



## IAS MAINS MATHEMATICS REFERENCE BOOKS

### PAPER – I

#### 1. Linear Algebra

1. **Linear Algebra** – A.R. Vasistha (Krishna Series)
2. **Matrices** – A. R. Vasistha (Krishna Series)

#### 2. Calculus

1. **Differential Calculus** – A.R. Vasistha, Dr. S.K Sharma (Krishna Series)
2. **Advanced Integral Calculus** – Dr. D.C. Agarwal (Krishna Series)

#### 3. Analytic Geometry

1. **3D Geometry** – P.N. Chatterjee
2. **Solid Geometry** -- Shanti Narayan (S. Chand)

#### 4. Ordinary Differential Equations

1. **Ordinary and Partial Differential Equations** – M.D. Raisinghania (S. Chand)  
[for both Paper I & II]

#### 5. Statics – Krishna Series

#### 6. Dynamics – Krishna Series

#### 7. Vector Analysis

1. **Vector Calculus** – A.R. Vasistha & J.N. Sharma
2. **Vector Calculus** – Shanti Narayana
3. **Curves in Spaces** – P.N. Chatterjee (**Class Handout**)

### PAPER – II

#### 1. Algebra

1. **Modern Algebra** – Vasistha (Krishna Series)
2. **A course in Abstract Algebra** – Khanna and Bhambri
3. **Modern Algebra** – I. N. Herstein (John Wiley Publications)

#### 2. Real Analysis

1. **Elements of Real Analysis** - M.D. Raisinghania (S. Chand Series)

#### 3. Complex Analysis

1. **Functions of a Complex Variable** – J.N. Sharma (Krishna Series)
2. **Complex Analysis** – Schaum's Series

#### 4. Linear Programming

1. **Operations Research** – Kanti Swarup, P. K. Gupta, ManMohan (S. Chand)

## **2. Operations Research – S.D.Sharma**

### **5. Partial Differential Equations**

1. M.D. Raisinghania ( Refer Paper – I Same book)
2. Ian Sneddon

### **6. Numerical Analysis**

1. A. R. Vasistha ( Krishna Series)
2. Introductory Methods of Numerical Analysis – Sastry
3. Numerical Methods – V. RajaRaman

### **7. Computer Programming – Class Handout**

### **8. Fluid Dynamics – M.D. Raisinghania**

### **9. Mechanics – S. Chand Publications**

## **MORE REFERENCES:**

1. **Linear Algebra** - Krishna Murthy nad Mainra
2. **Linear Algebra** - K.C. Prasad, K B Datta
3. **Calculus** - Santhi Narayan
4. **Analytic Geometry** - Shantinarayan, HC Sinha, DK Jha and Sharma
5. **Ordinary Differential Equations** - Golden series-NP Bali
6. **Dynamics, Statitics and Hydrostatics** - M.Ray
7. **Vector analysis** - Shantinarayan
8. **Algebra** - K C Prasad, KB Datta
9. **Real Analysis** - Shantinarayan, Royden
10. **Complex Analysis** - GK Ranganath
11. **Mechanics & Fluid dynamics** - AP Mathur, Azaroff leonid

\*\*\*\*\*