



SuccessClap

Best Coaching for UPSC Mathematics

Year Long Weekly Test Series for UPSC CSE 2027

Total 50 TESTS for Practice

Why you need?

- Every week one Test.
- To Follow Year Long Strict Schedule: Time Bound Preparation for UPSC CSE 2027
- Testing after learning
- Reasonable time frame for topics to be learnt and test it .
- Total 50 Tests: Practicing at least 800 Questions.

How it Works?

- Download Question paper from the portal and take test.
- Evaluation in 3 days
- Regular Test: Time duration is 90 minutes which has 10 questions to be solved
- Full Length Test is 3hrs and as per UPSC model
- If you miss schedule, you can take Test on any other day.

Test Schedule

Test No	Date	Topic Covered
		LINEAR ALGEBRA
1	Lineal Algebra 1 19-07-2026	Matrix: Matrix Basics, Det, Adj, Find Rank Matrix-Reduction to Normal Form Cayley Hamilton-Proof, Problems Linear Eqns, Homogeneous, Find Dimension, Bases Matrix Eigen Vectors, Theorems Similarity of Matrix, Diagonalization Quadratic Form
2	Lineal Algebra 2 26-07-2026	Vector Spaces, Subspaces ,Basis, Dimensions, Nullity Linear Transformation: Given Linear Transformation, Find a) Rank, b) Nullity c) Range Space d) Null Space Invertible, Inverse transformation

		<p>Matrix LT</p> <p>Given Matrix Form of Linear Transformation, Find a) Rank, b) Nullity c) Range Space d) Null Space</p> <p>Given Linear Transformation with Two Different Bases Sets, Find Matrix</p> <p>Given Linear Transformation with Standard Basis. Find Matrix relative to New Basis Set</p>
		CALCULUS
3	Calculus1 02-08-2026	<p>Limits, Continuity, Differentiability, Uniform Continuity</p> <p>Indeterminants</p> <p>Asymptotes</p> <p>Max/Min Single variable and Application Problems</p> <p>Max/Min two variable and Multiple variables, Lagrange multiplier</p> <p>Max/Min Lagrange multiplier</p>
4	Calculus 2 09-08-2026	<p>Partial Differentiation, total differentiation</p> <p>Euler Identities</p> <p>Curve Tracing</p> <p>Length of Arc,</p> <p>Areas</p> <p>Volumes,</p> <p>Surfaces</p> <p>Differentiation under Integral Sign</p>
5	Calculus 3 16-08-2026	<p>Mean Value Theorem: Taylor/Maclaurin Expansion, generalised MVT, Rolle, Lagrange, Cauchy MVT, Function Increase decrease</p> <p>Jacobians</p> <p>Beta Gamma: Properties, Forms and Problems</p> <p>Beta Gamma: Several Variables Formula and Applications</p> <p>Definite Integral as Sum</p> <p>Multiple Integrals: Order Change, Evaluation</p>
		REAL ANALYSIS
6	Real Analysis 1 23-08-2026	<p>Riemann Integrals</p> <p>Summation of Series</p> <p>Theorems :</p> <p>Continuous is integrable</p> <p>Bounded and Finite Set of Discontinuity is integrable</p> <p>Bounded and Discontinuity point has fixed limit point is integrable</p> <p>Monotonic is integrable</p> <p>Integral Inequality Eqn</p> <p>First Mean Value Theorem</p> <p>Generalised Mean Value Theorem</p> <p>Second Mean Value Theorem</p> <p>Improper Integrals</p> <p>Limit Test</p> <p>Cauchy Test</p>

		Absolute Convergence and conditional convergence Abel Test Dirichlet Test
7	Real Analysis 2 30-08-2026	Functions of Several Variables Limit Continuity Differentiability Maxima and Minima Sequence Bolzano-Weistress Theorem Cauchy First Theorem on Limit Cauchy second Theorem on Limit Caseros Theorem Cauchy sequence Monotone Convergence Theorem
8	Real Analysis 3 06-09-2026	Series Necessary Condition Comparison Test Comparison Test of Second Kind D Alembert Ratio Test Cauchy nTH Root Test Raabe Test Logarithmic Test DE Morgan and Bertrand Test Second Logarithmic Ratio Test Kummer Test Gauss Test Cauchy Integral Test Cauchy Condensation Test Uniform Convergence Cauchy Principle Mn Test Weir strass Test Abel Test Dirichlet Test Properties on a) Sum b) Differentiability c) Integrability
		VECTOR ANALYSIS
19	Vector Analysis 1 13-09-2026	Differentiation of Vectors Gradients, Divergence, Curl Directional Derivative : Max/Min ,Angle made, Vector Identities: Proofs -Curl (A XB), Div (AX ,Grad (A.B) ,Curl(curl A) Invariance under Transformation Vector Integration Line Integral Surface Integral Volume Integrals

