

■ EDUQUEST EXCLUSIVE 8-PAGE MASTER GUIDE

MCAT Pre-Med Strategy Guide & 515+ Score Blueprint

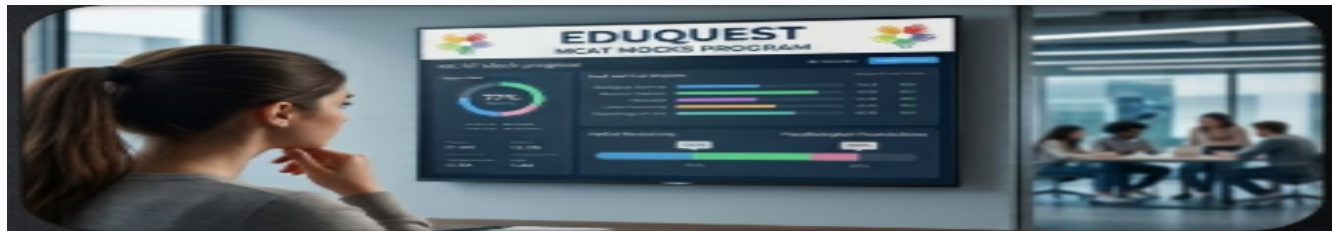
High-Yield Sciences, CARS Passage Navigation & Diagnostic Error Telemetry for Medical Schools

1. MCAT Exam Architecture & Scoring Scale

The Medical College Admission Test (MCAT) is the standardized computer-based examination for prospective medical students in the United States, Canada, and global medical schools.

Section	Questions & Timing	Score Range	Core Focus
Chemical & Physical Foundations (C/P)	59 Questions in 95 mins	118 – 132	Biochemistry, organic chemistry, physics, general chemistry
Critical Analysis & Reasoning (CARS)	53 Questions in 90 mins	118 – 132	Humanities, philosophy, ethics, cultural studies passages
Biological & Biochemical Foundations (B/B)	59 Questions in 95 mins	118 – 132	Molecular biology, genetics, anatomy, cellular metabolism
Psychological & Social Foundations (P/S)	59 Questions in 95 mins	118 – 132	Psychology, sociology, behavioral biology, statistics

Figure 1: MCAT AAMC Sectional Diagnostic Score Dashboard



■ 515+ Target Band

A 515+ score (90th percentile) is the target benchmark for admission to top 40 US Allopathic (MD) medical schools.

Module 2: Chemical & Physical Foundations (C/P) High-Yield Principles

1. High-Yield Physics & Chemistry Formulas

- Enzyme Kinetics: Michaelis-Menten equation $v = (V_{\max} \cdot [S]) / (K_m + [S])$, Lineweaver-Burk plots, competitive vs non-competitive inhibition.
- Thermodynamics & Electrochemistry: $\Delta G = \Delta H - T\Delta S$, $\Delta G^\circ = -RT\ln(K_{eq})$, Nernst equation for cell potential.
- Fluid Dynamics & Optics: Continuity equation $A_1 v_1 = A_2 v_2$, Bernoulli's equation, thin lens formula $1/f = 1/d_o + 1/d_i$.

Module 3: Biological & Biochemical Foundations (B/B) Mastery

1. Core Metabolic Pathways & Genetics

- Metabolism: Glycolysis, Pyruvate Dehydrogenase, Krebs Cycle, Electron Transport Chain, Gluconeogenesis, Beta-Oxidation ATP yields.
- Molecular Genetics: Central dogma, operons (lac operon), eukaryotic vs prokaryotic transcription/translation, recombinant DNA.
- Endocrine & Organ Systems: Nephron countercurrent multiplier, action potentials, cardiac cycle, hormonal feedback loops.

Module 4: CARS: The Main Idea & Argument Navigation System

1. CARS Passage Strategy

- Read for the Thesis: Identify the author's central claim within the first two paragraphs.
- Tone & Perspective: Note whether the author is celebratory, critical, detached, or cautionary.
- Eliminate Extreme Words: Options containing 'exclusively', 'invariably', or 'never' are rarely correct on CARS.

Module 5: Psychological, Social & Biological Foundations (P/S)

1. High-Yield Theories & Flashcard Concepts

- Cognitive Development: Piaget's 4 stages, Vygotsky's Zone of Proximal Development, Kohlberg's stages of moral reasoning.
- Sociological Theories: Structural functionalism, conflict theory, symbolic interactionism, social constructionism.
- Memory & Learning: Classical vs operant conditioning, working memory capacity, heuristics and cognitive biases.

Module 6: AAMC Full-Length Simulation Strategy

1. Diagnostic Score Trajectory

Score Band	Percentile Rank	Competitiveness for US MD / DO Schools
520 – 528	98th – 100th	Elite Tier: Highly competitive for Harvard, Johns Hopkins, Stanford, UCSF.
515 – 519	90th – 97th	Competitive MD Tier: Solid target for top 40 US Medical Schools.
508 – 514	74th – 88th	Standard MD / Top DO Tier: Competitive for state medical schools.
< 505	< 65th	Retake Recommended: High risk for allopathic (MD) admissions.

Module 7: 6-Month Study Calendar for International Pre-Meds

1. Month-by-Month Protocol

- Months 1–2: Content Review + Anki flashcards (C/P, B/B, P/S).
- Months 3–4: Section bank passage drills + 1 diagnostic mock every 2 weeks.
- Months 5–6: Weekly AAMC official full-length mocks under exact test-day timing.

Module 8: Candidate Self-Assessment & Mentorship Booking

1. Pre-Med Checklist

- Have you completed all amino acid structure and charge memorization? (Yes / No)
- Is your CARS practice scoring consistently at 128+? (Yes / No)
- Have you completed at least 5 official AAMC full-length mock exams? (Yes / No)

■ EduQuest Pre-Med Advisory

Our students achieve 515+ median MCAT scores and gain admission to top US, UK, and Caribbean medical schools.

■ Book Your 1-on-1 Strategy & Diagnostic Session

Schedule an MCAT Diagnostic Consultation with EduQuest Medical Mentors.

Hotline / WhatsApp: +91 99580 41888 | **Email:** contact@eduquest.org.in | **Web:** www.eduquest.org.in