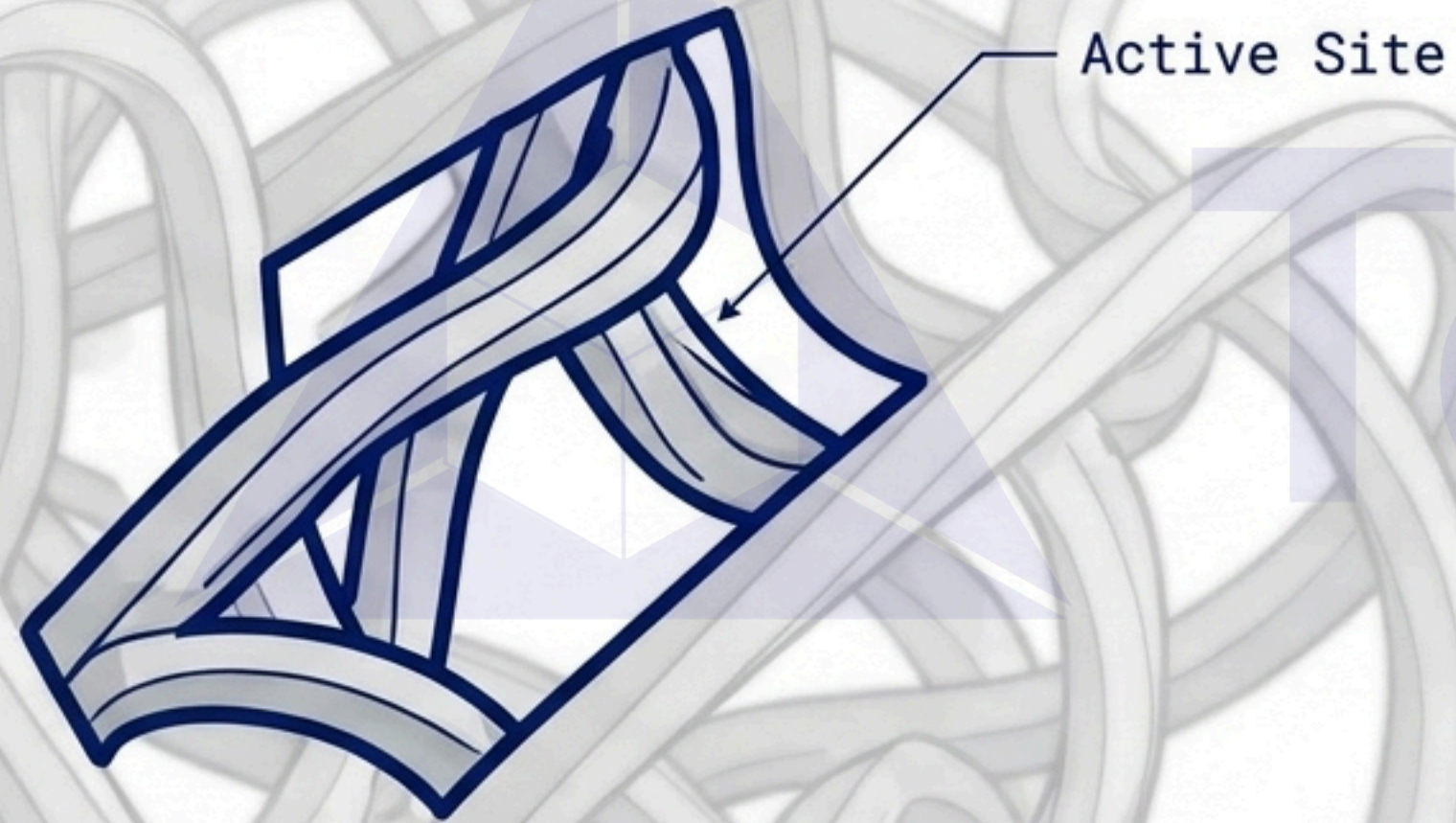
- » Free Study Material, Videos & Infographics
- » Push Your Limits with Level-Based Challenges
- » Climb the Leaderboard Among Fellow Aspirants
- » Practice Unlimited MCQs for NEET & JEE
- » Get Clear Explanations, Not Just Marks
- » Track Your Performance Smarter



