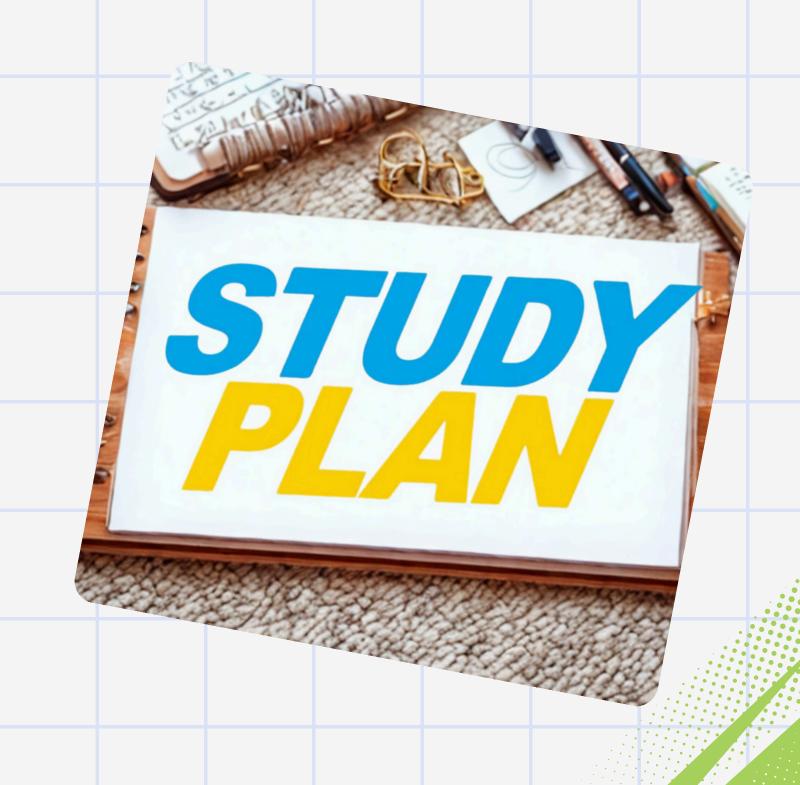


Perfect for the focused, hardworking student aiming higher



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CORE PRIORITIES



Environmental & IV & V ~60 Marks Chemical Civil Engineering II & III Civil Engineering II & III Civil Engineering Civil Engineering	AREA	MODULES	WEIGHT	STRATEGY
CIVII Engineering II X III - ~30 Marks		IV & V	~60 Marks	
	Civil Engineering	II & III	~30 Marks	-
Mathematics I ~10 Marks Daily practice (target 100% accuracy)	Mathematics		~10 Marks	

STRUCTURE OF THE PLAN



Phase 1 Foundation (Day 1 - 20)

Phase 2 Environmental & Chemical Core (Day 21 - 45)

Phase 3 Final Revision & Mock Tests
(Day 46 – 60)

Phase 1 – Foundation (Day 1–20)



Focus: Engineering Maths + Civil Fundamentals + Start Environmental basics

	Day	Main Civil / Environment / Chemical Topics	Daily Maths Workout
	1	Engineering Mechanics – Forces, Moments, Equilibrium	Matrices & Determinants
	2	Strength of Materials – Stress, Strain, Elastic Constants	Eigen values & vectors
	3	RCC – Design philosophies, Limit state concept	Partial Differentiation
_			



Day	Main Civil / Environment / Chemical Topics	Daily Maths Workout
4	RCC – Singly & Doubly Reinforced Beams	Maxima & Minima (2 variables)
5	Steel Structures – Tension & Compression Members	Taylor & Maclaurin Series
6	Building Materials – Concrete, Admixtures, IS Codes	ODE (First Order)
7	Building Construction – Foundations, Masonry, Roofs	ODE (Second Order)



Day	Main Civil / Environment / Chemical Topics	Daily Maths Workout
8	Construction Management – CPM, PERT, Valuation	Laplace Transforms
9	Survey – Levelling, Contours, Theodolite	Complex Analysis basics
10	Fluid Mechanics – Properties of fluids, Flow types	Vector Differentiation
11	Fluid Mechanics – Pipe flow, Losses, Turbines	Gradient, Divergence, Curl



Day	Main Civil / Environment / Chemical Topics	Daily Maths Workout
12	Hydrology – Precipitation, Runoff, Hydrograph	Fourier Series
13	Irrigation – Duty, Delta, Crop Water Requirement	Partial Differentiation revision
14	Geotech – Soil Properties & Classification	Laplace Equation Practice
15	Geotech – Permeability, Compaction, Consolidation	Differential Eqns review



Day	Main Civil / Environment / Chemical Topics	Daily Maths Workout
16	Geotech – Bearing Capacity, Earth Pressure	Numerical methods overview
17	Transportation – Highway Geometric Design	Statistics & Probability
18	Transportation – Pavement Design & CBR	Regression & Correlation
19	Environmental – Water Demand, Population Forecast	Differential Eqns review
20	Environmental – Water Treatment (Sedimentation, Filtration)	Laplace practice + Test 1

Phase 2 – Environmental & Chemical Core (Day 21 – 45)



Priority: Pollution control, wastewater, air & solid waste management + chemical processes.

