

RAJIV GANDHI PROUDYOGIKI VISHWAVIDYALAYA, BHOPAL

Credit Based Grading System

Civil Engineering, VII-Semester

CE-7002 Structural Design & Drawing –II (Steel)

Unit – I

Plate girder bridges (Riveted and welded)

Unit – II

Trussed girder bridges for railways and highways (IRC & IRS holding).Bearings for bridges.

Unit – III

Water tanks: Pressed steel tanks, tanks with ordinary plates, square, rectangular, circular with hemispherical bottom and conical bottom.

Unit - IV

Chimneys: Guyed and self-supporting steel stacks.

Unit – V

Bunkers, Silos & Towers

Reference books:

1. Design of Steel Structures -Ramammutham
2. Design of Steel Structures -Punia
3. Steel structures -RamchandraVol II
4. Steel structures - Arya and Ajmani
5. Design of steel structures - L.S. Negi
6. Design of steel structures –N. Subramanian Relevant IS codes

Practical work:

1. The detailed design and drawing of various structural components given below as per the syllabus:
2. Plate girder bridges (riveted and welded)
3. Trussed girder bridges for railways and highways (IRC & IRS holding).
4. Bearings for bridges.
5. Circular (with hemispherical and conical bottom), square and rectangular water tanks
6. Chimney (guyed and self-supporting steel stacks)
7. Bunkers
8. Silos
9. Towers