

Online Test Series Details for GATE 2025 - 26

Branch : Chemical Engineering

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Test Name
Topic Wise Tests Total 24 tests
Subject Wise Tests (Basic Level) Total 12 tests
Subject Wise Test (Advance Level) Total 12 tests
Multiple Subjects Tests Total 12 tests
Full Length Mock GATE Total 10 tests

Topic-wise Tests (One Year Program)

Each test carries 30 marks and 45 minutes duration.

Test consists of 10 one mark questions and 10 two marks questions.

Topic		Subject
Test 1	Fluid Properties, Fluid Statics, Fluid Kinematics, Fluid dynamics	Fluid Mechanics
Test 2	Internal flow, Boundary layer, Pumps, Flow meters.	

Topic		Subject
Test 1	Linear Algebra, Differential Equations, Vector calculus, Probability	Engineering Mathematics
Test 2	Differential Calculus, Integral calculus, Complex numbers, maxima & minima	

Topic		Subject
Test 1	<ol style="list-style-type: none"> 1. Diffusion 2. MT Coefficient, MT Theories and Dimensionless Nos 3. Interphase Mass Transfer 4. Absorption 5. Distillation 	Mass Transfer
Test 2	<ol style="list-style-type: none"> 6. Extraction 7. Humidification 8. Drying 9. Adsorption 10. Membrane Separation 	

Topic		Subject
Test 1	<ol style="list-style-type: none"> 1. Polymerization Industries 2. Petroleum Refining 3. Petro-Chemicals 	Chemical Technology
Test 2	<ol style="list-style-type: none"> 4. Natural Products Industries (Pulp and Paper, Sugar, Oil, Fats & Detergents) 5. Fertilizers (Ammonia, Urea, SSP and TSP) 6. Inorganic chemical industries (sulfuric acid, phosphoric acid, chlor-alkali industry) 	

Topic		Subject
Test 1	Classical Thermodynamics	Thermodynamics
Test 2	Solution Thermodynamics	

Topic		Subject
Test 1	Conduction(Steady and unsteady state, heat generation), convection	Heat Transfer
Test 2	Radiation, Heat Exchanger, Evaporator, Boiling & Condensation	

Topic		Subject
Test 1	<ol style="list-style-type: none"> 1. Theories of reaction rates 2. Kinetics of homogeneous reactions 3. Interpretation of kinetic data 4. Single and multiple reactions in ideal reactors 5. Kinetics of enzyme reactions (Michaelis-Menten & Monod Mo.) 	Chemical Reaction Engineering
Test 2	<ol style="list-style-type: none"> 6. Non-ideal reactors, Residence time distribution and Single parameter model 7. Non-isothermal reactors 8. Kinetics of heterogeneous catalytic reactions 9. Diffusion effects in catalysis 10. Rate and performance equations for catalyst deactivation 	

Topic		Subject
Test 1	Introduction and material balance without chemical reaction	Process Calculations
Test 2	Material balance with chemical reaction, combustion, Energy balances	

Topic		Subject
Test 1	<ol style="list-style-type: none"> 1. Laplace Transform 2. First Order Systems 3. Second & Higher order Systems 4. Closed Loop and Feedback Control 5. Stability of Control System and Routh Array Method 	Instrumentation and Process Control
Test 2	<ol style="list-style-type: none"> 6. Frequency Response, Bode Stability Criteria & Controller tuning 7. Control Valves 8. Feed forward and Cascade Control 9. Inverse Response 10. Instrumentation 	

Topic		Subject
Test 1	Verbal and Analytical Aptitude	General Aptitude
Test 2	Spatial and Quantitative Aptitude	

Topic		Subject
Test 1	Cost indices, time value of money, Depreciation	Plant Design & Economics
Test 2	Design, breakeven point and optimization, Profitability	

Topic		Subject
Test 1	Size reduction and solid handling	Mechanical Operations
Test 2	Fluidization, filtration, Mixing	

Basic Subject-wise Tests (One Year Program)

Each test carries 50 marks and 90 minutes duration.

Test consists of 10 one mark questions and 20 two marks questions.

Subjects	No. of Tests
General Aptitude + General English	01
Fluid Mechanics	01
Engineering Mathematics	01
Mass Transfer	01
Heat Transfer	01
Mechanical Operations	01
Chemical Reaction Engineering	01
Thermodynamics	01
Instrumentation & Process Control	01
Mechanical Operations	01
Chemical Technology	01
Plant Design & Economics	01

Advance Subject-wise Tests (One Year Program)

Each test carries 50 marks and 90 minutes duration.

Test consists of 10 one mark questions and 20 two marks questions.

Subjects	No. of Tests
General Aptitude + General English	01
Fluid Mechanics	01
Engineering Mathematics	01
Mass Transfer	01
Heat Transfer	01
Mechanical Operations	01
Chemical Reaction Engineering	01
Thermodynamics	01
Instrumentation & Process Control	01
Mechanical Operations	01
Chemical Technology	01
Plant Design & Economics	01

Multi-Subject Tests (One Year Program)

Each test carries 50 marks and 90 minutes duration.

Test consists of 10 one mark questions and 20 two marks questions.

Subjects	
Basic Level	Advanced Level
Aptitude + Engineering Maths	Aptitude + Engineering Maths
Network Theory + Machines	Network Theory + Machines
PC + Thermodynamics	PC + Thermodynamics
MT + HT	MT + HT
CRE + PDC	CRE + PDC
CT + Economics	CT + Economics

Full Length Mock GATE (Tentative Details for One Year Program)

(Each test carries 100 marks and 3 hours duration) as per GATE Pattern.

Subjects
Full Length Mock - 1
Full Length Mock - 2
Full Length Mock - 3
Full Length Mock - 4
Full Length Mock - 5
Full Length Mock - 6
Full Length Mock - 7
Full Length Mock - 8
Full Length Mock - 9
Full Length Mock - 10

Finally... How to get registered for Test Series ?

Step - I	Step - II
<p>Visit http://onlinetestseries.gateacademy.co.in Click on New Registration Fill the Form, You will be Redirected to the Test Portal Click on buy Package Make Payment using Coupon code (For gate academy student) or by online payment.</p>	<p>Send completely filled registration form to our office (for gate academy student)</p>