Day	Core Topics	Daily Maths Workout
21	Sewer Design, BOD, COD, Sewer Appurtenances	Vector revision
22	Wastewater Treatment Units – Screening, Grit, Sedimentation	Laplace applications
23	Biological Treatment – ASP, Trickling Filter, RBC	ODE Test 2
24	Sludge Treatment – Digestion, Drying Beds	Series practice



Day	Core Topics	Daily Maths Workout
25	Industrial Wastewater – Dairy, Paper, Tannery	Matrix & Determinant Test
26	Air Pollution – Sources, Effects, Dispersion Models	Probability practice
27	Air Pollution Control – Cyclone, ESP, Scrubber	Fourier review
28	Solid Waste Mgmt – Collection, Processing, Landfill	Gradient & Curl problems



Day	Core Topics	Daily Maths Workout
29	E-Waste, Bio-Medical, Nuclear Waste, Noise Control	Vector Revision Test
30	Environmental Acts – Water Act, Air Act, EPA	Laplace Test 3
31	Environmental Mgmt – EIA, ISO 14001, EMS	Calculus recap
32	Climate Change, Kyoto, Montreal, Kigali Protocols	ODE mixed set



Day	Core Topics	Daily Maths Workout
33	Sustainable Development, Green Building	Fourier practice
34	Renewable Energy, Carbon Credit & Trading	Probability revision
35	Process Calculations – Mole Concept, Material Balance	Matrix practice
36	Energy Balance, Heat Capacity, Enthalpy	Differential Eqn set



Day	Core Topics	Daily Maths Workout
37	Thermodynamics – 1st & 2nd Law, Entropy	Laplace application
38	Reaction Engineering – Kinetics, Reactor Types	Series + Vector combo
39	Catalysis, Diffusion, Porous Media	Problem Test 4
40	Process Instrumentation – Pressure, Temperature, Flow	Complex Analysis revision



Day	Core Topics	Daily Maths Workout
41	pH & Spectroscopic Analysis methods	Vector Test 5
42	Numerical Practice – Process Calc Problems	Quick Math Drill
43	Industrial Pollution Case Studies + ISO Standards	Formula Revision
44	Waste Minimisation & Cleaner Production	Practice Paper – Maths
45	Revision – Environmental & Chemical Modules	Combined Mock Maths Test

Phase 3 – Final Revision & Mock Tests (Day 46 – 60)



Goal: Link theory application exam mindset.

Day	Focus	Task
46 - 48	Civil Engineering Revision (Structures, Geotech, Survey)	Rapid short-notes review
49 - 51	Environmental Engineering Revision	Solve previous PSC & AE papers
52 - 54	Chemical & Process Engg Revision	Formula sheet & numerical test
55 - 56	Mock Test 1 & Analysis	Identify weak areas

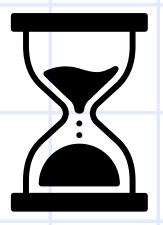
Phase 3 – Final Revision & Mock Tests (Day 46 – 60)



Day	Focus	Task
57 - 58	Mock Test 2 & Topic Brush-up	Target weak modules
59	Full Syllabus Revision + Quick MCQs	Timed practice
60	Final Full-Length Mock + Reflection	Strategy for exam day

Daily Schedule Example





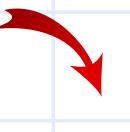
7 - 9 AM

Mathematics Workout (Problem practice)



Core Subject Study
(Environmental or Chemical)

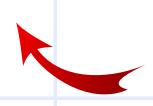
10 - 1 PM



15 min Summary

NIGHT

Notes Update





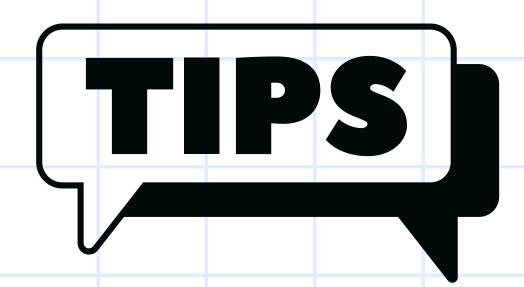
MCQs + Short Revision

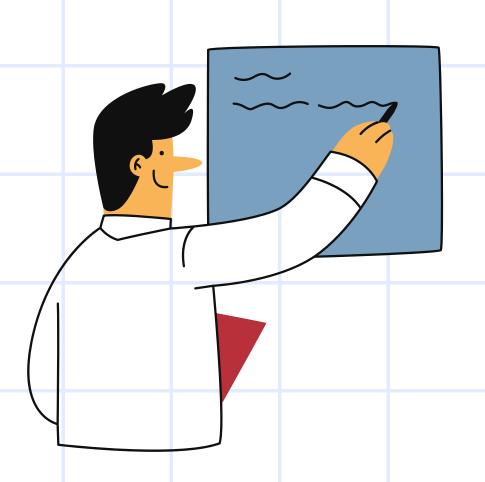
6 - 8 PM

2 - 5 PM

Civil Subject (Structures/ Geo/Fluid/Survey rotation)







Maintain three notebooks:

Civil Core Notes

Environmental/Chemical Core

Maths Formula & Tricks

- Weekly mini-test on Sundays (20 MCQs each from 3 modules).
- Use KPSC AE Previous Papers + GATE Civil Environmental sets for applied practice.
- Prioritize Module IV & V (60 marks total) → review thrice during the plan.





