

## PhD MATHEMATICS ENTRANCE EXAMINATION

### 50 Multiple Choice Questions

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#### Question Distribution Overview

Section	Topics	Count	Difficulty
Real Analysis	Limits, Continuity, Sequences, Series	7	Moderate-High
Complex Analysis	Analytic Functions, Residues, Contours	7	High
Linear Algebra	Vector Spaces, Eigenvalues, Determinants	5	Moderate
Abstract Algebra	Groups, Rings, Fields	3	High
ODE	Initial Value Problems, Solutions	6	Moderate
PDE	Wave, Heat Equations, Method of Characteristics	6	High
Topology & FA	Metric Spaces, Compactness, Operators	8	Very High
Numerical Analysis	Root Finding, Interpolation, Quadrature	8	Moderate

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