		Divergence Theorem Stoke Theorem
10	Vector Analysis 2 20-09-2026	Green Theorem Work done. Differential Geometry: Derive Serret Frennet formula, Show curve lie in Plane, Find Curvature Vector, Problems on finding Radius of Curvature, Torsion
		ODE
11	ODE1 27-09-2026	Formation of DE, Eqn of 1stOrder 1st degree - Ch 2.1 to 2.15 Integrating Factor - Ch 2.16 to 2.27 Geometry Application -Ch 2.28 ++ Trajectories - Ch 3 Eqn 1st Order but not 1dt degree - Ch 4.1 to 4.7 Clauruit - Ch 4.8 to 4.11 Singular Soln, Loci - Ch 4.12 ++
12	ODE2 04-10-2026	Linear DE with constant Coefficient - Ch 5.1 to 5.25 Cauchy Euler Eqns - Ch 6 Method of Variation of parameter - Ch 7 Simultaneous Differential Eqns - Ch 8
13	ODE3 11-10-2026	Linear Eqn of Second Order - Ch 10 Laplace, Inverse Laplace Laplace Application
		PDE
14	PDE 18-10-2026	Formation of PDE - Ch1 Linear PDE of Order 1 Lagrange Eqns - Ch 2:2.1 to 2.13 Surface Passing through Curve, Orthogonal - Ch 2.14 to 2.19 Linear PDE n independent variable - Ch 2.20 + "Non Linear PDE ofOrder 1: Simultaneous Eqns, Charpit - Ch 3.1 to 3.8" Charpit - Ch 3.7 to 3.8 Special methods - Ch 3.9 to 3.18
15	PDE2 25-10-2026	Jacobians - Ch 3.19 to 3.22 Cauchy Strip problems - Ch 3.23 Homogeneous Linear PDE with Constant Coefficient - Ch 4 Non homogeneous Linear PDE with Constant Cooefficient Ch5 Cauchy Euler PDE - Ch 6 Geometry Application - Ch 7.10 ++ Canonical Method - Ch 8
16	PDE3 01-11-2026	PDE Applications Wave Eqn Initial Velocity is zero, Initial Displacement is Given

		<p>Initial Velocity is Given, Initial Displacement is Zero</p> <p>Heat Eqn a) Initial Temperature $f(x)$.Both Ends suddenly changed to Zero Temperature b) Initial Temperature (T_1 , T_2) , suddenly change to (T_3 , T_4) c)Initial Temperature $f(x)$. Both Ends Insulated suddenly d)At $t=0$ distribution is $f(x)$. Suddenly One end is kept at T_1 and other end Insulated</p> <p>Laplace Eqns a) Three sides Temperature is 0, Other side $f(x)$ b) Two sides Temperature is 0, One side $f(x)$, Other side at Infinite Long c)One side Insulated (X-Axis) d)One Side Insulated (Opposite side of X-Axis) e) Two sides Insulated , X-axis side $f(x)$, Other side 0 f) Two sides Insulated, X-axis side 0, Other side $f(x)$ g) Three sides Insulated</p> <p>Laplace in Polar Coordinate Sysytem a) Semicircular Plate b) Circular Arc c) Circular Place d) Circular Annulus</p>
		COMPLEX ANALYSIS
17	Complex Analysis 1 18-10-2026	<p>Analytic Function: Cauchy Riemann Equation Given Function and Given Point a) Show it satisfy Cauchy Riemann eqn b) Show Analytic or Non-Analytic c) Show Existence of Derivative or Not Given U or V as Harmonic Function, find its Conjugate and also Function</p> <p>Complex Integration: Cauchy Integrals, Zeroes, Singularity, Poles,</p>
18	Complex Analysis 2 15-11-2026	<p>Series Expansion Expand in Taylor Series Expand in Laurent Series Power Series representation Use Cauchy Residue Theorem, to Evaluate the Integral Rouche theorem Contour Integrations</p>
		LPP
19	LPP1 22-11-2026	<p>Formulation of LPP Graphical Method of Solution Simplex Method</p>
20	LPP2 29-11-2026	<p>Simplex: Big M Method, Phase 2 Method Construct Dual and Solve</p> <p>Transportation Problem</p>

