

Part I – Basic Concepts

1. Introduction to Steel Structures
 2. Loads, Stresses, and Design Philosophy
-

Part II – Connections in Steel Structures

3. Riveted Connections
 4. Bolted and Pinned Connections
 5. Welded Connections
-

Part III – Design of Structural Members

6. Tension Members
 7. Compression Members (Columns and Struts)
 8. Flexural Members (Beams)
 9. Gantry Girders and Beam-Columns
 10. Column Bases and Footings
-

Part IV – Built-Up and Special Members

11. Riveted and Welded Beam Connections
 12. Plate Girders
 13. Unsymmetrical Bending
-

Part V – Roofs and Industrial Structures

14. Roof Trusses
 15. Round and Tubular Steel Structures
 16. Light Gauge Steel Construction
 17. Steel Chimneys, Tanks, Towers, and Masts
-

Part VI – Advanced Structural Systems

18. Influence Lines for Stresses in Frames
19. Space Frames and Multi-Storey Buildings

- 20. Industrial Buildings
 - 21. Plastic Analysis and Design
-

Part VII – Bridges

- 22. Steel Bridges (loads, deck systems, plate girder bridges, truss bridges)