

Baba Ramesh Das: National Institute of Technology & Management, Lucknow
B. Tech-Fifth Year (Semester Semester 2016-17)
Department of Civil Engineering

DESIGN OF STEEL STRUCTURE (NCE/NE)
Assignment 1 (Unit 2)

NOTE-ATTEMPT ALL PARTS

1. Give the chemical composition of structural steel and discuss the amount of carbon in it.
2. Explain advantages and disadvantages of steel structure over RCC structure. Support your views with practical examples.
3. With the help of stress strain curve, explain how limit state design philosophy is different/superior to working stress design philosophy.
4. Classify Dead, Live and environmental loads. Explain their properties. How reaction loads affect the Design of steel structures.
5. What are the partial safety factors for materials adopted by IS - 800 - 2007 code ?
6. Give the chemical composition of structural steel and discuss the amount of carbon in it.
7. Give reasons why steel is more suitable than wood or concrete as structural material.
8. Sketch various types of rolled steel sections and show their conventional uses.
9. Discuss various limit states which are considered in design.
10. Estimate the design the wind pressure for a 100m high lattice tower located on the coastline of Allahabad. Estimate also the wind load in terms of effective frontal area for tower.