		Assignment Problem Travelling Salesman problem
		NUMERICAL ANALYSIS
21	Numerical Analysis 1 06-12-2026	<p>Obtain derivation (a) Quadrature Formula, (b) Trapezoid Rule, (c) Simpson 1/3, (d) Simpson 3/8. Rule and also (e) derive their Error Formula for ALL RULES.</p> <p>Gauss Quadrature Formula. Derive formula for $n=3,4,5$ Derive Newton Gregory Forward interpolation formula, and its Error.</p> <p>Derive Newton Gregory's Backward Interpolation formula and its Error</p> <p>Lagrange Interpolation, Derivation of formula and derive its Error formula</p>
22	Numerical Analysis 2 13-12-2026	<p>Solve ODE Problems a) Euler b) Euler Modified c) Runge Kutta Order 1, 4</p> <p>Newton Raphson Method a) Derivation, b) Find Condition for its convergence c) Show rate of convergence is quadratic d) Explain its merits and demerits</p> <p>Bisection Method Regula Falsi Method Secant Method Iteration Method and its Convergence Solve Linear Eqns a) Gauss Elimination b) Gauss Jordan c) Gauss Seidel d) Gauss Jacobi</p> <p>Use Gauss Jordan to Find Inverse</p>
23	Numerical Analysis 3 20-12-2026	<p>Boolean Algebra Conversion -Decimal, Octagonal, Hexadecimal Solve Boolean Expression CNF, DNF Algorithms and Flow Chart</p>
		MECHANICS
24	Mechanics 1 27-12-2026	<p>Solving Problems on Lagrange Eqns Solving Problems on Hamilton Eqns</p>
25	Mechanics 2 03-01-2027	<p>D'Alembert Principal Problems Moment of Inertia</p>

26	Mechanics 3 10-01-2027	Fixed Axis Motions (Important questions Only) Motion in 2Dimension (Important questions Only)
		FLUID DYNAMICS
27	FD1 17-01-2027	Learn Basics: Del, Div, curl in Cartesian, spherical, cylindrical, general coordinate system Kinematics Ch 2 Equation of Motion of Inviscid Fluids Ch 3 Bernoulli Eqns Ch 4
28	FD2 24-01-2027	Sources and Sink Ch 5 Irrotational Motion Ch 6 Motion of Cylinder Ch 7 Irrotational Motion in 3D Ch 10
29	FD3 31-01-2027	Vortex Motion Ch 11 Navier Stoke Ch 14 Laminar Flow in Pipes Ch 16
		Analytic Geometry
30	Geometry 1 07-02-2027	Basics: System of Coordinates, Directional Cosines Ch 1 2 Planes Straight Lines Shortest Distance Skew Lines
31	Geometry 2 14-02-2027	Spheres Cylinder Cone
32	Geometry 3 21-02-2027	Conicoids Paraboloids Generating Lines Reduction of General equation
		Statics
33	Statics 28-02-2027	Equilibrium of Rigid bodies Virtual Work Catenary Stable Unstable Equilibrium Friction
		Dynamics
34	Dynamics 07-03-2027	Rectilinear Motion SHM Projectile Motion Central Forces, Kepler Law, Planetary Motion Constrained Motion in Circle, Plane Motion in Resisting Medium

Abstract Algebra		
35	Algebra 1 14-03-2027	Groups Ch 1
36	Algebra 2 21-03-2027	Homomorphism and Permutation Ch 2 Sylow Theorem Ch 4
37	Algebra 3 21-03-2027	Rings Ch1 Homomorphism, Max, Prime Ideals PID Ch-2
38	Algebra 4 28-03-2027	Eucliden and Polynomial Rings Ch-3
FULL LENGTH TESTS		
39	06-06-2027	Full Length Test Paper 1
40	06-06-2027	Full Length Test Paper 2
41	13-06-2027	Full Length Test Paper 3
42	13-06-2027	Full Length Test Paper 4
43	20-06-2027	Full Length Test Paper 5
44	20-06-2027	Full Length Test Paper 6
45	27-06-2027	Full Length Test Paper 7
46	27-06-2027	Full Length Test Paper 8
47	04-07-2027	Full Length Test Paper 9
48	04-07-2027	Full Length Test Paper 10
49	11-07-2027	Full Length Test Paper 11
50	11-07-2027	Full Length Test Paper 12

NOTE:

- The validity of Test Series is till UPSC Mains 2027 Exam.
- All Papers will be Evaluated before the validity.
- After UPSC Mains 2027 Exam, papers will not be evaluated.
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