



EXERGIC

India's leading institute for
online GATE prep

**GATE 2022
Test Series**

Tests Overview

Topicwise Tests

30 Tests | 15 questions per test | 45 minutes

Subject Tests

25 Tests | 25 questions per test | 75 minutes

Full Length Tests

15 Tests | 65 questions per test | 180 minutes

**“Either you bear
the pain of
discipline or you
bear the pain of
consequences”**





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GATE 2022 Test Series

Tests Topics

Topicwise Tests

Strength of Materials

SOM 1

Stress and strain, elastic constants, Poisson's ratio; Mohr's circle for plane stress and plane strain; thin cylinders; SFD and BMD; bending and shear stresses

SOM 2

Shear centre; deflection of beams; torsion of circular shafts; Euler's theory of columns; energy methods; thermal stresses; strain gauges and rosettes; testing of materials.

Thermodynamics

ET 1

1st law for closed and open system, Second law

ET 2

Entropy and Availability, Thermodynamic relations, Properties of Pure Substances, behavior of ideal and real gases

Fluid mechanics

FM 1

Fluid properties, Fluid statics, manometry, Buoyancy and Floatation, forces on Submerged bodies, momentum and energy, fluid acceleration, differential equation of continuity and momentum, Bernoulli's equation

FM 2

Dimensional analysis; viscous flow of incompressible fluids, boundary layer, elementary turbulent flow, flow through pipes, head losses in pipes, bends and fittings; basics of compressible fluid flow, Impact of jets, Turbines and pumps



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Theory of machines

TOM 1

Displacement, velocity and acceleration analysis of plane mechanisms; dynamic analysis of linkages; cams;

TOM 2

gears and gear trains; flywheels and governors; balancing of reciprocating and rotating masses; gyroscope.

Heat Transfer

HT 1

Modes of heat transfer; one dimensional heat conduction, resistance concept and electrical analogy, heat transfer through fins; unsteady heat conduction, lumped parameter system, Heisler's charts

HT 2

Convection, Radiation, Heat Exchangers

Applied Thermo

ETA 1

Air and gas compressors; power cycles I.C.engines: Turbomachinery.

ETA 2

Refrigeration and air-conditioning

Machine Design

MD 1

Design for Static & Fluctuating loads, Sliding contact and Rolling contact bearings

MD 2

Welded, riveted and threaded joints, Friction clutches, Brakes

Engg Mechanics

EM 1

Free-body diagrams and equilibrium, friction and its applications including rolling friction, belt-pulley, brakes, clutches, screw jack, etc.: trusses and frames,

EM 2

kinematics and dynamics of rigid bodies in plane motion, impulse and momentum (linear and angular) and energy formulations, Lagrange's equation



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Manufacturing & Production

MP 1

Metal Casting, Metal Forming, Metal Cutting

MP 2

Metal Joining, Non Traditional Machining, Computer Integrated Manufacturing

Industrial Engg and OR

IEOR 1

Linear Programming, Transportation and Assignment, CPM, PERT

IEOR 2

Queuing Theory, Sequencing, Line Balancing, Inventory Control, Forecasting, MRP

General Aptitude

GA 1

Verbal Ability

GA 2

Quantitative Aptitude

GA 3

Reasoning

Engg Mathematics

MA 1

Linear algebra, differential calculus integral calculus and vector calculus

MA 2

Functions and differentiability, complex functions, and probability and statistics

MA 3

Laplace transformation, fourier series and numerical methods



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Full Subject Tests

Strength of Materials	Engg Thermodynamics	Fluid Mechanics	Theory of Machines
SOM F1	ET F1	FM F1	TOM F1
SOM F2	ET F2	FM F2	TOM F2
Heat Transfer	Applied Thermodynamics	Machine Design	Engg Mechanics
HT F1	ETA F1	MD F1	EM F1
HT F2	ETA F2	MD F2	EM F2
Manufacturing & Production	Industrial Engg & Op. Reseach	Engg Mathematics	General Aptitude
MP F1	IEOR F1	MA F1	GA F1
MP F2	IEOR F2	MA F2	GA F2

Full Length Tests

FLT -1 to FLT -15



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GATE 2022 Test Series Tests Timeline

*April
2021*

EM 1
EM 2
ET 1
ET 2
ETA 1
ETA 2

*Jun
2021*

MP 1
MP 2
IEOR 1
IEOR 2
GA 1
GA 2
GA 3
MA 1
MA 2

*Aug
2021*

HT F1
HT F2
ETA F1
ETA F2
MD F1
MD F2
EM F1
EM F2

*May
2021*

SOM 1
SOM 2
TOM 1
TOM 2
FM 1
FM 2
HT 1
HT 2
MD 1
MD 2

*Jul
2021*

SOM F1
SOM F2
ET F1
ET F2
FM F1
FM F2
TOM F1
TOM F2

*Sep
2021*

MP F1
MP F2
IEOR F1
IEOR F2
MA F1
MA F2
MA F3
GA F1
GA F2



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GATE 2022 Test Series Tests Timeline

*Oct
2021*

FLT 1
FLT 2
FLT 3

*Dec
2021*

FLT 8
FLT 9
FLT 10
FLT 11
FLT 12

*Nov
2022*

FLT 4
FLT 5
FLT 6
FLT 7

*Jan
2022*

FLT 13
FLT 14
FLT 15