

<b>Devi Ahilya Vishwavidhyalaya, Indore, India</b>			
<b>Institute of Engineering &amp; Technology</b>			
<b>Subject Code and Name</b>	<b>Type</b>	<b>L-T-P</b>	<b>Credits</b>
	<b>L</b>	<b>T</b>	<b>P</b>
<b>7VLRC2: Design of Steel Structures – II</b>	<b>PC</b>	<b>3-1-1</b>	<b>4+1(P)</b>

### **Course Objective:**

The course is designed

1. To learn the design of plate girder.
2. To learn about design of gantry girders
3. To learn about Design of railway and highway trussed bridges
4. To learn about Design of storage structures water tank, bunkers and silos
5. To learn about Design of chimney and towers

### **COURSE CONTENTS**

#### **Unit - I**

**Plate Girders** - Necessity of plate girders- equivalent uniformly distributed load – design of welded plate girders – intermediate stiffeners – vertical and horizontal – bearing stiffeners

#### **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**

Guyed and self-supporting steel stacks (Chimneys). Bunkers, Silos

#### **Unit – V**

Transmission line towers: Introduction, types of towers, tower configuration, load analysis and design of members.

#### **Reference Books :-**

1. Design of Steel Structures, Ramammutham
2. Design of Steel Structures, Punmia B.C
3. Design of Steel Structures, Ramchandra Vol II

