

Lesson Plan

Subject: R & BE ENGG. (Th.3) **Name of faculty: Er.Tina Guru** **Semester: 5th**

Class allotted -4P/W

Branch: Civil Egg.

Session: 2025(W)

Discipline	Semester	From date: 14/07/2025 TO 15/11/2025	Teaching Aid
Subject:	No. of days/ per week:4 days/week	Theory/ Practical –Topics/Lesson	
Week	Date/Period		
1	15/07/2025 TO 19/07/2025	Section – A: RAILWAYS 1 Introduction 1.1 Railway terminology 1.2 Advantages of railways 1.3 Classification of Indian Railways	White board & marker
2	21/07/2025 TO 26/07/2025	2 Permanent way 2.1 Definition and components of a permanent way 2.2 Concept of gauge ,different type of gauge.	White board & marker
3	28/07/2025 TO 02/08/2025	3 Track materials 3.1 Rails 3.1.1 Functions and requirement of rails 3.1.2 Types of rail sections, length of rails 3.1.3 Rail joints – types, requirement of an ideal joint	White board & marker& Smart board
4	04/08/2025 TO 09/08/2025	3.1.4 Purpose of welding of rails & its advantages 3.1.5 Creep- definition, cause & prevention 3.2 Sleepers	White board & marker
5	11/08/2025 TO 16/08/2025	3.2.1 Definition, function & requirements of sleepers 3.2.2 Classification of sleepers 3.2.3 Advantages & disadvantages of different types of sleepers 3.3 Ballast	White board & marker
6	18/08/2025 TO 23/08/2025	3.3.1 Functions & requirements of ballast 3.3.2 Materials for ballast 3.4 Fixtures for Broad gauge 3.4.1 Connection of rails to rail-fishplate, fish bolts 3.4.2 Connection of rails to sleepers	White board & marker
7	25/08/2025 TO 30/08/2025	4 Geometric for broad gauge 4.1 Typical cross – sections of single & double broad gauge railway track in cutting and embankment	White board & marker& Smart board

Week	Date/Period	Theory/ Practical –Topics/Lesson	Teaching Aid
8	01/09/2025 TO 06/09/2025	4.2 Permanent & temporary land width 4.3 Gradients for drainage 4.4 Super elevation – necessity & limiting valued	White board & marker
9	08/09/2025 TO 13/09/2025	5 Points and crossings 5.1 Definition, necessity of Points and crossings 5.2 Types of points & crossings with tie diagrams	White board & marker
10	15/09/2025 TO 20/09/2025	6 Laying & maintenance of track 6.1 Methods of Laying & maintenance of track 6.2 Duties of a permanent way inspector	White board & marker
11	22/09/2025 TO 27/09/2025	Section – B: BRIDGES 1 Introduction to bridges 1.1 Definitions 1.2 Components of a bridge	White board & marker & Smart board
12	08/10/2025 TO 11/10/2025	1.3 Classification of bridges 3.2 Types of bridge foundations – spread foundation, pile foundation- well foundation – sinking of wells, caission foundation	White board & marker
13	13/10/2025 TO 18/10/2025	3.3 Coffor dams 4 Bridge substructure and approaches 4.1 Types of piers	White board & marker & Smart board
14	20/10/2025 TO 25/10/2025	4.2 Types of abutments 4.3 Types of wing walls	White board & marker
15	27/10/2025 TO 01/11/2025	4.4 Approaches 5 Culvert & Cause ways 5.1 Types of culvers – brief description 5.2 Types of causeways – brief description	White board & marker

Week	Date/Period	Theory/ Practical –Topics/Lesson	Teaching Aid
16	03/11/2025 TO 08/11/2025	Revision.....	White board & marker & Smart board
17	10/11/2025 TO 15/11/2025	Revision.....	White board & marker



Signature of HOD



Signature of faculty