Tertiary structure pockets



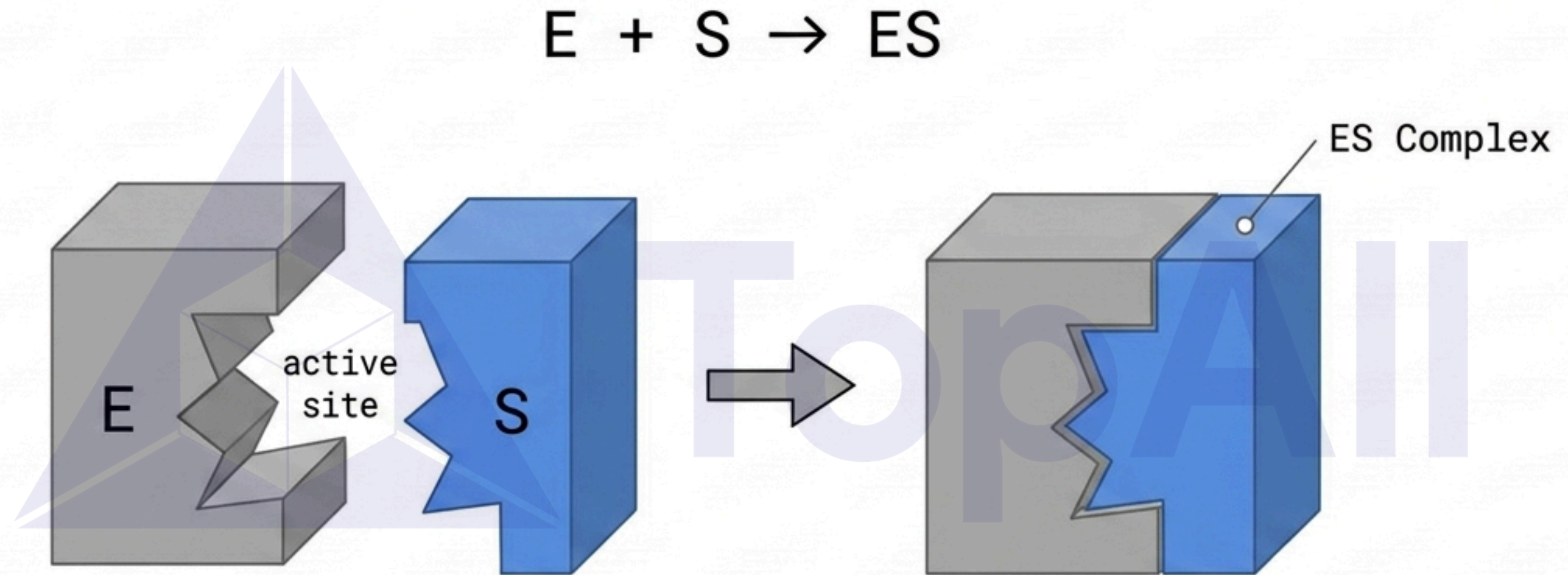
Active site



Structural Fragility

Inorganic catalysts withstand extreme conditions, but human enzymes get damaged at high temperatures (above 40°C). Heat destroys this precise 3D active site, permanently halting catalysis.

Substrate fitting



The substrate must physically diffuse into and bind to the active site within a given cleft, forming an obligatory, transient Enzyme-Substrate complex before bonds are broken.

10,000,000x Faster

Uncatalyzed



200 molecules formed in one hour

Enzyme Catalyzed



600,000 molecules formed every second

Enzymes are precision 3D architectures that don't just facilitate chemical reactions—they accelerate them to vastly higher biological speeds by physically bringing substrates together in the active site.



You've Learned the Theory.

Now Let's Test It.

Reading notes gets you knowledge.

Practicing MCQs gets you marks.

That's exactly what TopAll Pro is built for.

Try TopAll Pro Now

What TopAll Pro Does Differently

-  **Stuck? Snap it. Solve it. — Doubts AI**
Photo → step-by-step solution in seconds, 24/7
-  **Your AI Coach finds your blind spots**
Concept-level weakness detection — not just chapter-level
-  **4.5 Lakh+ questions. Never run out.**
13× more content than any other prep app in India
-  **Build your own test in 60 seconds**
Pick a chapter, set difficulty — AI does the rest instantly.
-  **AI Recommendation that helps you improve**
AI Recommendation Analysis your Tests and tell you where you need to improve.



Practice the moment you finish studying
Jump in while the concept is still fresh in your head

4.5L+
MCQs

1.5L+
Students

AI Powered
In-Depth Analysis