2023학년도 편입학전형 자연계열 필기시험(수학) 참고분야

대분류	소분류
Calculus	Functions and models
	Limits and continuity
	Derivatives
	Application of differentiation
	Integrals
	Applications of integration
	Techniques of integration
	Parametric equations and polar coordinates
	Infinite sequences and series
	Vectors and geometry of space
	Vector functions
	Partial derivatives
	Multiple integrals
	Line integrals, Green's theorem
	Curl and divergence
	Surface integrals, Stokes' theorem, Divergence theorem
Linear Algebra	Vector spaces and subspaces
	System of linear equations
	Basis and dimension
	Linear transformation and matrix
	The change of coordinate matrix
	Invertibility and isomorphism
	Dual spaces
	Determinants
	Eigen values, eigenvectors, and diagonalization
	Inner product space
	Orthogonality
	Orthogonal projection
Differential Equations	First order differential equations and applications
	Higher-order differential equations and applications
	Series solutions of linear equations
	Laplace transforms and applications
	System of linear first-order differential equations