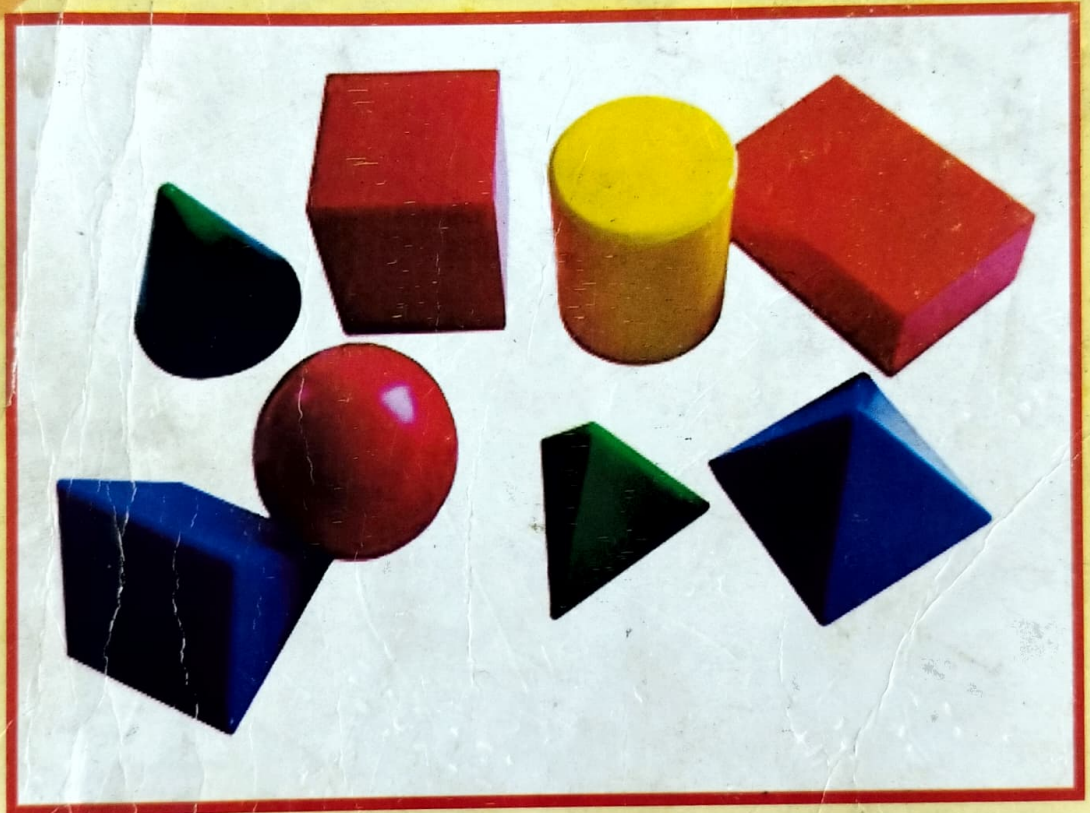


SOLID GEOMETRY

SUDHIR PUJARA • UPASNA • POONAM SAINI • MINI



A.S. PRAKASHAN, MEERUT

A Sister Concern of Pragati Prakashan, Meerut

SOLID GEOMETRY

*For B.A./B.Sc. I Year (First Semester) Students of
M.D.U., Rohtak, K.U., Kurukshetra & CDLU*

SUDHIR PUJARA

*Department of Mathematics
Govt. College,
BAPALI*

UPASNA

*Associate Professor
Department of Mathematics
Dayanand Mahilla Mahavidyalya,
KURUKSHETRA*

POONAM SAINI

*Assistant Professor
Department of Mathematics
Guru Nanak Girls College,
YAMUNANAGAR*

MINI

*Assistant Professor
Department of Mathematics
S.A. Jain (PG) College,
Ambala City*



WITH BEST COMPLIMENTS FROM:
Anil Sharma
ASM

SPECIMEN COPY



A. S. PRAKASHAN

D-106, Saket, Meerut 250 001, U.P.

A Sister Concern of Pragati Prakashan, Meerut

For MDU/KU/CDLU

MATHEMATICS

- Algebra
- Calculus
- Solid Geometry
- Number Theory and Trigonometry
- Ordinary Differential Equations
- Vector Calculus
- Advanced Calculus
- Partial Differential Equations
- Statics
- Sequences and Series
- Special Function and Integral Transforms
- Programming in 'C' and Numerical Methods
- Real Analysis
- Group and Rings
- Dynamics
- Real and Complex Analysis
- Linear Algebra
- Numerical Analysis

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A.S. PRAKASHAN
Educational PublishersD-106, Saket, Meerut
Phone : 0121-6544643, 6544642
e-mail : asprakashanmrt@gmail.com**Our Books also available at****PRAGATI PRAKASHAN**
Educational Publishers240, W. K. Road, Meerut-250 001
SMS/Ph. : (0121) 6544642, 6451644
Tele/Fax : (0121) 2640642, 2643636
www.pragatiprakashan.in
e-mail : pragatiprakashan@gmail.com**Edition 2018**

ISBN : 978-93-86706-03-4

Price : ₹ 235/-Published by : A.S. Prakashan, D-106, Saket, Meerut-250001. Laser Typesetting : Pragati Laser Type
Setters Pvt. (Ltd.), Meerut (Phone : 0121-2661657) and Printed at Honey Process, Meerut.

Syllabus

Note : The question paper will consist of five sections. Each of the first four sections (*I-IV*) will contain two questions (each carrying 7 marks) and the students shall be asked to attempt one question from each section. **Section-V** will contain **six** short answer type questions (each carrying 2 marks) without any internal choice covering the entire syllabus and shall be **compulsory**.

Section -I :

General equation of second degree. Tracing of conics. Tangent at any point to the conic, chord of contact, pole of line to the conic, director circle of conic. System of conics. Confocal conics. Polar equation of a conic, tangent and normal to the conic.

Section -II :

Sphere : Plane section of a sphere. Sphere through a given circle. Intersection of two spheres, radical plane of two spheres. Co-oxal system of spheres

Cones : Right circular cone, enveloping cone and reciprocal cone.

Cylinder : Right circular cylinder and enveloping cylinder.

Section - III :

Central Conicoids : Equation of tangent plane. Director sphere. Normal to the conicoids. Polar plane of a point. Enveloping cone of a coinoid. Enveloping cylinder of a coinoid.

Section -IV :

Paraboloids : Circular section, Plane sections of conicoids.

Generating lines. Confocal conicoid. Reduction of second degree equations.

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