

# UPSC Maths Optional Books Paper I & Paper II

## Mathematics Paper I

- Dynamics, Statics and Hydrostatics – M. Ray
- Calculus – Shanti Narayan
- Analytic Geometry – Shanti Narayan, DK Jha, HC Sinha and Sharma
- Ordinary Differential equations:- Golden series-NP Bali, MD Raising Lumina
- Vector analysis – Shantinakaran
- Linear Algebra – K.C. Prasad, K B Datta

## Mathematics Paper II

- Linear Programming – SD Sharma
- Algebra – K C Prasad, KB Datta
- Mechanics & Fluid dynamics – Azaroff Leonid, AP Mathur
- Complex Analysis – GK Ranganath
- Real Analysis – Shanti Narayan, Royden
- Partial Diff.eq.s. – Singhanian
- Numerical analysis and Computer Progg. – SS Shastri, V. Rajaraman

## Reference books

- Statistical Mechanism – Carson Horg
- Calculus – I. A. Menon
- Coordinate Geometry – R. L. Soni
- Mathematics Dictionary – James
- Differential Equations – Schaum Series (Frank Ayres)
- Mechanism – D. S. Mathur
- Numerical Analysis – S.S. Sastry

- Textbook of Coordinate Geometry – Rai Ballabh
- Analytical Solid Geometry – Shanti Narayanan
- Complex Analysis – Schaum Series
- Differential Calculus – Gorakh Prasad
- Linear Algebra – Schaum Series (Lipshutz) or Sharma and Vashishta
- Matrices – Schaum Series (Frank Ayres) or Vashisth
- Mechanism – D. S. Mathur
- Modern Algebra – A. R. Vashisth
- Operations Research – Kanti Swarup
- Solid Mechanism – Kazmi
- Algebra – J. N. Sharma and S. N. Goyal